APPENDICES

for the

Proposed Redevelopment of the former St. John Villa Campus

57 Cleveland Place

Staten Island, New York

Appendix A:

Cultural Resources

(Letter of Resolution/ SHPO Correspondence)

LETTER OF RESOLUTION
between the
NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
and the
NEW YORK STATE OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION

Regarding

DEMOLITION OF CERTAIN EXISTING STRUCTURES AT SAINT JOHN VILLA ACADEMY AT 57 CLEVELAND PLACE IN THE COUNTY OF RICHMOND, CITY OF NEW YORK

WHEREAS, pursuant to the New York State Historic Preservation Act of 1980 (NYSHPA), and state laws and regulations, the New York City School Construction Authority (NYCSCA) is responsible for undertaking activities affecting historic properties in a manner that emphasizes preservation, avoidance and/or mitigation of the impact of undertakings that might adversely affect historic resources listed in or eligible for inclusion in the State or National Registers of Historic Places to the fullest extent possible; and

WHEREAS, the NYCSCA acquired the real property known as Saint John Villa Academy (the "Campus" or "Saint John Villa Academy") to redevelop for the City's Department of Education, which redevelopment is expected to consist of up to five new schools and athletic fields; and

WHEREAS, the NYCSCA and the New York State Office of Parks, Recreation, and Historic Preservation ("OPRHP") (collectively, the "Parties") recognize that the Campus is a National Register of Historic Places (NRHP)-eligible resource; and

WHEREAS, in connection with the redevelopment of the Campus, NYCSCA proposes to demolish the existing Villa Elementary School, High School, Pre-K Center, Annex, and Garage on the Campus, located within the Staten Island neighborhood of Concord, to develop a new replacement facility (the "Project"); and

WHEREAS, the Project is considered an undertaking under the NYSHPA; and

WHEREAS, pursuant to Section 14.09 of the NYSHPA, OPRHP is responsible for determining the effects of undertakings that may potentially impact historic resources located on lands within the State of New York; and

WHEREAS, the NYCSCA and OPRHP have engaged in discussions regarding the Project to assess the impact of this undertaking on historic resources; and

WHEREAS, in or about 2018, the NYCSCA engaged a multi-disciplinary team of architects, structural and system engineers, and landscape architects to develop an existing conditions inventory and assessment of the Campus; and

WHEREAS, the oldest buildings on the Campus, the Villa and Elementary School, have undergone several modifications to their original design affecting their architectural style and significance; and

WHEREAS, the access to and entrances of existing buildings do not meet current standards for accessibility and negatively impact safe access to and circulation around the Campus; and

WHEREAS, the existing buildings do not meet current building and safety codes requirements for egress and accessibility and require significant alterations to provide the required number and width of exits, and required elevators thereby reducing the available area for educational spaces; and

WHEREAS, the existing buildings' structural systems cannot be adapted into contemporary instructional spaces because the existing building widths and column grids cannot accommodate and are not compatible with NYCSCA standards for classrooms; and

WHEREAS, several of the existing buildings exhibit compromised structural systems including cracked exterior façades and foundation walls, and a portion of the Annex's first floor has collapsed and is currently supported by temporary shoring; and

WHEREAS, the existing buildings exhibit water infiltration from cracked and detached face brick façades, deteriorated brick facing, and corroded windows; and

WHEREAS, Staten Island is one of the fastest growing districts in the City and continues to demonstrate need for new educational facilities to support the growing student population; and

WHEREAS, the current FY2020-2024 Five-Year Plan set aside funding for the construction of new seats throughout the borough and on all grade levels; and

WHEREAS, the redevelopment of the Campus will enable the City to build 2,000 new school seats, bring the City much closer to the goal of providing 5,000 new seats to Staten Island, and will serve students from Pre-K to 12th grade, as well as students with special needs; and

WHEREAS, there were no alternative privately-owned sites of comparable size, residential context, and unencumbered by Special Flood Hazard Areas and State-Regulated Wetlands on the market for sale in the vicinity of the proposed site; and

WHEREAS, the Parties agree that it is in the public interest to fully demolish the Villa, Elementary School, High School, Pre-K Center, Annex, and Garage in order to design and construct a new state-of-the-art educational campus that would comply with all building and safety codes and satisfy the educational requirements and needs of the school district; and

WHEREAS, NYCSCA and the OPRHP are State Agencies as defined by Section 14.03 of NYSHPA, and have mutual interests and obligations in the protection and preservation of historic properties located on lands within the State; and

WHEREAS, the Parties desire to enter into this Letter of Resolution to memorialize the obligations of the NYCSCA and the OPRHP with respect to the Campus.

NOW, THEREFORE, NYCSCA and the OPRHP mutually agree as follows:

1. Purpose. This Letter of Resolution (LOR) between the Parties establishes the course of action necessary for the successful mitigation of the potential adverse impacts of the demolition of the Villa, Elementary School, High School, Pre-K Center, Annex, and Garage at Saint John Villa Academy in accordance with Section 14.09 of the NYSHPA.

2. Scope of Agreement

   a. The NYCSCA will act as the lead agency in collaboration with qualified consultants, to prepare and present all necessary documentation required by the NYSHPA and State Environmental Quality Review (SEQR) to fulfill the New York State Environmental Quality Review Act (SEQRA) mandates.

   b. The Parties recognize that, in the absence of any unanticipated conditions discovered during the course of this undertaking, the successful execution of this LOR fulfills NYCSCA's responsibilities to explore all feasible and prudent alternatives to avoid and/or mitigate any adverse impacts of the undertaking, in accordance with SEQRA and Section 14.09 of the NYSHPA.

   c. NYCSCA will mitigate the adverse impacts of the demolition of the Villa, Elementary School, High School, Pre-K Center, Annex, and Garage by preparing and submitting the following documentation to OPRHP:

      (1) NYCSCA will preserve the existing Chapel building and will submit a restoration plan to OPRHP, who will have thirty days to review and comment upon the proposed work.

      (2) NYCSCA will preserve the existing stone wall, iron fencing, and gates located at a portion of the site's perimeter. Where they are in good condition, the stone wall and iron fence will be preserved, and a reconstruction will be provided around a larger extent of the campus boundary.

(3) NYCSCA will continue to consult with OPRHP on the designs of the new buildings and site work proposed on the Campus that will aim to reflect existing visual cues, massing, and scale of the historic buildings currently existing at the Saint John Villa Academy. NYCSCA will submit its proposed design to OPRHP, who will have thirty days to respond and comment on the proposed designs.

(4) Prior to their demolition, NYCSCA will compile photo documentation of the Villa, Elementary School, High School, Pre-K Center, Annex, and Garage buildings in the manner set forth in Exhibit 1. Two (2) copies of the photo documentation shall be provided to OPRHP. NYCSCA will send one copy of the photographs to a local library or historical society. A proof sheet will be provided to OPRHP for review thirty days before the buildings are scheduled for demolition. The actual photos will be included in the documentation reports, which NYCSCA will send to OPRHP within six months after the buildings are demolished.

(5) NYCSCA has scanned existing drawings of the existing buildings at Saint John Villa Academy and has archived some in its electronic database. These will be included in the documentation report.

(6) NYCSCA will install interpretive panels in the Chapel building that may include photos of the existing Campus. The designs for the interpretive panels shall be submitted to OPRHP for review and comment before design is final.

3. Completion of Project. Pursuant to Section 14.09 of the NYSHPA, this LOR specifies how the undertaking will proceed. At the completion of the Project, NYCSCA will certify in writing that it has completed the undertaking in accordance with the LOR and will provide any additional documentation regarding the Project at the reasonable request of the OPRHP.

4. Execution. This LOR may be executed in counterparts, each of which shall be regarded as an original and all of which shall constitute one and the same instrument. Execution of this LOR by the NYCSCA and the OPRHP, and implementation of its terms shall demonstrate that the NYCSCA has taken into account the impact of the undertaking on historic properties.

SIGNATURE PAGES FOLLOW

NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

BY: _____ DATE: 10/16/23
Daniel Mackay
Deputy Commissioner

NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY

BY: _____ DATE: 10/16/23
Stanley Dalair, RA
Chief Design and Construction Innovation Officer - Agency Preservation Officer

EXHIBIT I

Photo Documentation Requirements

- Photographs submitted as documentation should be clear, well-composed, and provide an accurate visual representation of the building and its significant features.
- Digital photographs should be taken using a ten (10) megapixel or greater digital SLR camera.
- Images should be saved in Tag Image File format (TIFF) or RAW format images. RGB color digital TIFFs are preferred
- Selected images for documentation package should be printed as follows: 1-3, 8 by 10-inch views of the overall facility. Sufficient 5 by 7-inch additional images to fully document the present condition of all elevations of the facility.
- Several historic images (if available) depicting the facility should be reprinted at the 5 by 7-inch size and included in the documentation
- Images should be printed on a high-quality color printer on compatible high quality photographic paper stock (HP printer us HP Paper, Epson printer use Epson paper)
- Each photograph must be numbered, and that number must correspond to the photograph number on a photo log or key. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph
- The label information will be written within the white margin on the front of the photograph using an archival photo labeling pen. Label information can also be generated by computer and printed directly in the white margin (no adhesive labels).
- Information will not be printed on the actual image – only the photo margin or back of the photograph will be used for labeling.
- At a minimum, photographic labels will include the following information: Photograph number, Name of the Property, County, and State.
- Photos will be placed in archival quality photo sleeves. Two (2) sets of images should be produced.

NEW YORK STATE OF OPPORTUNITY. Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

March 1, 2021

Thomas Nielsen, RA
Architect
NYC School Construction Authority
30-30 Thomson Ave
Long Island City, NY 11101

NYCSCA
Redevelopment of St. John Villa Academy
57 Cleveland Pl.
Staten Island, Richmond Co.
21PR00621

Dear Thomas Nielsen:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

The project consists of the demolition of an entire complex of historic school buildings. Linda Mackey in our National Register unit has determined that the complex is eligible for listing in the National Register and she has prepared an extensive Resource Evaluation that describes the cultural, historical, and architectural significance of the complex and it is attached in CRIS. Because of the historic status of the complex, we have reviewed the SCA's proposal to demolish the historic campus.

It is the opinion of OPRHP that the project will have an Adverse Impact on the historic Catholic complex. At this time, we recommend that you consult with our office on ways to avoid the adverse impact. Please prepare an alternatives analysis for our review and approval.

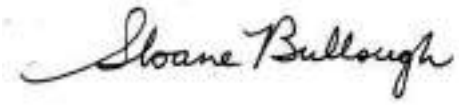
An alternatives analysis should include, but not be limited to:

1. Information about whether the historic structures can be reused to meet SCA's needs.
2. Alternative site analysis. Is there another site that could be used to meet SCA's needs instead of this site?
3. Marketability information about the site. Have there been any other developers interested in the site and how long was it listed?
4. An analysis of whether some of the buildings can be completely or partially

reused.

We would appreciate if the requested information could be provided via our Cultural Resource Information System (CRIS). If you have any questions, I can be reached at sloane.bullough@parks.ny.gov.

Sincerely,



Sloane Bullough
Historic Sites Restoration Coordinator via email only

Appendix B:

Hazardous Materials
(Phase I ESA/Phase II ESI)

PHASE I ENVIRONMENTAL SITE ASSESSMENT
OF

POTENTIAL ACQUISITION - ST. JOHN VILLA CAMPUS
BLOCK 3087, LOT 1 & BLOCK 3089, LOT 59
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

SCA LLW NO. 107932
SCA CONTRACT NO. C000013429
SCA JOB NO. 66656
SCHOOL DISTRICT: 31

AKRF PROJECT NO. 89215

June 20, 2017

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Attn: Ms. Lee Guterman

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1.0 EXECUTIVE SUMMARY

At the request of the Industrial and Environmental Hygiene (IEH) Division of the New York City School Construction Authority (NYCSCA), AKRF Engineering, P.C. (AKRF) conducted a Phase I Environmental Site Assessment (ESA) for the St. John Villa Campus (hereafter referred to as the "Site"). The Site is located at 57 Cleveland Place in Staten Island, New York (New York City Tax Block 3087, Lot 1, and Block 3089, Lot 59) in a residential area with some educational and commercial uses. Alternative addresses for the Site include 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, and 18 Hastings Street. The Site consists of an approximately 7.2-acre property containing eight buildings associated with a parochial school constructed between approximately 1891 and 2005, including: a 3-story elementary school with a partial cellar, a 2-story convent with a cellar, a 4-story chapel with a cellar, a 2- to 3-story high school, a 1- to 2-story gymnasium, a 2-story annex, a 1-story child development center, and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a swimming pool with a pool shed. The Site is being considered for acquisition and conversion to a public school facility by the NYCSCA.

The Site was occupied by Clar Manor boarding house prior to acquisition by St. John Villa in 1930. The Manor house was converted into the convent building, and additional structures were added to St. John Villa throughout the 1900s. Some small accessory structures on the eastern portion of the Site were present from 1930 to 1955. The current layout, including the addition to the high school, was present since 2005.

The Site is bounded to the north by Garson Avenue, followed by residences; to the east by Narrows Road South, followed by the Staten Island Expressway; to the southeast by Hastings Street, followed by residences; to the south by Knauth Place, followed by residences; to the west by Landis Avenue followed by St. Joseph Academy and Retreat Center; and to the northwest by Cleveland Alley, followed by residences.

The main objective of the Phase I ESA is to identify recognized environmental conditions (RECs) and environmental concerns that may affect the suitability of the Site for use as a school. RECs are defined in ASTM International (ASTM) Standard Practice E 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or, (3) under conditions that pose a material threat of a future release to the environment. Note that controlled recognized environmental conditions (CRECs) are considered to be RECs and are listed in the Executive Summary and Conclusions of this Phase I ESA. Additionally, vapor encroachment conditions (VECs) were evaluated as per ASTM E 2600-10.

Other environmental issues and conditions that, in the opinion of the *environmental professional* conducting the assessment, would not be considered *RECs* are identified in this assessment. These may include *historical RECs and/*or *de minimis* conditions. The Phase I ESA also includes a preliminary evaluation of specific potential environmental issues or conditions that are, according to ASTM E 1527-13, considered non-scope considerations. These issues include radon, asbestos-containing material (ACM), polychlorinated biphenyl (PCB) - containing light ballasts and caulking materials, exterior lead-based paint (LBP), chemical storage, wetlands, regulatory compliance issues, dry cleaner and other industrial emissions, mold, biological agents, electromagnetic fields, and methane. The Phase I ESA included a review of federal, state, and local records, previous reports (if available) and historical

documents; visual observation of the Site and adjoining properties; and interviews with selected Site representatives.

The assessment requested by the NYCSCA is intended to identify conditions that would have the potential to impact the value of the Site or the development and use of the Site as a public school facility. The assessment was also conducted for purposes of environmental due diligence in order to qualify for the innocent landowner, a bona fide prospective purchaser or a contiguous property owner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Phase I ESA included evaluation of the following: current and historical Site usage; current and historical usage of adjoining properties; regulatory agency records review; on-site solid waste management and disposal practices; on-site hazardous materials and petroleum products management; chemical storage, ACM, PCBs and exterior LBP management; wetlands; regulatory compliance issues; dry cleaner and other industrial emissions; radon; mold and moisture intrusion; biological agents; electromagnetic fields; and potential for methane generating materials.

Summary of RECs, CRECs, VECs and Environmental Concerns

On-Site REC/CREC/VEC:

- Three in-service fuel oil underground storage tanks (USTs) with two closed-status Spill listings and one reported tank-tightness test failure.
- Potential historic material of unknown origin and/or abandoned USTs associated with demolished historic on-site buildings, and/or potential historic fill associated with past nearby highway construction.

Off-Site RECs/CRECs/VECs:

- Potential contamination associated with historic railroad tracks located east of the Site.
- A New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) listing west-adjacent to the Site at 77 Chicago Avenue.
- A groundwater monitoring well observed during Site reconnaissance on the Cleveland Place sidewalk between the two Site lots.

This Phase I ESA has revealed the following other environmental concerns associated with the Site:

- Suspect ACM in building materials and/or buried demolition debris/fill material.
- Suspect LBP identified on painted surfaces and/or buried demolition debris/fill material.
- Potential PCB-containing building materials and/or buried demolition debris/fill material.
- A 55-gallon drum with unknown contents was observed near the High School building.
- Water damage and associated mold growth.

Recommendations

Based on the findings of the Phase I ESA, AKRF recommends performing a Phase II Environmental Site Investigation (ESI) at the Site to investigate the identified RECs/VECs. The ESI should include a geophysical survey and subsurface soil, soil vapor, and groundwater sampling in the areas of concern. Areas that were inaccessible during the Phase I Site reconnaissance should be inspected during the Phase

II ESI to check for potential additional RECs and/or environmental concerns. In addition, AKRF also recommends that any ACM, LBP, mold, and/or PCB-containing building components affected by future renovations, repairs, or demolition at the Site be identified and properly managed during such activities. Furthermore, the Site's PBS registration should be updated to correct the 6,000-gallon UST capacity, and tank tightness testing information should be reviewed to ensure compliance with PBS requirements.

2.0 INTRODUCTION

This report summarizes the results of the Phase I Environmental Site Assessment (ESA) of the St. John Villa Site, located at 57 Cleveland Place in Staten Island, New York, on Tax Block 3087, Lot 1, and Block 3089, Lot 59. Alternative addresses for the Site include 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, and 18 Hastings Street.

The Site consists of an approximately 7.2-acre property developed with eight buildings: a 3-story elementary school with a partial cellar, a two-story convent with a cellar, a 4-story chapel with a cellar, a 2- to 3-story high school, a 1- to 2-story gymnasium, a 2-story annex, a 1-story child development center, and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a pool with a pool shed. The Site is bounded to the north by Garson Avenue, followed by residences; to the east by Narrows Road South followed by the Staten Island Expressway; to the southeast by Hastings Street, followed by residences; to the south by Knauth Place, followed by residences; to the west by Landis Avenue followed by St. Joseph Academy and Retreat Center; and to the northwest by Cleveland Alley, followed by residences.

Visual inspection of the Site and surrounding area was performed on April 18, 2017 by Ms. Amy Jordan of AKRF, accompanied by Mr. Robert Bustamante, the Facilities Manager at the Site, Mr. Mathew Mankovich of NYCSCA, and other members of the NYCSCA team. At the time of the inspection, the weather was clear and approximately 65 ºF, and visibility was not obscured by weather conditions. Photographs taken during the reconnaissance are provided in Appendix C.

2.1 Selected Definitions

The following terms are used throughout this report and, for the purpose of clarity, corresponding definitions are provided. These terms are fully defined in ASTM E 1527-13 and ASTM E 2600-10.

Controlled recognized environmental condition (CREC) – A recognized environmental condition resulting from a past *release* of *hazardous substances or petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority) with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations, institutional controls, or engineering controls).*

Historical recognized environmental condition (HREC) – A past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations, institutional controls,* or *engineering controls).*

Recognized environmental condition (REC) - The presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at *a property*: (1) due to any *release* to the *environment*; (2) under conditions indicative of a *release* to the *environment;* or, (3) under conditions that pose a *material threat* of a future *release* to the *environment.*

Environmental Professional - A person meeting the education, training, and experience requirements as set forth in 40 CFR § 312.10(b), necessary to conduct a *site reconnaissanc*e, *interview*s, and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors in 40 CFR § 312.20(e) and (f).

Vapor Encroachment Condition (VEC) – The presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil or groundwater or both either on or near the target property.

2.2 Purpose and Scope

The purpose of this assessment is to identify *RECs, CRECs, VECs,* and certain other environmental issues or concerns as they existed at the Site at the time of the Site visit. The assessment is intended to identify conditions that would have the potential to impact the value of the Site or the development and use of the Site as a public school facility. The assessment was also conducted for purposes of environmental due diligence in order to qualify for the innocent landowner, a bona fide prospective purchaser or a contiguous property owner defense under the Comprehensive Environmental Responsibility Compensation and Liability Act (CERCLA). The Phase I ESA included, but was not limited to an assessment of the following potential environmental issues: current and historical Site usage; current and historical usage of adjoining properties; regulatory agency records review; on-Site solid waste management and disposal practices; on-Site hazardous materials and petroleum products management; asbestos-containing material (ACM), polychlorinated biphenyl (PCB) - containing equipment and lead-based paint (LBP) management; wetlands; regulatory compliance issues; dry cleaner and other industrial emissions, radon, mold and moisture intrusion; biological agents; electromagnetic fields; and, potential for methane generating materials.

This evaluation was conducted by qualified *environmental professionals* utilizing a standard of good commercial and customary practice in accordance with the ASTM E 1527-13. The scope of work completed for this evaluation meets all requirements of ASTM 1527-13 and includes the following:

- Documenting the physical characteristics of the Site through a review of available topographic, geologic, wetland, flood plain, groundwater data and Site observations.
- Researching the Site history through a review of reasonably ascertainable standard sources such as land deeds, fire insurance maps, city directories, aerial photographs, prior reports and interviews.
- Documenting current Site conditions, via observations and interviews, regarding the presence or absence of hazardous substances/petroleum products; the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes; the presence of electrical equipment that utilizes oils which potentially contain PCBs; and the presence of storage tanks (above and below ground), floor drains, drains that discharge to subsurface, former septic tanks and drywells.
- Determining the usage of adjoining and nearby properties to identify the likelihood for environmental conditions (if present and/or suspected) and concerns to migrate onto the Site.
- Evaluating information contained within federal and state environmental databases and other local environmental records, within specific search distances.

2.3 Additions, Deviations, Deletions, Data Failures, and Data Gaps

The following environmental issues that are outside the scope of (additions to) ASTM E 1527-13 were evaluated:

- A review of available radon data for the Site vicinity
- A review of available wetlands data
- A visual assessment for water damage and mold
- A visual assessment for suspect ACM
- A visual assessment for suspect LBP
- An assessment of potential methane generation on-Site or migration to the Site
- Regulatory compliance
- PCB light ballasts and caulking materials
- Biological agents (mold, pigeon guano, medical waste, etc.)
- Air emissions from dry cleaners and other industrial sources
- An assessment of the potential presence of electromagnetic fields (EMF)
- An assessment of any dust generating activities on or near the Site.

The following deviations, data gaps and deletions from ASTM E 1527-13 were necessary in conducting this assessment:

- The property area history review was not conducted in five-year intervals. However, sufficient information about the history of the Site and surrounding area could be obtained from the available historical Sanborn maps, aerial photographs, city directories, and local records, and this data gap is not likely to alter the conclusions of this report.
- The garage and the northwestern portion of the Site were inaccessible during Site inspection. The garage reportedly contains storage of machinery and light maintenance operations, and the northwestern portion of the Site is fenced off with dense woods and steep slopes. This data gap is not likely to alter the conclusions of this report.

2.4 Limitations and Exceptions

AKRF has prepared this Phase I ESA using reasonable efforts in each phase of its work to identify RECs associated with hazardous substances, wastes and petroleum products at the Site. The methodology of the Phase I ESA was consistent with the ASTM E 1527-13. Findings within this report are based on information collected from observations made on the day of the Site investigation and from reasonably ascertainable information obtained from governing public agencies and private sources.

This report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes. AKRF makes no representation or warranty that the past or current operations at the Site are or have been in compliance with all applicable federal, state and local laws, regulations and codes.

Regardless of the findings stated in this report, AKRF is not responsible for consequences or conditions arising from facts that were concealed, withheld, or not fully disclosed at the time the evaluation was conducted.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report focuses on the Site and neighboring properties that could impact the Site. Neighboring properties listed in governmental environmental records are identified within specific search distances. The search distance varies depending upon the particular government record being checked. The regulatory research is designed to meet the requirements of ASTM E 1527-13. The information provided in the regulatory database report is assumed to be correct and complete.

This report was prepared for the sole use of NYCSCA and related New York City municipal agencies pursuant to the AKRF Contract dated August 1, 2014.

3.0 SITE DESCRIPTION

3.1 Site Location and Legal Description

The Site is located at 57 Cleveland Place in Staten Island, New York (New York City Tax Block 3087, Lot 1, and Block 3089, Lot 59) in a residential area with some educational and commercial uses. Alternative addresses for the Site include 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, and 18 Hastings Street.

The Site consists of an approximately 7.2-acre property developed with eight buildings: a 3-story elementary school with a partial cellar, a two-story convent with a cellar, a 4-story chapel with a cellar, a 2- to 3-story high school, a 1- to 2-story gymnasium, a 2-story annex, a 1-story child development center, and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a pool with a pool shed.

The Site is bounded to the north by Garson Avenue, followed by residences; to the east by Narrows Road South followed by the Staten Island Expressway; to the southeast by Hastings Street, followed by residences; to the south by Knauth Place, followed by residences; to the west by Landis Avenue followed by St. Joseph Academy and Retreat Center; and to the northwest by Cleveland Alley, followed by residences.

According to the New York City Department of Buildings (NYCDOB) and the Department of City Planning (NYCDCP) zoning map, the Site is zoned R1-2 (Residential). Neither the Site nor adjacent properties contain Hazardous Materials "E" Designations or "D" Restrictive Declarations. A map showing the location of the Site is presented in *Appendix A.* A Site plan showing the physical layout including adjacent land use is presented in *Appendix B.* Photographs of Site and surrounding areas are included in *Appendix C*. A zoning map is included in *Appendix J.*

An addition to the north of the high school building, not shown on the 2007 fire insurance map, was noted during the Site inspection.

3.2 Physical Setting

3.2.1 Topography

According to the United States Geological Survey (USGS) 7.5-Minute Quadrangle Maps, *The Narrows, NY – NJ,* dated 2013, the elevation of the Site ranges from approximately 100 to 140 feet above the North American Vertical Datum of 1988 (an approximation of mean sea level), to a high point in the center of the Site. The nearest surface water body is Grasmere Lake, approximately 3,000 feet to the west. The Lower Bay of New York Bay is located approximately 3,000 feet southeast and 4,500 feet east of the Site. A copy of the topographic map is presented in *Appendix A.*

3.2.2 Geology

According to the *USGS Geologic and Geohydrologic Reconnaissance of Staten Island, New York* (1988) the Site is underlain by Pleistocene glacial deposits consisting primarily of clay and sand with some boulders. These deposits are underlain by the Cretaceous clay member of the Raritan formation approximately 200 to 250 feet below ground surface (bgs). The Raritan formation is in turn underlain by Staten Island Serpentine crystalline bedrock at approximately 250 to 300 feet bgs.

3.2.3 Soils

According to the New York City Reconnaissance Soil Survey compiled by the United States Department of Agriculture-Natural Resources Conservation Service, soil beneath the Site is described as: nearly level to gently sloping areas partially filled with natural materials, and a mixture of anthropogenic soils and red till soils.

3.2.4 Hydrology

According to the *USGS Geologic and Geohydrologic Reconnaissance of Staten Island, New York*, groundwater is anticipated to be encountered approximately 90 to 130 feet below grade, flowing in a south-southeasterly direction toward the Lower Bay, located approximately 3,000 feet southeast of the Site. However, actual groundwater levels and/or flow direction may vary due to geology, seasonal fluctuations in precipitation, and other factors beyond the scope of this study. There are no surface water bodies or streams on or immediately adjacent to the Site. The closest surface water body to the Site is Grasmere Lake, approximately 3,000 feet to the west. Stormwater in the Site vicinity flows to the New York City sewer system. Groundwater in Staten Island is not used as a source of potable water.

AKRF reviewed the United States Fish and Wildlife Service National Wetlands Index (NWI) map for the area of the Site (https://www.fws.gov/wetlands/data/mapper.html) to determine whether the Site is located in a regulated wetlands area. Based on a review of the map, the Site is not located within or adjacent to a regulated wetland area. No suspected wetlands were observed during the Site inspection. A copy of the wetlands map is included in *Appendix D.*

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site area (Panel No. 3604970327F, effective date September 2007) was reviewed to assess whether the Site is located within a designated flood plain or flood zone. The Site is located in a Zone X area, which is defined by FEMA as an area located outside of the 500-year flood zone. A copy of the FEMA map for the Site area is included in *Appendix E*.

3.2.5 Radon

Radon is a colorless, odorless radioactive gas that results from the natural breakdown of uranium minerals in soil, rock, and water, which subsequently enters the atmosphere. It can concentrate in buildings, entering through cracks and other penetrations of a building foundation. Some areas are more likely to have elevated concentrations of radon than others, reflecting subsurface lithologic conditions.

The New York State Department of Health (NYSDOH) maintains a database of radon test results on a local and county level. According to NYSDOH, 298 radon tests have been conducted in Richmond County in 2016: 236 tests in basements and 62 tests on ground floors. The average basement radon level was found to be 1.41 picoCuries per liter (pCi/L), and the average ground floor radon level was found to be 1.22 pCi/L. According to data presented in the regulatory agency database report (*Appendix I*), the average indoor radon level is 0.67 pCi/L in living areas and 1.25 pCi/L for basements in Richmond County, based on 61 tested locations. These results are below the United States Environmental Protection Agency (USEPA) Action Level of 4 pCi/L. As such, AKRF concludes that it is unlikely that elevated levels of radon gas are present at the Site.

4.0 ADJOINING AND SURROUNDING PROPERTIES

The general area around the Site consists of predominantly residential properties, with a Catholic High School Campus to the southwest and entrance ramps for the Verrazano-Narrows Bridge to the northeast. The following table summarizes the adjoining property uses:

Direction	Facility Name/Description	Street Address/Location	Current Use
North	Garson Avenue and Cleveland Avenue, followed by:	N/A	Public Street
	Residences	25 Garson Avenue and 11-31 Cleveland Place	Private dwellings
South	Knauth Place and Hastings Street, followed by:	N/A	Public Street
	Residences	15-40 Knauth Place, 6 Narrows Road South, 35 Landis Avenue, and 11-31 Hastings Street	Private Dwellings
East	Narrows Road South, followed by:	N/A	Public Street
	Staten Island Expressway	N/A	Public Highway
West	Landis Avenue, followed by:	N/A	Public Street
	St. Joseph Retreat Center, St. Joseph Academy High School, and Geller House School	850 Hylan Boulevard and 77 Chicago Avenue	Private School and facilities, and specialized public school
Northwest	Cleveland Alley, followed by:	N/A	Public Street
	Residences	326-348 Fingerboard Road	Private Dwellings

AKRF conducted a review of the surrounding properties to identify potential RECs and to determine whether any existing public schools are located within a two-block radius of the Site. No public schools were identified within this radius. However, two private schools, Geller House School (77 Chicago Avenue) and St. Joseph Hill Academy High School (850 Hylan Boulevard) were noted within one block of the Site. A groundwater monitoring well was noted in the Cleveland Place sidewalk adjacent to the parking lot on the northwestern portion of the Site.

The following change was noted from the most recent Fire Insurance map dated 2007: an addition to the north of the high school building, not shown on the 2007 map, was noted during the Site inspection.

The review of adjoining properties indicated evidence of the following RECs/VECs at the Site or in the surrounding area:

- A groundwater monitoring well observed during Site reconnaissance on the Cleveland Place sidewalk between the two Site lots.

5.0 HISTORICAL USE RESEARCH

5.1 Land Title Records and Tax Records

AKRF ordered a Chain of Title report for the Site from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. Public deed records and tax records were reviewed from 1938 to the present for Block 3087, Lot 1. The current owner of the Site is listed as the Sisters of St. John the Baptist Inc. The records indicated that the Site was transferred from Mary Brunetta Paolicelli and Giacenta Poalicelli to the current owner the Sisters of St. John the Baptist Inc. in 1938. No other sale or lease records were identified.

A search of the NYC Department of Finance online database identified the following owner records for the Site:

- Block 3087 Lot 1: St. John Villa Academy
- Block 3089, Lot 89: Sisters of St. John the B.

The review of current and historical ownership and tax record information did not indicate evidence of RECs or VECs at the Site. A copy of the title search is included in *Appendix J.*

5.2 Historical USGS Topographic Quadrangles

AKRF reviewed available historical USGS Topographic Quadrangles for information regarding past uses of the Site. The following table summarizes descriptions and interpretations from the historical USGS maps:

Year	Comments
1891: Staten Island Quadrangle 1:62,500	**Site:** The Site is a largely vacant parcel with a single small building in the northwest portion, sloping upward to the northeast from an elevation of approximately 90 to 130 feet. **Surrounding Properties:** The Site is located approximately 100 feet west of a rapid transit railroad, in a sparsely developed area. Military installations are shown in the vicinity of the Site (Fort Wadsworth is approximately 2,400 feet to the east, and Fort Tompkins is approximately 3,000 feet to the east). The shore of the Lower Bay is approximately 3,000 feet to the southeast of the Site. The area around the Site is sparsely developed.
1898: Staten Island Quadrangle 1:62,500	**Site:** A small road is shown leading to the structure in the northwest portion of the Site. No further significant changes from the 1891 map were noted. **Surrounding Properties:** Buildings were shown to the northwest of the Site. A small pond was shown approximately 200 feet north-northeast of the Site. Additional roads and sparse development were shown surrounding the Site.
1900: Staten Island Quadrangle 1:62,500	**Site:** No significant changes from the 1898 map were noted. **Surrounding Properties:** The surrounding area is similar to the 1898 map.
1905: Passaic Quadrangle 1:125,000	**Site:** The small building is not shown on the Site. **Surrounding Properties:** No buildings were shown on the map, the road network is similar to the 1898 map.
1925: Staten Island Quadrangle 1:62,500	**Site:** The Site appears similar to the 1900 map with a small structure in the northwest portion of the Site. **Surrounding Properties:** The surrounding area is similar to the 1900 map.

Year	Comments
1947: The Narrows and Jersey City Quadrangles 1:24,000	**Site:** The Site is labeled as St. John Academy with three structures. The topography of the Site is shown with structures at a crest at an elevation of approximately 130 feet, and the perimeter of the Site at approximately 120 feet. **Surrounding Properties:** Additional buildings are shown surrounding the Site. The small pond previously shown to the north-northeast is no longer shown. An unnamed road is located west-adjacent to the Site. St. Joseph Academy is located approximately 250 feet southwest of the Site. An "old tank" is shown approximately 0.3 mile northwest of the Site. A railroad is shown east-adjacent to the Site.
1955: The Narrows and Jersey City Quadrangles 1:24,000	**Site:** The Site is labeled as St. Johns Academy and is developed with seven small buildings and vacant land. The buildings appear different from those shown on the 1947 map. The map shows 10 foot elevation contours, relative to 20 foot contours on earlier maps. **Surrounding Properties:** St. Joseph's Home for the Aged is shown southwest of the Site, followed by St. Joseph's Hill Academy. Public Schools PS 39 and PS 34 are shown within 0.25 mile of the Site. The greater surrounding area is shaded pink, indicating unspecified urban development, and contains schools, churches and a hospital. Fort Wadsworth is labeled as a U.S. Military Reservation shown 0.25 mile to the east including vegetated land, stone ruins, and several buildings. Vegetated land is shown to the west and northwest. Grasmere Lake and Cameron Lake are shown approximately 0.5 mile west of the Site. The "old tank" shown on the 1947 map is no longer shown.
1966: The Narrows Quadrangle 1:24,000	**Site:** Six buildings are shown on the St. Johns Villa Academy Site; one building on the eastern border is no longer shown. The northeast area of the Site potentially has been filled in, as a small mound is shown. **Surrounding Properties:** Significant development is shown east of the Site, including the construction of an expressway (Interstate-278 or I-278), a toll gate, a breakwater, and the Verrazano-Narrows Bridge, located northeast adjacent to the Site at the nearest point. Railroad tracks are no longer shown. A building labeled "service facilities" (possibly associated with the bridge) is shown adjacent to the toll gate, approximately 500 feet east-southeast of the Site. St. Joseph's Home for the Aged and PS 34 are no longer shown. Additional structures have also been constructed within in the area surrounding the Site.
1981: The Narrows and Jersey City Quadrangles 1:24,000	**Site:** No significant changes from the 1966 map were noted. **Surrounding Properties:** I-278 has been widened in the area surrounding the toll gate. Additional development is shown northwest of the Site. The surrounding area is otherwise similar to the 1966 map.
1998: The Narrows Quadrangle 1:24,000	**Site:** No significant changes from the 1981 map were noted. **Surrounding Properties:** The surrounding area is similar to the 1981 map.
2013: The Narrows Quadrangle 1:24,000	**Site:** Site details are not shown. **Surrounding Properties:** Surrounding area details are not shown, but the surrounding area appears similar to the 1998 map.

*RECs/CRECs/HRECs/VECs, if found, are listed in **Bold** font*

Based on its distance from the Site the "old tank" shown on the 1947 map is not considered a REC/VEC. The review of the USGS Topographic Quadrangles indicated the following RECs/VECs:

- Potential buried debris associated with demolition of historical on-site buildings could include **underground storage tanks (USTs) and/or historical fill material** of unknown origin.
- **Railroad tracks** noted on the 1891 to 1955 maps east-adjacent to the Site.

- Potential **historical fill material** of unknown origin associated with the construction of the Staten Island Expressway in the northeastern portion of the Site.

Based on a review of the historical topographic maps, the Site was not located in an area of suspected former wetlands; thus, potential subsurface methane is not considered an environmental concern. Copies of the historical USGS topographic maps are included in *Appendix F*.

5.3 Historical Aerial Photographs

AKRF reviewed aerial photographs of the Site and surrounding areas provided by EDR to identify historical land uses that may have involved hazardous substances or petroleum products. These photographs ranged from 1924 to 2011. The following table summarizes descriptions and interpretations from the aerial photograph reviews:

Year	Comments
1924 1:500	**Site:** The Site appears to be developed with a few structures including the convent building in its present day location, and contains vegetated land in the northern portion. Due to the quality of the photograph, specific details are difficult to discern. **Surrounding Properties:** The areas north, south, and west of the Site are vegetated and sparsely developed. Northwest trending Railroad tracks are shown running east of the Site. Small structures whose purpose cannot be determined are shown approximately 100 feet west of the Site.
1940 1:500	**Site:** The Site appears to contain three structures that are presumed to be the existing chapel, convent, and elementary school buildings in the center, and two smaller buildings on the eastern portion of the Site. Two driveways are shown leading to the Site from Cleveland Place. The remainder of the Site appears to be cleared landscaped. **Surrounding Properties:** The area surrounding the Site is developed with small, likely residential structures, with vegetated land shown further east, west, and northwest of the Site. The railroad tracks are shown approximately 250 feet east of the Site at the nearest point.
1951 1:500	**Site:** No changes to the Site in comparison to the 1940 aerial photograph were noted. **Surrounding Properties:** Additional residential development is noted in the greater surrounding area. Disturbed land is shown on the west-adjacent parcel.
1954 1:500	**Site:** A new building is shown to the east-southeast of the existing buildings. No changes to the Site in comparison to the 1951 aerial photograph were noted. **Surrounding Properties** An increase in development is shown southwest of the Site. No further significant changes to the surrounding properties in comparison to the 1951 aerial photograph were noted.
1961 1:500	**Site:** The southern portion of the current High School building is shown. A building is shown on the east-central portion of the Site, it appears to be the current Child Development Center. Two small structures are shown south of the Annex Building. No further changes in comparison to the 1954 photograph were noted. **Surrounding Properties:** Construction is shown northeast-adjacent to the Site including apparent excavation and filling of material.
1966 1:500	**Site:** The pool is now shown on the eastern portion of the Site. No further changes to the Site in comparison to the 1961 aerial photograph were noted. **Surrounding Properties:** A multi-lane highway (I-278) runs northwest to southeast to the east of the Site, with entrance ramps and a toll way east of the Site. The rail tracks shown on the 1940-1961 photographs have been demolished due to highway construction. Additional residences are shown in the greater surrounding area. No further significant changes to the surrounding properties in comparison to the 1961 aerial photograph were noted.
1975 1:500	**Site:** The northwest portion of the Site is shown as a parking lot. No further changes to the Site in comparison to the 1966 aerial photograph were noted. **Surrounding Properties:** No significant changes to the surrounding properties in comparison to the

Year	Comments
	1966 aerial photograph were noted.
1984 1:500	**Site:** The Site appears to be developed with the existing buildings, with the addition of the gymnasium/auditorium building is shown in the southeastern portion of the Site. No further changes were noted in comparison to the 1975 aerial photograph. **Surrounding Properties:** An increase in development is noted northwest of the Site. No further significant changes to the surrounding properties in comparison to the 1975 photograph were noted.
1991 1:500	**Site:** No changes to the Site in comparison to the 1984 aerial photograph were noted. **Surrounding Properties:** No significant changes from the 1984 photograph were noted.
1995 1:500	**Site:** No changes to the Site in comparison to 1991 aerial photograph were noted. **Surrounding Properties:** No significant changes to the surrounding area were noted compared to the 1991 aerial photograph.
2006 1:500	**Site:** An addition on the High School is shown north of the original building shown on previous photographs. The Site appears to be developed with the existing layout. No further changes to the Site in comparison to the 1995 aerial photograph were noted. **Surrounding Properties:** The surrounding area appears generally similar to the 1995 photograph.
2009 1:500	**Site:** No changes to the Site in comparison to the 2006 aerial photograph were noted. **Surrounding Properties:** No changes to the surrounding properties in comparison to the 2006 aerial photograph were noted.
2011 1:500	**Site:** No changes to the Site in comparison to the 2009 aerial photograph were noted. **Surrounding Properties:** No changes to the surrounding properties in comparison to the 2009 aerial photograph were noted.

Notes: **See photographs in Appendix G for actual scale. RECs/CRECs/HRECs/VECs, if found, are listed in **Bold** font*

The review of aerial photographs indicated evidence of the following RECs/VECs at the Site or in the surrounding area:

- Potential **historical fill material** of unknown origin associated with the construction of the Staten Island Expressway in the northeastern portion of the Site.
- **Railroad tracks** noted on the 1924 to 1961 photographs running approximately 250 feet east of the Site.

These RECs were also identified based on review of the historic topographic maps. Copies of reproducible aerial photographs are included in *Appendix G*.

5.4 Historical Fire Insurance Maps (Sanborn Maps)

A search for historical fire insurance maps (Sanborn Maps) for the Site and adjoining properties was conducted by EDR. Specifically, Sanborn Maps from 1917, 1937, 1950, 1962, 1977, 1981, 1983, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 2001, 2002, 2003, 2004, 2005, 2006, and 2007 were reviewed. The following table presents descriptions and interpretations from the historical fire insurance map review:

Year	Comments
1917	**Site:** The Site is developed with a two-story boarding house labeled Clar Manor in the center, and a small structure in the southeast corner. McFarland Place (near the southern boundary), Glen Avenue (near the western boundary), and Cleveland Place (near the northwestern boundary) are shown traversing the Site. The remainder of the Site is vacant. **Surrounding Properties:** State Avenue is shown to the north of the Site, followed by a partially developed block with residences. Garfield Avenue is shown to the east of the Site, followed by a vacant undeveloped block. An unnamed street followed by vacant land and the **Staten Island Rapid Transit Tracks** is shown southeast of the Site. McFarland Place followed by a sparsely developed block with two residences and an auto house is shown to the south. Prospect Avenue followed by Barrett Manor is shown to the west. Cleveland Alley followed by residences and the Hebrew Orphan Asylum is shown to the northwest.
1937	**Site:** The Site is shown as St. John's Villa Academy including a Convent (in the former boarding house), Chapel, and School with construction noted between 1930 and 1937. Five vacant lots are shown at the eastern site boundary, and five small structures are shown on the eastern boundary at 341-343 Garfield including a dwelling, miscellaneous storage, a laundry and an auto house. McFarland Place is renamed Knauth Place, and Glen Avenue is renamed Elm Avenue. A small shed is shown in the southwest corner at the corner of Elm Avenue and Knauth Place. The remainder of the Site is vacant. No other significant changes were noted from the 1917 map. **Surrounding Properties:** State Avenue is renamed Garson Avenue and Prospect Avenue is renamed Landis Avenue. Additional residences are shown to the north, east, and south of the Site. Barrett Manor is no longer shown to the west of the Site, and buildings associated with an academy are shown approximately 375 feet southwest of the Site.
1950	**Site:** Four of the vacant lots fronting Garfield Avenue on the eastern portion of the Site are no longer shown, the remaining lot is in the northeast corner of the Site at the corner of Garson Avenue. The small structures at 341-343 Garfield Avenue are no longer shown and have been replaced with a dormitory with laundry, a dwelling, and two storage structures. A small structure is shown in the southeast corner. A 6" water pipe leading to a fire hydrant is shown on the Site running from Garfield Avenue toward the Convent and School. The convent, chapel, and school appear similar to the 1937 map. No other significant changes were noted from the 1937 map. **Surrounding Properties:** Some small accessory structures were shown on the southwest-adjoining block including a tool shed and two water closets. The surrounding area appears similar to the 1937 map with some additional structures and dwellings.
1962	**Site:** A high school is shown on the western portion of the Site fronting Landis Avenue, it is noted that the high school was constructed in 1956. Elm Avenue no longer traverses the Site. Classrooms replace the dormitory in the laundry building, and additional classrooms are shown on the eastern portion of the Site near the dwellings. The storage building in the southeastern portion of the Site has expanded and contains auto garage and storage. These buildings are consistent with the existing Annex Building, Child Development Center, and Garage. No other significant changes were noted from the 1950 map. **Surrounding Properties:** The block east of the Site is vacant. The railroad tracks are labeled "not in operation." The remaining surrounding area appears similar to the 1950 map with some additional structures and dwellings.
1977	**Site:** The Site appears similar to the 1962 map, with two additional small unnamed structures shown in the southern portion of the Site. The vacant lot in the northeastern portion of the Site is no longer demarcated. **Surrounding Properties:** The Staten Island Expressway is shown to the east and northeast, with interchange ramps east-adjacent to the Site, and the Staten Island Rapid Transit railroad tracks are no longer shown. The remaining surrounding area appears similar to the 1962 map.
1981	**Site:** The Site appears similar to the 1977 map. **Surrounding Properties:** No significant changes were noted from the 1977 map.
1983	**Site:** The Site appears similar to the 1981 map. **Surrounding Properties:** No significant changes were noted from the 1981 map.

Year	Comments
1986	**Site:** A gymnasium is shown in the southwestern portion of the Site in its current configuration and is noted as constructed in 1983. Knauth Place is no longer shown traversing the Site. **Surrounding Properties:** No significant changes were noted from the 1983 map.
1987	**Site:** Elm Avenue is shown extending to the Site near the High School and Chapel from Cleveland place. No other significant changes were noted from the 1986 map. **Surrounding Properties:** No significant changes were noted from the 1986 map.
1988	**Site:** The Site appears similar to the 1987 map. **Surrounding Properties:** No significant changes were noted from the 1987 map.
1989	**Site:** The Site appears similar to the 1988 map. **Surrounding Properties:** No significant changes were noted from the 1988 map.
1990	**Site:** Elm Avenue is no longer shown extending onto the Site. No other significant changes were noted from the 1989 map. **Surrounding Properties:** No significant changes were noted from the 1989 map.
1991	**Site:** The Site appears similar to the 1990 map. **Surrounding Properties:** No significant changes were noted from the 1990 map.
1992	**Site:** The Site appears similar to the 1991 map. **Surrounding Properties:** No significant changes were noted from the 1991 map.
1993	**Site:** The Site appears similar to the 1992 map. **Surrounding Properties:** No significant changes were noted from the 1992 map.
1994	**Site:** The Site appears similar to the 1993 map. **Surrounding Properties:** No significant changes were noted from the 1993 map.
1995	**Site:** The Site appears similar to the 1994 map. **Surrounding Properties:** No significant changes were noted from the 1994 map.
1996	**Site:** The Site appears similar to the 1954 map. **Surrounding Properties:** No significant changes were noted from the 1995 map.
2001	**Site:** The Site appears similar to the 1996 map. **Surrounding Properties:** New residential development is shown southeast of the Site, beyond Hastings Street.
2002	**Site:** The current parking lot is labeled "parking" on the northern portion and "playground" on the southern portion. The Site otherwise appears similar to the 2001 map. **Surrounding Properties:** A playground is shown west of the Site across Landis Avenue. No further significant changes were noted from the 2001 map.
2003	**Site:** The Site appears similar to the 2002 map. **Surrounding Properties:** No significant changes were noted from the 2002 map.
2004	**Site:** The Site appears similar to the 2003 map. **Surrounding Properties:** No significant changes were noted from the 2003 map.
2005	**Site:** The Site appears similar to the 2004 map. **Surrounding Properties:** No significant changes were noted from the 2004 map.
2006	**Site:** The Site appears similar to the 2005 map. **Surrounding Properties:** No significant changes were noted from the 2005 map.
2007	**Site:** The Site appears similar to the 2006 map. **Surrounding Properties:** No significant changes were noted from the 2006 map.

*Note: RECs/CRECs/HRECs/VECs, if found, are listed in **bold** font.*

The review of fire insurance maps indicated evidence of the following RECs/VECs:

- Small structures and road beds were present throughout the Site prior to construction of the current buildings. **Potential buried demolition debris/fill material and/or suspect tanks** could be present beneath the Site from the former on-site structures.

- Railroad tracks for the **Staten Island Rapid Transit** were present approximately 250 feet east of the Site between 1917 and 1962 east-adjacent to the Site.

A copy of the Historical Fire Insurance Map report is included in *Appendix H*.

5.5 City Directories

A search for historical city directories was conducted by EDR using the addresses 57-61 Cleveland Place, 26 Landis Avenue, and 8 Narrows Road South. The following table presents descriptions and interpretations from the search:

Year	Comments
1928	**Site:** Not listed. **Surrounding Properties:** Residential
1934	**Site:** St. Johns Villa Academy, St George Hotel (51 Cleveland Place) **Surrounding Properties:** Lakeview Home(77 Chicago Avenue), Orphanage, , Residential
1960	**Site:** St. John Villa Academy **Surrounding Properties:** Lakeview Home (77 Chicago Avenue), Residential
1965	**Site:** St. John Villa Academy **Surrounding Properties:** Lakeview Home (77 Chicago Avenue), Residential
1970	**Site:** St. John Villa Academy **Surrounding Properties:** Residential
1975	**Site:** St. John Villa Academy **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
1979	**Site:** St. John Villa Academy **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
1984	**Site:** St. John Villa Academy **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
1990	**Site:** St. John Villa Academy **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
1995	**Site:** Convent, Elementary School, St. John Villa Academy **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
2000	**Site:** St. John Villa Academy **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
2005	**Site:** HSale 3 M AO, Mcloughlin E M Av, St. John Villa Academy Elementary School **Surrounding Properties:** Residential, Jewish Family and Child Services, Geller House (77 Chicago Avenue)
2008	**Site:** Not Listed. **Surrounding Properties:**
2010	**Site:** Sisters of St. John the Baptist Inc., St. John Villa Academy High School (26 Landis Avenue) **Surrounding Properties:** Jewish Family and Child Services, , Hawthorne-Cedar Knolls Union (77 Chicago Avenue), Frank Trmbetta Sons Construction Corp (348 Fingerboard Rd), Vincent's Home Maintenance Inc (378 Fingerboard Road), Commercial
2014	**Site:** Sisters of St. John the Baptist Inc. **Surrounding Properties:** Jewish Family and Child Services, Frank Trmbetta Sons Construction Corp (348 Fingerboard Rd), Hawthorne-Cedar Knolls Union (77 Chicago Avenue), Commercial

The review of city directories did not identify any RECs/VECs.

A copy of the city directory search is included in *Appendix J*.

5.6 Prior Reports

No prior reports were provided to AKRF for review.

5.7 Other Historical Sources

Computerized NYCDOB records (summarized in Section 6.2) were reviewed for evidence of historical Site work or Site occupation with the potential to have impacted environmental conditions. No records of environmental concern were identified on the NYCDOB Database.

AKRF reviewed electronic block and lot information for the Site on PropertyShark.com (Property Shark). This website contains information including past and present ownership, selected tax records, NYCDOB files including building permits, and environmental hazards compiled by Toxics Targeting, Inc. of Ithaca, New York. The Property Shark website indicated toxic site listings on the Site lot. Of these, two spills, one tank test failure, and one PBS listing are considered RECs/VECs (as detailed in Section 6.1). The report did not indicate any toxic site listings adjacent to the Site. A copy of the Property Shark report is included in Appendix J.

5.8 Historical Use Interviews

Mr. Bustamante, the Facilities Manager of the Site since approximately 1999, indicated that the Site has been occupied by St. John Villa Academy since that time.

5.9 Historical Use Summary

The following table summarizes the findings of the research pertaining to historical Site usage:

YEARS	HISTORICAL USES		SOURCE(S)	COMMENTS
	Site	Surrounding Property		
1891-1929	A small building (Clar Manor Boarding House, current Convent) and vacant land.	Sparse residential development. Military uses (Fort Wadsworth and Fort Tompkins) shown east of the Site on the USGS maps. Staten Island Rapid Transit railroad tracks shown east and southeast of the Site.	Historical USGS topographic maps, Sanborn maps.	The 1891 USGS map is the oldest map noted for the Site. Identified RECs/VECs: potential **USTs and/or fill materials** associated with demolition of a historic building on-site; contamination from railroad operations, may have migrated onto the Site from the **Staten Island Rapid Transit.**

YEARS	HISTORICAL USES		SOURCE(S)	COMMENTS
	Site	Surrounding Property		
1930-1955	St. John Villa Academy including Convent, Chapel (constructed 1937), and School (constructed 1930), some small accessory buildings on perimeter of the Site.	Additional residential and some commercial development in the surrounding area.	Historical USGS topographic maps, Sanborn maps, and Aerial Photographs.	Identified RECs/VECs: potential **USTs and/or fill materials** associated with demolition of historic buildings on-site.
1956-1982	The existing High School building was added to the Site, smaller accessory structures on the eastern boundary no longer shown. The existing Annex Building, Child Development Center, and Garage were shown by 1962.	Additional residential development in the surrounding area. The Staten Island Expressway and Verrazano-Narrows bridge is built approximately 500 feet south of the Site by 1966. The railroad tracks are no longer present to the east of the Site.	Historical USGS topographic maps, aerial photographs, Sanborn maps.	Identified RECs/VECs: potential **USTs and/or fill materials** associated with demolition of historic buildings on-site; Fill materials from highway construction may have been deposited on-site.
1983-present	Existing campus and grounds layout, with gymnasium constructed in 1983.	Residential and educational uses in the surrounding area.	Historical USGS topographic maps, aerial photographs, City Directories, Sanborn Maps.	Identified RECs/VECs: potential **USTs and/or fill materials** associated with demolition of historic buildings on-site.

The review of historical records identified the following RECs/VECs:

- Potential **USTs and/or fill materials** associated with demolition of historic buildings on-site.
- Potential for contamination from track ballast, railroad ties, track maintenance operations, transformers, etc. may have migrated onto the Site from the **Staten Island Rapid Transit** tracks**.**
- **Fill materials** from highway construction may have been deposited on-site.

6.0 REGULATORY AGENCY RECORD REVIEWS

The database search results discussed in this section, provided by EDR of Milford, Connecticut, were reviewed for information regarding documented and/or suspected releases of regulated hazardous substances and/or petroleum products on or near the Site. AKRF also reviewed the "unmappable" (also referred to as "orphan") listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that cannot be plotted with confidence, but are identified as being located within the general vicinity of the Site based on a partial street address. In general, the listing cannot be mapped due to inaccurate or incomplete address information provided to the corresponding regulatory agency. Any listings from the unmappable summary identified by AKRF as a result of the Site reconnaissance and/or cross-referencing to mapped listings are included in the corresponding database discussion within this section.

6.1 Federal and State Regulatory Agency Database Reviews

A review of federal and state records for the Site was accomplished by contacting offices of federal and state regulatory agencies and reviewing listings compiled in the regulatory agency database report (*Appendix I*). The results of the review of the federal and state records are presented below. Copies of the correspondence are included in *Appendix K*.

United States Environmental Protection Agency (USEPA)
The USEPA is responsible for the research, development and enforcement of national environmental regulations. Certain regulatory programs are deferred by the USEPA to state or tribal entities issuing permits and enforcing compliance. The USEPA Region 2 covers New York, New Jersey, Puerto Rico, US Virgin Islands and seven tribal nations within the region. As directed by EPA personnel (FOIA Specialist) from the Public Outreach Branch, USEPA Region 2, AKRF performed an electronic records search for St. John Villa's addresses on the USEPA FRS Facility Query electronic information search engine. No facilities were identified for the Site address or in the immediate surrounding area.

New York State Department of Environmental Conservation (NYSDEC)
The NYSDEC is responsible for the implementation and enforcement of state-mandated environmental regulations to protect the public health and safety. The NYSDEC Region 2 covers New York City. A FOIL request was submitted to the NYSDEC Region 2 via e-mail on April 14, 2017 to determine whether the agency holds records pertaining to the Site. As of the date of this report, NYSDEC has not responded to the FOIL request. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

New York State Department of Health (NYSDOH)
The NYSDOH Bureau of Environmental Exposure Investigation is responsible for investigating the potential for human exposure from environmental contamination, primarily at inactive hazardous waste sites. Activities include water sampling and treatment; dump site, construction site, and spill investigations; and emergency event investigations. For every state, federal Superfund, Brownfield, and voluntary clean-up site, a bureau specialist is assigned to coordinate and communicate health-related activities. A FOIL request was submitted to the NYSDOH via e-mail on April 14, 2017 to determine whether the agency holds records pertaining to the Site. As of the date of this report, NYSDOH has not responded to the FOIL request. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

A summary of sites identified through review of the federal and state regulatory agency databases is provided in the following table:

Federal and State List	Last Updated	Search Radius*	No. of Sites within Search Radius	Site Appears on List	RECs Identified
National Priorities List for Federal Superfund Cleanup (NPL)	12/05/16	1 mile	0	No	No
Delisted NPL Site List	12/05/16	1 mile	0	No	No
Superfund Enterprise Management System (SEMS), including No Further Remedial Action Planned listings (SEMS-ARCHIVE)	10/10/16	½ mile ½ mile	0 0	No No	No No
Resource Conservation and Recovery Information System (RCRIS) – Corrective Action Activity (CORRACTS) and Non-CORRACTS Treatment, Storage, or Disposal Facilities (RCRIS-TSD)	12/12/16 12/12/16	1 mile ½ mile	0 0	No No	No No
Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans)	12/12/16	¼ mile	3 (+6 Non-Generators)	No	No
Federal Institutional Control/Engineering Control Registries	11/15/15	½ mile	0	No	No
Emergency Response Notification System (ERNS)	09/26/16	Site	0	No	No
Toxic Release Inventory System (TRIS)	12/31/14	¼ mile	0	No	No
New York State Inactive Hazardous Waste Disposal Site (SHWS)	11/14/16	1 mile	2	No	No
Hazardous Substance Waste Disposal Site Inventory (HSWDS)	01/01/03	½ mile	1	No	No
Solid Waste Management Facilities Sites (SWF/LF)	01/04/17	½ mile	0	No	No
Vapor Reopened	06/01/16	1 mile	0	No	No
New York State Spills Information (NY Spills)/Leaking Underground Storage Tanks (LTANKS)	02/06/17	½ mile	99/16	**Yes**	**Yes**
Petroleum Bulk Storage Tanks (AST/UST)	12/28/16	¼ mile	3/2	**Yes**	**Yes**
Chemical Bulk Storage Tanks (CBS UST/CBS AST)	12/28/16	¼ mile ¼ mile	0/1	No No	No No
State Voluntary and Brownfield Cleanup Program Sites (VCP/Brownfields)	11/14/16	1 mile	2/1	No	No
Registered Dry Cleaners	10/27/16	½ mile	2	No	No
Manufactured Gas Plant Sites (Coal Gas)	N/A	1 mile	0	No	No
E-Designation Sites	11/08/16	¼ mile	0	No	No
EDR US Historic Auto Stations	N/A	¼ mile	0	No	No
EDR US Historic Cleaners	NA	½ mile	9	No	No

*The surrounding area search radius indicates the radial area (measured from perimeter of the Site) for which the database review was performed.

As the summary table indicates, the Site is listed in the AST, UST, FINDS, and LTANKs databases. The following subsections provide a discussion of the listings for the Site and surrounding properties, which have been identified within the search radius and are listed in the previous table.

National Priority List (NPL) – Environmental Protection Agency Superfund
The NPL is a subset of the CERCLIS, and lists properties that are ranked as high priority for cleanup under the federal Superfund program. Neither the Site nor any other facilities within one mile of the Site are listed in the NPL database.

Delisted NPL Site List
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria the USEPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL when no further response is appropriate. Neither the Site nor any other facilities within one mile of the Site are listed in the delisted NPL database.

Superfund Enterprise Management System (SEMS)
The SEMS list, formerly known as the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list, is a compilation of known and suspected uncontrolled or abandoned hazardous waste sites which are, or were, under investigation by USEPA, but have not been elevated to the status of a Superfund (NPL) site. Former CERCLIS sites that have been granted the status of No Further Remedial Action Planned (NFRAP), currently known as Superfund Enterprise Management System Archive (SEMS-ARCHIVE) sites, are also included in this database. Neither the Site nor any other facilities within one-half mile of the Site are listed in the SEMS database.

Resource Conservation and Recovery Information System - Treatment, Storage, or Disposal Facilities (RCRIS-TSD)/RCRIS Corrective Action Activity (CORRACTS)
The Resource Conservation and Recovery Act (RCRA) program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRIS database tracks facilities that treat, store, and/or dispose of hazardous waste as defined by RCRA (referred to as TSD facilities). The RCRIS CORRACTS database identifies TSD facilities that have conducted, or are currently conducting, corrective action(s) as regulated under RCRA. Neither the Site nor any other facilities within the specific search radii of the Site are listed in the RCRIS-TSD or RCRA CORRACTS databases.

RCRIS Generators/Transporters (RCRIS Gen/Trans)
This list includes any operation that generates or transports hazardous waste and must obtain a hazardous waste generator identification number or transporter permit. The database identified three registered RCRA hazardous waste generator facilities and six additional non-generator facilities within one-quarter mile of the Site. Based on their distance (over 475 feet away and hydraulically crossgradient) and the nature of the listings, none of the RCRA sites are considered RECs/VECs.

Federal Institutional Control/ Engineering Control Registries
These registries are listings of sites with engineering and/or institutional controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining at a site. Deed restrictions are generally required as part of the institutional controls. Neither the Site nor any other facilities within one-half mile of the Site are listed in the Federal Institutional Control/Engineering Control Registries.

Emergency Response Notification System (ERNS)
The ERNS is a national database used to collect information on reported releases of oil and hazardous substances. The Site is not listed in the ERNS database.

Toxic Release Inventory System (TRIS)
TRIS identifies facilities which release toxic chemicals to the air, water, and land in reportable quantities under Superfund Amendments and Reauthorization Act (SARA) Title III Section 313. Neither the Site nor any other facilities with a one-quarter mile radius of the Site are listed in the TRIS database.

New York State Inactive Hazardous Waste Disposal Site (SHWS)

The SHWS database, compiled by the NYSDEC, maintains information regarding the investigation and cleanup of suspected hazardous waste sites. Two SHWS facilities were listed within a one-mile radius of the Site. Based on distance from the Site, assumed hydraulic relationship, and/or listing details, neither of the facilities listed are expected to have affected the Site subsurface.

Hazardous Substance Waste Disposal Site Inventory (HSWDS)
The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that USEPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites. The sites on the list will not automatically be made Superfund sites; rather, each site will be further evaluated for listing on the Registry. One facility within a one-half mile radius of the Site is listed in the HSWDS database. The listing was associated with the removal of hazardous waste from Fort Wadsworth located over one-quarter mile east of the Site, and is not considered a REC/VEC due to its downgradient location - the listing is likely mapped incorrectly.

Solid Waste Management Facilities (SWF/LF)
The SWF/LF database is a comprehensive listing of state permitted/recorded solid waste management facilities. The Site is not listed in the SWF/LF database. No SWF/LF facilities were listed within a one-half mile radius of the Site.

New York State Spills Information Database (NY Spills)/Leaking Storage Tanks Incidents Report (LTANKs)
The NY Spills database including LTANKS sites was researched to identify listings within one-half mile of the Site. The Site is listed in the Spills/LTANKS database. The database identified an additional 114 reported NY Spills/LTANKS incidents within a one-half mile radius of the Site. The following table identifies the Spills/LTANKS listings that are considered RECs/VECs given the listing details:

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Status/Available Data
St. John Villa Academy 57 Cleveland Place	Site	N/A	A4	Spill No. 9005671 was reported in May 1990 due to a tank overfill. Spill 0612683 was reported in 2007 due to a tank test failure. According to the listing details the tank was pumped out, lines were exposed and no contamination was found. Both spills are closed. The Site is also listed in the PBS database.

Based on distance from the Site, assumed hydraulic relationship, and/or listing details, none of the off-site facilities identified in the NY Spills/LTANKs database are expected to represent RECs/VECs.

Petroleum Bulk Storage Tanks (USTs/ASTs)

The NYSDEC petroleum bulk storage (PBS) tank databases were researched to identify listings for the Site and surrounding properties located up to one-half mile from the Site. The Site is listed in the PBS database. The database identified an additional two facilities are listed in the PBS database. The following table identifies the PBS database listings that are considered RECs/VECs given the listing details:

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Regulatory Site ID/Status/Available Data
St. John Villa Academy 57 Cleveland Place	Site	N/A	A2	Facility ID 2-092401 is listed with: one 275-gallon in service #2 fuel oil AST (installed in 1983), two in-service 2,000-gallon #2 fuel oil USTs (one installed in 1965 and one installed in 1980) and one in-service 5,000-gallon #2 fuel oil UST (installed 1956). These PBS listings are considered RECs/VECs. The Site is also listed in the LTANKs database.
Geller House 77 Chicago Avenue	west-adjacent	Upgradient	B6	Facility ID 2-360856 is listed as an active PBS facility with an in-service 2,000-gallon #2 Fuel Oil UST.

Based on distance from the Site, assumed hydraulic relationship, and/or listing details, the remaining facility is not expected to impact the environmental integrity of the Site.

Chemical Bulk Storage Tanks (CBS UST/CBS AST)

The NYSDEC chemical bulk storage (CBS) tank databases were researched to identify listings for the Site and properties within the search radius of one-quarter mile. The Site was not listed in the CBS database. One facility within a one-quarter mile from the Site is listed in the CBS AST tank database. The Hills of Grasmere Hoa located at 49 Claradon Lane, approximately 700 feet northwest of the Site is listed for an in-service 500-gallon sodium hypochlorite tank. No violations were reported. Based on the listing details, this facility is not considered a REC/VEC.

New York State Voluntary and Brownfields Cleanup Programs (VCP/BCP)

The NYSDEC Voluntary and Brownfields Cleanup Programs database was researched to identify listings for the site and within a one-mile radius of the Site. The Site is not listed in the VCP or BCP databases. Two facilities located within a one-mile radius are listed in the VCP database, and one in the BCP database. Based on distances from the Site (over 4,600 feet), these facilities have not affected the Site subsurface.

Registered Dry Cleaners and EDR Historic Cleaners

The registered dry cleaners and EDR Historic Cleaners databases were researched to identify listings within one-half mile of the Site. The Site is not listed in the Registered Drycleaners or EDR Historic Cleaners databases. The regulatory agency database search identified nine EDR Historic Cleaners and two Registered Drycleaners within one-half mile of the Site. Based on distance from the Site and assumed hydraulic relationship, none of these listings are likely to affect the Site subsurface.

Manufactured Gas Plant Sites (Coal Gas)
The EDR manufactured gas plant database was researched to identify listings for the Site and within a one-mile radius of the Site. Neither the Site nor any facilities located within one mile of the Site are listed in the manufactured gas plant database.

EDR Historic Auto Sites
The EDR historic auto database was researched to identify listings within a one-quarter mile radius of the Site. Neither the Site nor any facilities located with one-mile from the Site are listed in the EDR Historic Auto Sites database.

6.2 Local Regulatory Agency Research

A review of local records for the Site was accomplished by contacting offices of New York City regulatory agencies. The results of the review of local records are presented below. Copies of the correspondence are included in *Appendix K*.

New York City Department of Buildings (NYCDOB)

NYCDOB records for the Site were reviewed to determine whether there were any references to buildings, tanks or other structures, property usage or inspection reports that may have indicated the presence, past use, or release of hazardous substances, wastes or petroleum products at the Site. The following records were identified:

- Eight buildings were listed on-site, with addresses including 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, 57 Cleveland Place, and 18 Hastings Street

61 Cleveland Place
- A 1984 Certificate of Occupancy (C of O) for a three-story school building with basement

8 Narrows Road South
- A 1987 C of O for a one-story (with mezzanine) building with a gym, locker room, kitchen, teacher rooms, and heating in the cellar, for the building located at 8 Narrows Road South

25 Landis Avenue
- A 1964 C of O for a one-story school building with basement including classrooms, a kitchen, and a cafeteria for the building located at 25 Landis Avenue
- A 2006 C of O for a two story school with basement.
- A 2006 permit for a horizontal and vertical enlargement including a three-story annex

57 Cleveland Place
- A 1935 C of O for a three story school building with basement including auditorium
- A 1984 C of O for a two story school building, with chapel, bedrooms, and a basement including a recreation room, lounge, dining room and kitchen, with a boiler room in the sub-basement
- A 1960 C of O for a one story (on-ground) kindergarten
- A 1995 Fuel Oil application to replace two boilers, two oil burners, and change grade of fuel from #4 to #2
- A 2005 Permit to replace the boiler and oil burner

No records were identified for Block 3089, Lot 59. A Building Permit Report provided by EDR also identified records including alterations, plumbing and electrical work, and replacing oil burners as summarized above. A copy of the Building Permit Report is included in *Appendix J*.

New York City Fire Department (FDNY)

The FDNY is responsible for the enforcement of local fire codes pertaining to the use and storage of flammable and hazardous materials. FDNY information concerning USTs, sealed or removed USTs, and history of leaks at the Site was requested in a record search form dated April 14, 2017. As of the date of this report, the FDNY has not responded to the FOIL request. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

New York City Department of Health and Mental Hygiene (NYCDOHMH)

The NYCDOHMH Bureau of Environmental Investigations (BEI) maintains files of health related environmental incidents in the City of New York. These incidents may include spills of hazardous chemicals, citizen complaints regarding asbestos issues, or reports of chemical odors or fumes. NYCDOHMH information concerning the Site was requested in a letter dated April 14, 2017. As of the date of this report, the NYCDOHMH has not responded to the FOIL request. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

New York City Department of Environmental Protection (NYCDEP)

The NYCDEP maintains files of incidents involving environmentally regulated materials. The records maintained by NYCDEP include reports of spills of hazardous chemicals and citizen complaints on environmental issues. NYCDEP information concerning the Site was requested in a form dated April 14, 2017. As of the date of this report, NYCDEP has not responded to the FOIL request. If issues of potential concern are noted upon receipt of the information, an addendum to this report will be created to discuss relevant findings.

7.0 USER RESPONSIBILITIES

7.1 Environmental Liens or Activity and Use Limitations

An Environmental Lien search was performed by EDR on April 20, 2017. The lien search indicated that no environmental liens or other activity and use limitations (AULs) were reported for the Site, and the current Site owner was listed as Sisters of St. John the Baptist Inc. A copy of the Environmental Lien search is included in *Appendix J*.

7.2 Valuation Reduction for Environmental Issues

The Site is owned by Sisters of St. John the Baptist Inc. No information was available at the time of the assessment regarding the relationship of the purchase price of the property to the fair market value of the property. If information is received regarding valuation reduction for environmental issues that changes the conclusions or recommendations presented in this Report, an addendum will be submitted to the NYCSCA.

7.3 Specialized Knowledge or Experience of the User

No information was available at the time of the assessment regarding any specialized NYCSCA knowledge or experience that is material to RECs/VECs in connection with the Site.

7.4 Commonly Known or Reasonably Ascertainable Information

No information was available at the time of the assessment regarding any commonly known or reasonably ascertainable information within the local community about the property that is material to RECs/VECs in connection with the Site.

7.5 The Degree of Obviousness of the Presence or Likely Presence of Contamination At The Property

No information was available at the time of the assessment regarding any obvious indicators that point to the presence or likely presence of releases at the Site.

8.0 SITE RECONNAISSANCE AND INTERVIEWS

8.1 Methodology and Limiting Conditions

The inspection of the Site included observations of the Site and surrounding area (Site reconnaissance) to identify potential sources or indications of hazardous substances, including: ASTs; USTs; tank vents and fill ports; transformers and other items that could contain PCBs; waste storage areas; hazardous materials usage, storage, and disposal; stained surfaces and soils; stressed vegetation; leaks; and, odors. In addition, readily-observable portions of the properties immediately adjacent to the Site were viewed from public rights-of-way to identify or determine the likelihood of any of the aforementioned potential sources of contamination being present.

8.2 Site Reconnaissance

Visual inspection of the Site and surrounding area was performed on April 18, 2017 by Ms. Amy Jordan of AKRF, accompanied by Mr. Robert Bustamante, the Facilities Manager at the Site, Mr. Bill O'Connor of Parish Property Management, Inc., Mr. Mathew Mankovich of NYCSCA, and other members of the NYCSCA team. At the time of the inspection, the weather was clear and approximately 65 ºF, and visibility was not obscured by weather conditions. Photographs taken during the reconnaissance are provided in Appendix C.

The Site is located at 57-61 Cleveland Place in Staten Island, New York and is also identified as New York City Tax Block 3087, Lot 1 and Tax Block 3089, Lot 59. The Site consists of an approximately 7.2-acre property developed with eight buildings: a 3-story elementary school with a basement and a partial cellar, a two-story convent with a cellar, a 4-story chapel with a cellar, a 2- to 3-story high school, a 1- to 2-story gymnasium, a 2-story annex, a 1-story child development center, and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a pool with a pool shed. The Site is bounded to the north by Garson Avenue, followed by residences; to the east by Narrows Road South followed by the Staten Island Expressway; to the southeast by Hastings Street, followed by residences; to the south by Knauth Place, followed by residences; to the west by Landis Avenue followed by St. Joseph Academy and Retreat Center; and to the northwest by Cleveland Alley, followed by residences.

Elementary School Building

The elementary school building is an approximately 24,600-square foot, three-story brick building with a basement and a partial cellar located on the central portion of the Site. The building contains a boiler room and storage in the partial cellar; classrooms, offices, and restrooms on the first floor; classrooms and restrooms on the second and third floors; and a partial attic above the roof. The attic contains storage for classroom supplies. The basement contains an auditorium/cafeteria, restrooms closets, a stage, and a small prep/warming kitchen. A tunnel is located at the southeastern portion of the building basement connecting it to the chapel. The roof is constructed of modified bitumen noted to be in good condition. The building is illuminated by fluorescent lights and is not served by elevators.

The partial cellar located beneath the northwestern portion of the building contains one oil-fired boiler, a sump pit, and a storage room. According to Mr. Bustamante, the sump pit is used for boiler cleaning only and otherwise remains dry and unused. The building is cooled via window-mounted units. A PBS registration for one 5,000-gallon and two 2,000-gallon fuel oil USTs, and one 275-gallon fuel oil AST was observed in the boiler room and identified the last testing date as March 1992 and a test due date of March 1997. A fill port and a vent pipe were observed in the asphalt northeast-adjacent to the elementary

school building. A sign on the building façade identified a 2,000-gallon No. 2 fuel oil UST. Mr. Bustamante indicated the tank previously used No. 4 fuel oil and that a tightness test was recently performed, but could not provide further details. Vent pipes and fill ports for the other tanks listed on the PBS registration were noted at the chapel building, annex building and child development center, as described below.

Interior finishing materials include plaster and drop-tile ceilings; painted block, wooden, gypsum board, and ceramic-tiled walls; and concrete, wooden, carpeted, and ceramic and vinyl tile floors, which were observed to be generally in good condition, with the exception of some cracked vinyl floor tiles and damaged plaster walls in the attic.

Minor evidence of water damage was observed in a third floor classroom. Mr. Bustamante indicated that minor leaks occur in the building and are repaired on an as-needed basis. Insulation on piping in the boiler room was noted to be in good to poor condition. Chemical storage noted in the building included cleaning chemicals in the slop sink closets and in the partial cellar in containers up to one gallon in size, which were neatly stored and labeled with no evidence of a release. No odors or staining were noted in the building.

High School Building

The high school building is an approximately 42,000-square foot two- and three-story brick, block, and glass building located on the southwestern portion of the Site. Corner stones on the building indicated construction dates of 1956 and 2005 for the southern portion of the building and the northern addition, respectively. The first floor contains classrooms, offices, restrooms, a cafeteria, a kitchen, and closets/mechanical spaces; and the second floor contained classrooms, offices, and restrooms. The third floor on the northern portion of the building contained classrooms and restrooms. The roof was constructed of bitumen noted to be in fair to good condition. The building is heated and cooled by roof-mounted air exchange equipment, is illuminated by fluorescent lights, and is served by one hydraulic elevator. A hydraulic oil-like odor was detected in the ground-floor elevator room, but no evidence of a leak or staining was observed.

During reconnaissance, evidence of water damage was observed throughout the first floor of the addition. Evidence of mold remediation was observed on the ground floor of the addition, including drywall removal and dehumidifiers. According to Mr. O'Connor, the first floor of the new (addition) portion of the high school building has been vacant since it was inundated with water during Hurricane Sandy in October 2012. Mr. O'Connor indicated that the mold was remediated, but the project is under litigation and, therefore, remains in its current state.

Interior finishing materials include drop-tile ceilings; block, gypsum board, and ceramic-tiled walls; and ceramic, vinyl tile, and laminated floors, which were observed to be generally in good condition, with the exception of some cut gypsum walls and damaged vinyl floor tiles in the ground floor space of the addition at the locations of the water/mold damage.

Chemical storage noted in the building included cleaning chemicals in the slop sink closets in containers up to one gallon in size and laboratory chemicals in flammable storage cabinets and on shelving in a science room. The chemicals were observed to be neatly stored and labeled with no evidence of a release. Mr. Bustamante indicated that disposal of the chemicals is handled by a private hauler on an as-needed basis.

A concrete-paved courtyard is located between the original building and the addition. A sewer ejector pit is located north of the addition along Chicago Avenue and a hydraulic trash compactor was observed east of the building. A 55-gallon drum was observed nearby the compactor; however, its contents were unknown.

Convent Building

The convent is an approximately 14,500-square foot, two-story brick building located on the central portion of the Site. It is connected to the chapel and elementary school buildings via underground passageways. The building contains storage, kitchen, restroom, laundry, and living spaces in the cellar (which was shared with the adjoining chapel building); and offices, living spaces, and restrooms on the first floor. The second floor was not inspected due to privacy concerns, but reportedly contains bedrooms and bathrooms. The basement contained an auditorium/cafeteria, restrooms closets, a stage, and a small prep/warming kitchen. A tunnel is located at the southeastern portion of the building basement connecting it to the chapel building. The roof was observed only from the exterior of the building but appeared to be constructed of bitumen shingles and in good condition.

According to Mr. Bustamante, the building is heated by an oil-fired boiler located east-adjacent to the elementary school building and cooled via window-mounted units. The building is illuminated by fluorescent lights and is not served by elevators.

Interior finishing materials include plaster and drop-tile ceilings; wooden, gypsum board, and marble- and ceramic-tiled walls; and concrete, wooden, carpeted, and ceramic and vinyl tile floors, which were observed to be generally in good condition. No evidence of chemical storage, odors, or staining was noted in the building.

Chapel Building

The chapel is an approximately 20,700-square foot, four-story brick building located on the central portion of the Site. It contains storage, a kitchen, restrooms, and living spaces in the cellar (which was shared with the adjoining convent building); and the first floor contained a chapel and meeting rooms. The remainder of the building was inaccessible due to privacy concerns, but reportedly contained restrooms, bedrooms, and living spaces. The boiler room contains three oil burning boilers, used for heating the building. A petrometer and an oil burner switch were also observed in the boiler room. A fill port and a vent pipe were observed in the concrete paving southwest-adjacent to the building. A sign on the building façade identified a 6,000-gallon No. 2 fuel oil UST. Mr. Bustamante indicated the tank previously used No. 4 fuel oil and that a tightness test was recently performed, but could not provide further details. The 5,000-gallon UST listed on the PBS registration observed in the elementary school building boiler room likely refers to this 6,000 gallon tank with the tank capacity reported incorrectly.. Bustamante also indicated that the observed fill port has not been used since a remote fill port was installed in the Cleveland Place sidewalk in 2005 to allow for easier filling. The building is cooled by window-mounted units.

Interior finishing materials include plaster and drop-tile ceilings; painted block, wooden, gypsum board, and ceramic-tiled walls; and concrete, wooden, carpeted, and ceramic and vinyl tile floors, which were observed to be generally in good condition. The roof is constructed of bitumen shingles, but was inaccessible for inspection. No chemical storage, odors, or staining were noted in the building.

Child Development Center/Pre-Kindergarten Building

The child development center/pre-kindergarten is an approximately 3,400-square foot, one-story brick building located on the southeastern portion of the Site. The building contains a boiler room, storage rooms, restrooms, and classrooms. The roof was not accessible for inspection.

The building is heated by an oil-fired boiler and cooled via window-mounted units. A 275-gallon AST was observed south-east adjacent to the building in a locked wooden enclosure that was not able to be inspected. Mr. Bustamante indicated the tank previously used No. 4 fuel oil, but currently uses No. 2 oil.

Interior finishing materials include plaster and drop-tile ceilings; painted block and ceramic-tiled walls; and concrete and vinyl tile floors, which were observed to be in good condition. The building is illuminated by fluorescent lights, is not served by elevators, and evidence of chemical storage was not observed.

Gymnasium/Auditorium Building

The gymnasium/auditorium is an approximately 13,400-square foot, one- and two-story brick building located on the southern portion of the Site. The building contains a large recreational room, a concession kitchen, storage closets, locker rooms, and a stage on the ground floor; and locker rooms on the partial second floor, which is located on the southeastern portion of the building.

Interior finishing materials include drop tile and corrugated metal (covered by insulation) ceiling; painted block, gypsum, and ceramic-tiled walls; and wooden and ceramic and vinyl tile floors, which were observed to be generally in good condition, with the exception of the insulation on the ceiling, which exhibited evidence of water damage. The building is heated and cooled by air exchange equipment located on the roof, is illuminated by fluorescent lights, and is not served by elevators. The roof was not able to be inspected. No chemical storage, odors, or staining were noted in the building.

Annex Building

The annex is an approximately 7,200-square foot, two-story brick building located on the southeastern portion of the Site. Only the ground-floor shop and boiler rooms were accessible at the time of the inspection. Chemical storage noted in the shop included approximately 100 one-gallon and approximately 20 five-gallon containers of paint; and approximately 50 small (less than one-gallon) containers of aerosols, degreasers, solvents, and soaps, which were neatly stored and labeled with no evidence of a release. Some dry paint was observed on the concrete flooring in the shop. No odors or staining were noted in the areas inspected. The boiler room contained one oil-fired boiler and three oil burner switches. Peeling paint was observed on the shop room ceiling and damaged piping insulation was observed in the boiler room. The roof was inaccessible for inspection. The accessible portions of the annex building are illuminated by fluorescent lights and the building is not served by elevators.

Interior finishing materials include plaster ceilings; painted block and gypsum board walls; and concrete and vinyl tile floors, which were observed to be generally in good condition, with the exception of some cracked vinyl floor tiles and concrete flooring.

A fill port was observed on the southeastern façade of the building. During reconnaissance, the associated UST was being excavated. According to Mr. Bustamante, the tank failed its tightness test and was being excavated to find the source of the leak. A sign on the façade identified the tank as a 2,000-gallon No. 2 fuel oil UST and Mr. Bustamante indicated the tank previously used No. 4 fuel oil.

Garage

The garage is an approximately 2,400-square foot, one-story brick building located on the southeastern portion of the Site. The garage was inaccessible during Site inspection. According to Mr. Bustamante, the garage building contains maintenance equipment. The heating and cooling systems of the building, if any, are not known.

Exterior Spaces

Exterior spaces surrounding the buildings included landscaped and grassy areas, concrete-paved walkways, asphalt-paved parking areas, and an inaccessible, steeply-sloped, wooded area on the northeastern portion of the Site. A pool with an adjacent inaccessible pool shed and asphalt-paved playground with playground equipment is located southeast of the wooded area. Mr. Bustamante

indicated that pool cleaning chemicals are not stored on-site. Dumpsters were observed north of the annex building and contained household garbage. An approximately 43,000-square foot, asphalt-paved parking lot is located on the northwestern portion of the Site and a monitoring well was observed adjacent to the parking lot in the Cleveland Place sidewalk adjacent to the parking lot on the northwestern portion of the Site; however, its use was unknown. No staining or stressed vegetation was observed on or around the parking lot.

Based on observations made during the Site inspection, no changes occurred at the Site since the most recent aerial photograph, dated 2011, as listed in Section 5.3.

8.3 Current and Historical Use Interviews

The following knowledgeable persons were interviewed with regard to the Site pursuant to ASTM 1527-13 Section 10:

8.3.1 Current Property Owner

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Robert Bustamante	Facilities Manager/St. John Villa	N/A	18

Mr. Bustamente of St. John Villa, the current facilities manager and representative of the owner, provided access to the Site and indicated that the Site buildings were constructed throughout the 1900s and have been occupied by a school throughout its history. Detailed information provided during the interview listed above is referenced in applicable sections of this report and is documented on the Record of Communication form in *Appendix K.*

8.3.2 Current Site Operator or Key Site Manager

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Robert Bustamante	Facilities Manager/St. John Villa	N/A	18

As noted above, Mr. Bustamante of St. John Villa provided access to the Site and was interviewed during the reconnaissance. Detailed information provided during the interview listed above is referenced in applicable sections of this report and is documented on the Record of Communication form in *Appendix K.*

8.3.3 Site Occupants

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Robert Bustamante	Facilities Manager/St. John Villa	N/A	18

As noted above, Mr. Bustamante of St. John Villa provided access to the Site and was interviewed during the reconnaissance. Detailed information provided during the interview listed above is referenced in applicable sections of this report and is documented on the Record of Communication form in *Appendix K.*

8.3.4 Past Owners, Operators and Occupants

No prior owners or occupants were available to be interviewed.

8.3.5 Report User

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Matthew Mankovich	Industrial Hygienist/NYCSCA	718-752-5622	N/A

Mr. Matthew Mankovich completed the Phase I ESA All Appropriate Inquiries (AAI) questionnaire for the Site. Mr. Matthew Mankovich indicated that the Site is being considered for acquisition and conversion into a new public school by the NYCSCA.

Detailed information provided during the interviews listed above is referenced in applicable sections of this report and is documented on the Record of Communication form in *Appendix K.*

8.4 Hazardous Substances and Petroleum Products Storage and Handling

Chemical storage at the Site includes cleaning and maintenance chemicals in containers up to five gallons in slop sink rooms, and a maintenance shop, and laboratory chemicals in flammable storage cabinets and on shelving in a science room in the high school building. Chemical storage noted in the annex building shop included cleaning chemicals of approximately 100 one-gallon and approximately 20 five-gallon containers of paint; and approximately 50 small (less than one-gallon) containers of aerosols, degreasers, solvents, and soaps. Some dry paint was observed on the concrete flooring in the shop. The chemicals were observed to be neatly stored and labeled with no evidence of a release. Mr. Bustamante indicated that chemical disposal was handled by private hauler on an as-needed basis. Although the garage was inaccessible at the time of inspection, it reportedly contains additional chemical storage and grounds maintenance equipment. On-site fuel oil storage is considered a REC.

8.4.2 Petroleum Product Storage and Handling

During the Site reconnaissance, fill ports, vent pipes and signs were noted for 2,000-gallon No. 2 fuel oil USTs outside of the elementary school and annex buildings and a 6,000-gallon No. 2 fuel oil UST outside of the chapel building. In addition, a 275-gallon No. 2 fuel oil AST was noted within a wooden adjacent to the child development center building. A PBS registration was observed in the elementary school boiler room listed one 5,000-gallon and two 2,000-gallon USTs, and one 275-gallon AST, which is consistent with the PBS database listing for the Site. It is likely that the 5,000-gallon UST is an erroneous listing and actually refers to the 6,000-gallon UST noted at the chapel building. During reconnaissance, a remote fill port was observed on the eastern Cleveland Place sidewalk. Mr. Bustamante indicated that the 6,000-gallon No. 2 fuel oil UST was previously filled via the direct fill port, but that the remote fill port was installed in 2005 and has been used since that time.

The PBS registration that was observed in the elementary school boiler room identified the date of the last UST tightness tests at the Site as 1992; however, the EDR database listings and the NYSDEC PBS database search details identified the last tightness tests were completed in 2012. According to Mr. Bustamante, the USTs had recently undergone tank tightness tests at the time of the Site reconnaissance, and the 2,000-gallon UST south of the annex building/northwest of the garage failed its test. During the inspection, the area around the UST was being excavated to find the source of the leak. The results of the

tests for the remaining USTs were not yet available. The presence of fuel oil tanks at the Site is considered a REC/VEC.

8.5 Solid Waste Generation, Storage and Disposal

Commercial refuse is generated at the Site. Mr. Bustamante indicated that the chemicals in the high school science classrooms were disposed of by a private hauler on an as-needed basis. No RECs or VECs associated with solid waste generation or disposal were identified during the Site reconnaissance.

8.6 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are toxic components of various products including, but not limited to caulking materials, light ballasts, dielectric and hydraulic fluids that were formerly used in electrical equipment such as transformers and hydraulic elevators/lifts. The manufacture and use of PCBs was banned in the United States in 1978.

Based on the ages of the buildings, electrical equipment and transformers, fluorescent lighting fixtures, and hydraulic elevator equipment may contain PCBs. No leaks or spills were noted in connection with the electrical fixtures, light ballasts, transformers or elevator equipment. The potential presence of PCBs in building materials and historical fill material is considered an environmental concern.

8.7 Asbestos-Containing Material (ACM)

AKRF conducted a limited visual survey (i.e., within accessible areas only) for the presence of suspect ACM at the Site. The intent of the survey was to identify exposed suspect ACM through a preliminary visual non-destructive survey. In accordance with the SCA scope of services, no sampling of suspect ACM was performed during this investigation. Pursuant to applicable asbestos control regulations and guidelines, AKRF considered any observed suspect ACM to be asbestos-containing. The presence of suspect ACM is considered an environmental concern.

Suspect ACM at the Site include vinyl floor tile, sheetrock, ceramic and stone tile mastic, acoustical ceiling tile, thermal pipe insulation, roofing materials, spray-on fireproofing, and window caulk and glazing, and are summarized as follows:

Material	Location
Thermal pipe insulation	Boiler rooms
Vinyl floor tiles	Throughout Site
Suspended ceiling tiles	Throughout Site
Sheetrock walls and ceilings	Throughout Site
Ceramic tile mastic	Bathrooms
Stone tile mastic	Lobby and hallways
Window caulk and glazing	Throughout Site
Roofing materials	Roofs

Additional known or suspect ACM may be present in portions of the buildings that were not inspected, including within pipe chases, behind walls, in other hidden locations and/or in buried fill materials beneath the Site.

8.8 Lead-Based Paint (LBP) Survey

During the Site inspection, a limited visual assessment of accessible painted surfaces was performed. No sampling or intrusive work was performed, as this is outside the scope of this Phase I ESA. In accordance with NYCSCA's current interior LBP Inspection protocol, all painted interior surfaces are assumed to be LBP.

Painted surfaces observed at the Site (e.g., walls and ceilings) were observed to be in generally good condition, with some small peeling areas noted on interior and exterior surfaces including peeling paint in the shop room in the Annex Building. Any construction work that may disturb exterior painted surfaces should be inspected, and tested as appropriate, in accordance with NYCSCA's current exterior LBP policies and procedures. Any interior paint that is damaged or in disrepair, or that may be disturbed in any way during construction activities, must be handled in accordance with NYCSCA policies and procedures. In addition, LBP may be present in fill materials beneath the Site. The potential presence of LBP is considered an environmental concern.

8.9 Regulatory Compliance

A PBS registration for one 5,000-gallon and two 2,000-gallon USTs, and one 275-gallon AST was observed in the elementary school building boiler room during reconnaissance. However, during the reconnaissance, placards adjacent to the on-site tanks indicated the presence of one 275-gallon No. 2 fuel oil AST, two 2,000-gallon USTs and one 6,000-gallon UST, indicating that 5,000-gallon tank on the PBS registration is likely in error. The PBS registration should be updated to indicate the correct UST details.

According to Mr. Bustamante, tightness tests were recently performed on the USTs at the Site, and the results of the 2,000-gallon No. 2 fuel oil UST south of the annex building indicated the tank failed the test. During reconnaissance, the tank was being excavated to find the source of the leak, but no further information was provided. Tank testing information should be reviewed to ensure that the USTs are in compliance with PBS requirements.

8.10 Electromagnetic Fields

No evidence of high voltage lines or substations was observed in close proximity to the Site during the reconnaissance, and no high-voltage lines were identified in close proximity to the Site in the regulatory database report provided by EDR.

8.11 Other Environmental Conditions (Methane, Mold, etc.)

During reconnaissance, evidence of water damage was observed throughout the first floor of the high school building addition (constructed in 2005). Evidence of mold remediation was observed on the first floor of the 2005 addition, including drywall removal and dehumidifiers. According to Mr. O'Connor, the first floor of the new high school building has been vacant since it was inundated with water during Hurricane Sandy in October 2012. Mr. O'Connor indicated that the mold was remediated, but the project is under litigation and, therefore, remains in its current state.

According to Mr. Bustamante, minor leaks throughout the Site buildings are repaired as needed. Minor evidence of water damage was observed in the elementary school building classrooms. No mold was observed in any of the Site buildings.

Based on a review of the historic topographic maps, the Site is not located in an area of suspected former wetlands. Therefore, potential subsurface methane beneath the Site is not considered an environmental concern at the Site.

9.0 SUMMARY OF FINDINGS

This report summarizes the findings of the Phase I ESA of St. John Villa Academy located in Staten Island, New York (New York City Tax Block 3087, Lot 1, and Block 3089, Lot 59). The Site address is 57 Cleveland Place, and alternative addresses for the Site include 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, and 18 Hastings Street. The Site consists of an approximately 7.2-acre property developed with eight buildings: a 3-story elementary school with a basement and a partial cellar, a 2-story convent with a cellar, a 4-story chapel with a cellar, a 2- to 3-story high school, a 1- to 2-story gymnasium, a 2-story annex, a 1-story child development center, and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a swimming pool with a pool shed.

The Site is bounded to the north by Garson Avenue, followed by residences; to the east by Narrows Road South, followed by the Staten Island Expressway; to the southeast by Hastings Street, followed by residences; to the south by Knauth Place, followed by residences; to the west by Landis Avenue followed by St. Joseph Academy and Retreat Center; and to the northwest by Cleveland Alley, followed by residences. A groundwater monitoring well was noted on the sidewalk on Cleveland Place between the two site lots. According to the New York City Department of Buildings (NYCDOB) and the Department of City Planning (NYCDCP) zoning map, the Site is zoned R1-2 (Residential). Neither the Site nor adjacent properties contain Hazardous Materials "E" Designations or "D" Restrictive Declarations.

According to the USGS 7.5-Minute Quadrangle Map, *The Narrows, NY – NJ*, dated 2013, the elevation of the Site ranges from approximately 100 to 140 feet above the North American Vertical Datum of 1988 (an approximation of mean sea level), to a high point in the center of the Site. The nearest surface water body is Grasmere Lake, approximately 3,000 feet to the west. The Lower Bay of New York Bay is located approximately 3,000 feet southeast and 4,500 feet east of the Site. Based on USGS mapping, groundwater is anticipated to be encountered approximately 90 to 130 feet bgs, and to flow in a south-southeasterly direction toward the Lower Bay. USGS mapping indicates that bedrock is approximately 250 to 300 feet bgs in the vicinity of the Site. Based on a review of the historical USGS topographic maps, the Site is not located in an area of suspected former wetlands; thus, potential subsurface methane is not considered an environmental concern.

The Site was occupied by Clar Manor boarding house prior to acquisition by St. John Villa in 1930. The Manor house was converted into the convent building, and additional structures were added to St. John Villa throughout the 1900s. Some small accessory structures on the eastern portion of the Site were present from 1930 to 1955. The current layout, including the addition to the high school, was present since 2005. Potential buried debris associated with demolition of historical on-site buildings could include USTs and/or historic fill material of unknown origin, which are considered RECs/VECs.

Visual inspection of the Site and surrounding area was performed on April 18, 2017 by Ms. Amy Jordan of AKRF, accompanied by Mr. Robert Bustamante, the Facilities Manager at the Site, Mr. Mathew Mankovich of NYCSCA, and other members of the NYCSCA team. At the time of the Site inspection, the weather was clear and approximately 65 ºF, and the visibility of the Site was not obscured by weather conditions. The chapel, convent, elementary school, annex, and child development center/pre-kindergarten are heated by No. 2 fuel oil-fire boilers and cooled by window-mounted units; the high school and gymnasium/auditorium are heated by natural gas-powered boilers and cooled by roof-mounted air handling systems. It is unknown if the garage is heated or cooled. The high school is served by one traction elevator; the remaining buildings do not contain elevators.

A PBS registration for one 275-gallon AST, two 2,000-gallon USTs, and one 5,000-gallon UST was observed in the elementary school boiler room, consistent with the PBS listing for the Site in the regulatory database. A 275-gallon AST was observed southwest-adjacent to the child development center/pre-kindergarten in a wooden enclosure. UST fill ports and vent pipes associated with one 6,000-gallon (registered as 5,000 gallons) and two 2,000-gallon USTs were observed northeast of the elementary school building, southeast of the annex /northwest of the garage, and southwest of the chapel. A remote fill port associated with the 6,000-gallon UST was also observed on the Cleveland Place sidewalk.

Chemical storage at the Site includes cleaning and maintenance chemicals in containers up to one gallon in slop sink rooms and a maintenance shop, and laboratory chemicals in flammable storage cabinets and on shelving in a science room in the high school building. The chemicals were observed to be neatly stored and labeled with no evidence of a release. Mr. Bustamante indicated that chemical disposal was handled by private hauler on an as-needed basis. A hydraulic trash compactor was observed east of the high school building. A 55-gallon drum was observed nearby the compactor; however, its contents were unknown.

Painted surfaces observed at the Site (e.g., walls and ceilings) were observed to be in generally good condition, with some small peeling areas noted on interior and exterior surfaces including the Annex Building. Based on the buildings' ages (with the exception of the high school building addition), electrical equipment, transformers, hydraulic elevator equipment, fluorescent lighting fixtures, and window caulking may contain PCBs.

Suspect ACM noted in the Site building include vinyl floor tile, sheetrock, ceramic and stone tile mastic, acoustical ceiling tile, thermal pipe insulation, roofing materials, spray-on fireproofing, and window caulk and glazing. These materials were noted to be in good condition with damaged pipe insulation in boiler rooms. Additional suspect ACMs may be present in building areas that were not inspected.

Regulatory database listings were identified for the Site including PBS records and two LTANKS listings. Both spills are closed, and St. John Villa facilities staff is aware of in-service fuel oil storage on Site.

On-site recognized environmental conditions (RECs) including: in-service fuel oil storage tanks with two associated closed-status Spill listings and one recent tightness test failure; and, historic fill of unknown origin, potential buried debris, and potential abandoned USTs. Off-site RECs include potential contamination from historic railroad tracks located east of the Site, a nearby PBS facility, and a monitoring well noted on the public sidewalk between the two Site lots. The Phase I ESA also revealed environmental concerns associated with suspect ACM, LBP, and PCB-containing materials in the Site structures and/or in buried debris; a 55-gallon drum with unknown contents; and current and former water damage with associated historic mold growth.

10.0 CONCLUSIONS AND RECOMMENDATIONS

AKRF has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 and the requirements of NYCSCA. Any additions to, exceptions to, or deletions from this practice are described in Section 2.0 of this report.

This Phase I ESA has revealed the following RECs, CRECs and/or VECs associated with the Site:

On-Site REC/CREC/VEC:

- Three in-service fuel oil underground storage tanks (USTs) with two closed-status Spill listings and one reported tank-tightness test failure.
- Potential historic material of unknown origin and/or abandoned USTs associated with demolished historic on-site buildings, and/or potential historic fill associated with past nearby highway construction.

Off-Site RECs/CRECs/VECs:

- Potential contamination associated with historic railroad tracks located east of the Site.
- A NYSDEC PBS listing west-adjacent to the Site at 77 Chicago Avenue.
- A groundwater monitoring well observed during Site reconnaissance on the Cleveland Place sidewalk between the two Site lots.

This Phase I ESA has revealed the following other environmental concerns associated with the Site:

- Suspect ACM in building materials and/or buried demolition debris/fill material.
- Suspect LBP identified on painted surfaces and/or buried demolition debris/fill material.
- Potential PCB-containing building materials and/or buried demolition debris/fill material.
- A 55-gallon drum with unknown contents was observed near the High School building.
- Water damage and associated mold growth.

Recommendations

Based on the findings of the Phase I ESA, AKRF recommends performing a Phase II Environmental Site Investigation (ESI) at the Site to investigate the identified RECs/VECs. The ESI should include a geophysical survey and subsurface soil, soil vapor, and groundwater sampling in the areas of concern. Areas that were inaccessible during the Phase I Site reconnaissance should be inspected during the Phase II ESI to check for potential additional RECs and/or environmental concerns. In addition, AKRF also recommends that any ACM, LBP, mold, and/or PCB-containing building components affected by future renovations, repairs, or demolition at the Site be identified and properly managed during such activities. Furthermore, the Site's PBS registration should be updated to correct the 6,000-gallon UST capacity, and tank tightness testing information should be reviewed to ensure compliance with PBS requirements.

11.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

AKRF Engineering, P.C. (AKRF) has performed a Phase I ESA of St. John Villa Academy Site (the "Site"), located at 57-61 Cleveland Place in Staten Island, NY. The scope of the Phase I ESA was consistent with the requirements of ASTM Standard Practice E 1527-13 and of NYCSCA. Signatures of the Environmental Professionals who participated in conducting this Phase I ESA are provided below. Qualifications for these individuals are provided in *Appendix L*. AKRF declares that to the best of their professional knowledge and belief, they meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. AKRF has the specific qualifications based on education, training and experience to assess the subject property. AKRF has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

PREPARED BY:
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ENVIRONMENTAL PROFESSIONAL

REVIEWED BY:
Marcus Simons
Senior Vice President
ACTING QC OFFICER

Rebecca A. Kinal, P.E.
Vice President
PROJECT MANAGER

12.0 REFERENCES

Persons Interviewed:

- Mr. Robert Bustamente, St. John Villa Academy facilities manager, interviewed on April 18, 2017.

Resources Consulted:

- Environmental Data Resources Inc. (EDR) of Shelton, Connecticut, Regulatory Agency Database Report, dated August 8, 2016.
- EDR Property Tax Map Report, dated August 8, 2016.
- EDR Aerial Photographs: 1924, 1940, 1951, 1954, 1961, 1966, 1975, 1980, 1985, 1994, 1995, 2006, 2009, and 2011.
- EDR Historical USGS topographic quadrangle maps: 1898, 1900, 1905, 1925, 1947, 1955, 1966, 1981, 1998, and 2013.
- EDR Sanborn maps: 1917, 1937, 1950, 1962, 1977, 1981, 1983, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 2001, 2002, 2003, 2004, 2005, 2006, and 2007.
- EDR City Directories: 1928, 1934, 1960, 1965, 1970, 1975, 1979, 1984, 1990, 1995, 2000, 2005, 2008 and 2013.

Regulatory Agencies Contacted:

- New York City Department of Buildings, Building Information Search Online (http://a810-bisweb.nyc.gov/bisweb), April 14, 2017.
- New York City Fire Department, April 14, 2017.
- New York City Planning and Zoning Department, April 14, 2017.
- New York City Department of Finance, April 14, 2017.
- New York City Department of Environmental Protection, April 14, 2017.
- New York City Department of Health and Mental Hygiene, April 14, 2017.
- New York State Department of Environmental Conservation, April 14, 2017.
- United State Environmental Protection Agency, April 14, 2017.

Documents and Maps:

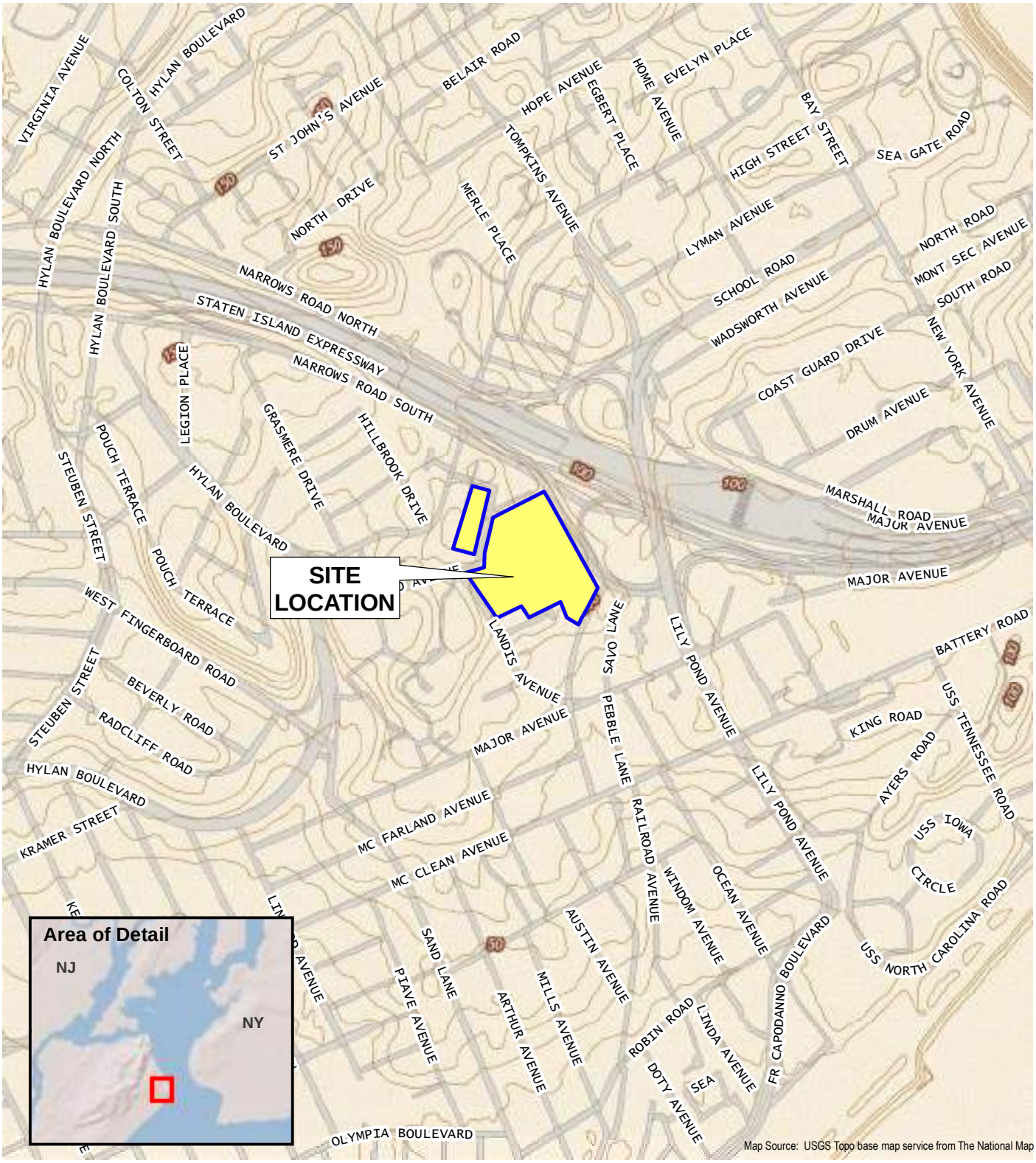
- American Society for Testing and Materials (ASTM), "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," ASTM Designation E 1527-13, 2013.
- Flood Insurance Rate Map (FIRM) Community Panel Number Panel No. 3604970331F, Federal Emergency Management Agency (FEMA), 2007.
- New York State Department of Health Database of Radon Test Results, 2016.
- New York City Planning Commission, New York City Zoning Map 27c, 2014.
- New York City Reconnaissance Soil Survey, United States Department of Agriculture-Natural Resources Conservation Service, 2009.
- National Wetlands Inventory Index Map, United States Fish and Wildlife Service, 2016.
- United States Geologic Survey Topographic Quadrangle Map, *The Narrows, NY - NJ*, dated 2013.
- United States Geological Survey, *Geologic and Geohydrologic Reconnaissance of Staten Island, New York*, Water-Resources Investigation Report 87-4048, Julian Soren, 1988.

13.0 APPENDICES

Appendix A - Site Location Map
Appendix B - Site Plan
Appendix C - Site Photographs
Appendix D - New York State Wetlands Map
Appendix E - FEMA Flood Insurance Rate Map
Appendix F - Historical Topographic Maps
Appendix G - Historical Aerial Photographs
Appendix H - Sanborn Fire Insurance Map Report
Appendix I - Regulatory Agency Database Report
Appendix J - Prior Reports/ Supporting Documents
Appendix K - Records of Communication & Agency Correspondence
Appendix L - Qualifications of Environmental Professionals

APPENDIX A

SITE LOCATION MAP



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AKRF
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440 Park Avenue South, New York, NY 10016

St. John Villa Academy
Staten Island, New York

SITE LOCATION

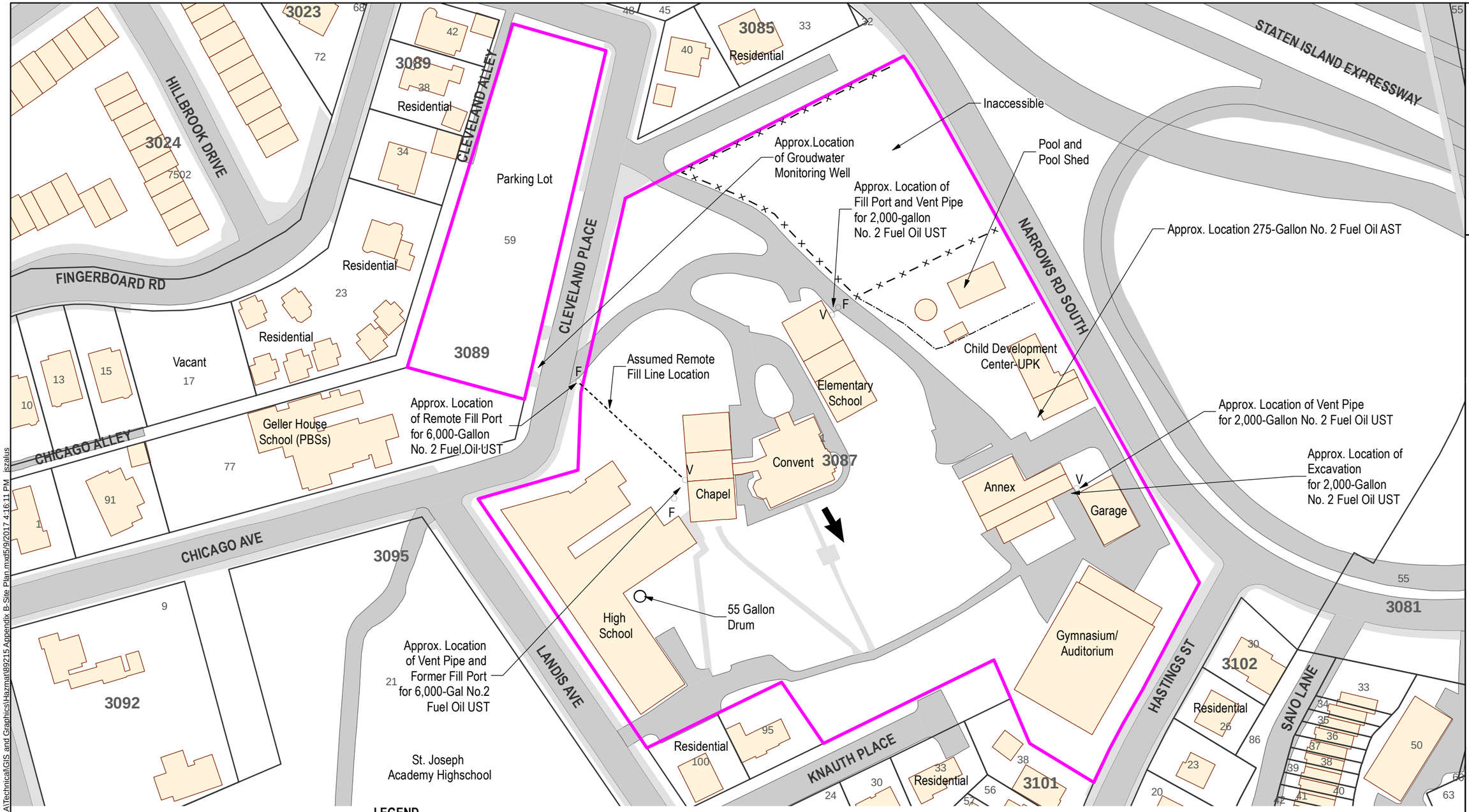
DATE
5/8/2017

PROJECT NO.
89215

APPENDIX
A

APPENDIX B

SITE PLAN



LEGEND

- PROJECT SITE BOUNDARY
- 1 LOT BOUNDARY AND TAX LOT NUMBER
- 3087 BLOCK NUMBER
- BUILDING
- ANTICIPATED GROUNDWATER FLOW

UST UNDERGROUND STORAGE TANK

AST ABOVEGROUND STORAGE TANK

V VENT PIPE

F FILL PORT

0 50 100 200

SCALE IN FEET

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

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440 Park Avenue South, New York, N.Y. 10016

St. John Villa Academy
Staten Island, New York

SITE PLAN

DATE
5/9/2017

PROJECT NO.
89125

APPENDIX
B

APPENDIX C

SITE PHOTOGRAPHS

Photograph 1: The convent building facing southeast.

Photograph 2: Ground floor kitchen in the convent.

Photograph 3: First floor entryway in the convent building.

Photograph 4: Rear façade of the chapel building facing east.

Photograph 5: Ground floor storage room in the chapel building.

Photograph 6: Petrometer in the ground floor chapel boiler room.

Photograph 7: Three oil-burning boilers in the chapel boiler room.

Photograph 8: First floor chapel.

Photograph 9: Vent pipe adjacent to the southern chapel building façade for a 6,000 gallon No. 2 fuel oil UST.

Photograph 10: Former direct fill port south-adjacent to the chapel building (left) and current remove fill port along the Cleveland Place sidewalk (right).

Photograph 11: Elementary school building façade facing east.

Photograph 12: Typical interior hallway within the elementary school building.

Photograph 13: Typical classroom in the elementary school building.

Photograph 14: Oil-burning boiler in the elementary school building basement.

Photograph 15: Damaged boiler piping insulation in the elementary school building basement.

Photograph 16: Minor water damage in the elementary school building.

Photograph 17: Fill port and vent pipe for the 2,000-gallon No. 2 fuel oil UST on the northern façade of the elementary school building.

Photograph 18: Eastern façade of the high school building along Landis Avenue.

Photograph 19: Concrete-paved courtyard adjacent to the high school building, facing northeast.

Photograph 20: Water damage from an October 2012 flood in the high school building addition.

Photograph 21: Typical hallway in the high school building.

Photograph 22: Typical classroom in the high school building.

Photograph 23: Chemical storage in the high school building science classroom.

Photograph 24: Southern façade of the annex building.

Photograph 25: Paint storage in the annex building.

Photograph 26: Oil burner switches in the annex building.

Photograph 27: UST excavation south of the annex building.

Photograph 28: Gymnasium/auditorium building western façade.

Photograph 29: Recreational space within the gymnasium/auditorium buildi8ng.

Photograph 30: Garage building southern facade.

Photograph 31: AST adjacent to the child development center/pre-kindergarten building.

Photograph 32: Classroom in the child development center/pre-kindergarten building.

Photograph 33: Parking lot northwest of Cleveland Place on the western portion of the Site.

Photograph 34: Wooded area on the northern portion of the Site.

Photograph 35: Playground (foreground) and pool (background) on the eastern portion of the Site.

Photograph 36: Monitoring well in the Cleveland Place sidewalk.

APPENDIX D

NEW YORK STATE WETLANDS MAP

LEGEND

- PROJECT SITE BOUNDARY
- FRESHWATER FORESTED/SHRUB WETLAND (PFO, PSS)
- FRESHWATER EMERGENT WETLAND (PEM)
- FRESHWATER POND (PUB, PAB)
- ESTUARINE AND MARINE WETLAND (E2, M2)
- RIVERINE (R)
- LAKE (L)
- ESTUARINE AND MARINE DEEPWATER (E1, M1)
- OTHER (PF, PML, PRB)

Map Source: USFWS National Wetlands Inventory 2016
Data Source: http://www.fws.gov/wetlands/Data/State-Downloads.html

0 800 1,600
SCALE IN FEET

AKRF Engineering, P.C.
440 Park Avenue South, New York, NY 10016

St. John Villa Academy
Staten Island, New York

NATIONAL WETLANDS MAP

DATE
5/8/2017
PROJECT NO.
89125
APPENDIX
D

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APPENDIX E

FEMA FLOOD INSURANCE RATE MAP

Data source: FEMA Effective National Flood Hazard Layer, New York State, 9/5/2007

Panel # 3604970327F

LEGEND

- PROJECT SITE BOUNDARY
- 1% ANNUAL CHANCE FLOOD HAZARD (100-YEAR FLOODPLAIN)
- 0.2% ANNUAL CHANCE FLOOD HAZARD (500-YEAR FLOODPLAIN)

0 800 1,600

SCALE IN FEET

AKRF Engineering, P.C.
440 Park Avenue South, New York, NY 10016

St. John Villa Academy
Staten Island, New York

FEMA FLOOD MAP

DATE **5/8/2017**
PROJECT NO. **89125**
APPENDIX **E**

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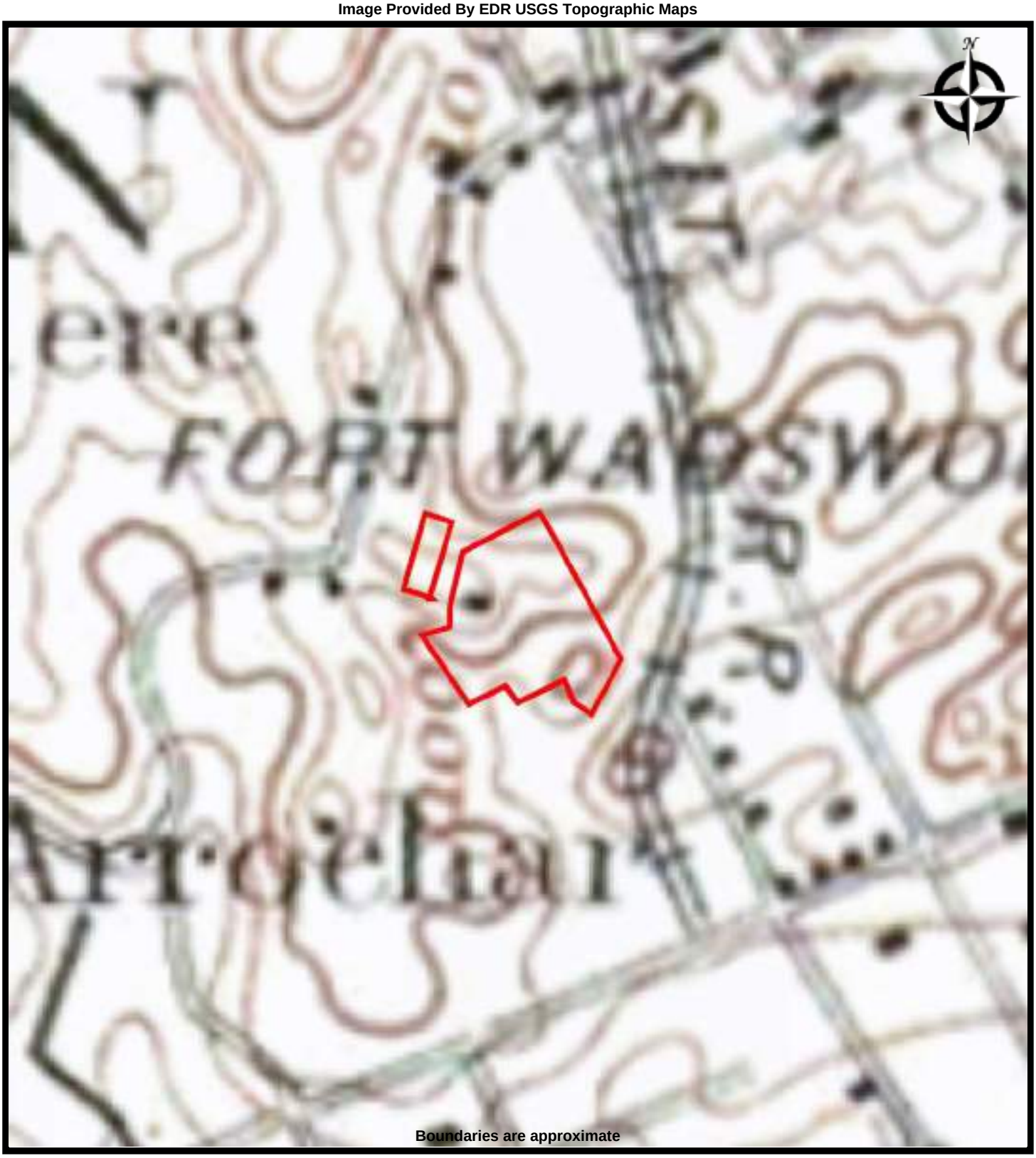
APPENDIX F

HISTORICAL TOPOGRAPHIC MAPS

Image Provided By EDR USGS Topographic Maps

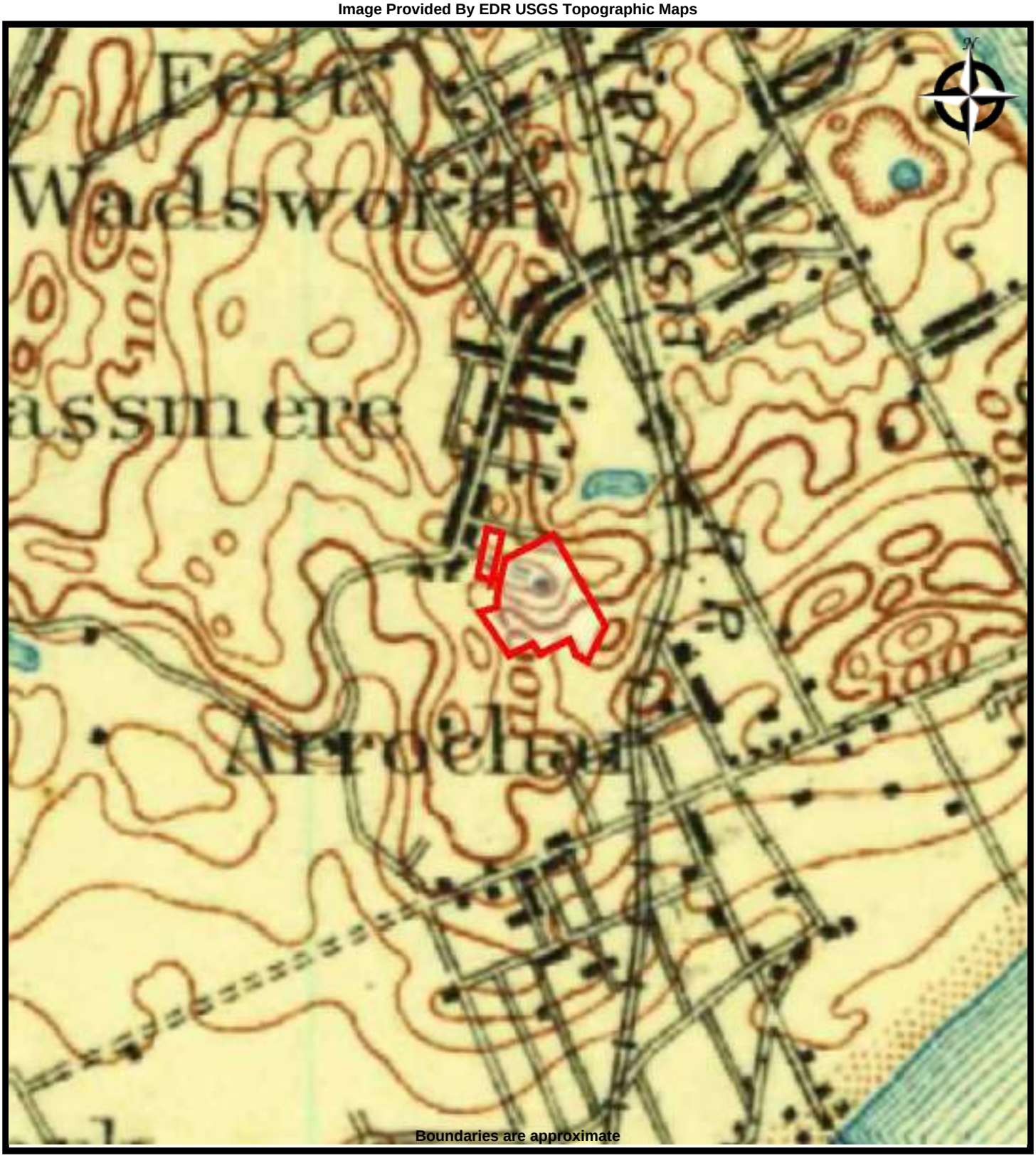


	TOPO MAP - 1891 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

Image Provided By EDR USGS Topographic Maps

	TOPO MAP - 1898 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

Image Provided By EDR USGS Topographic Maps



	TOPO MAP - 1900 **57-61 Cleveland Place** **Staten Island, New York 10305**
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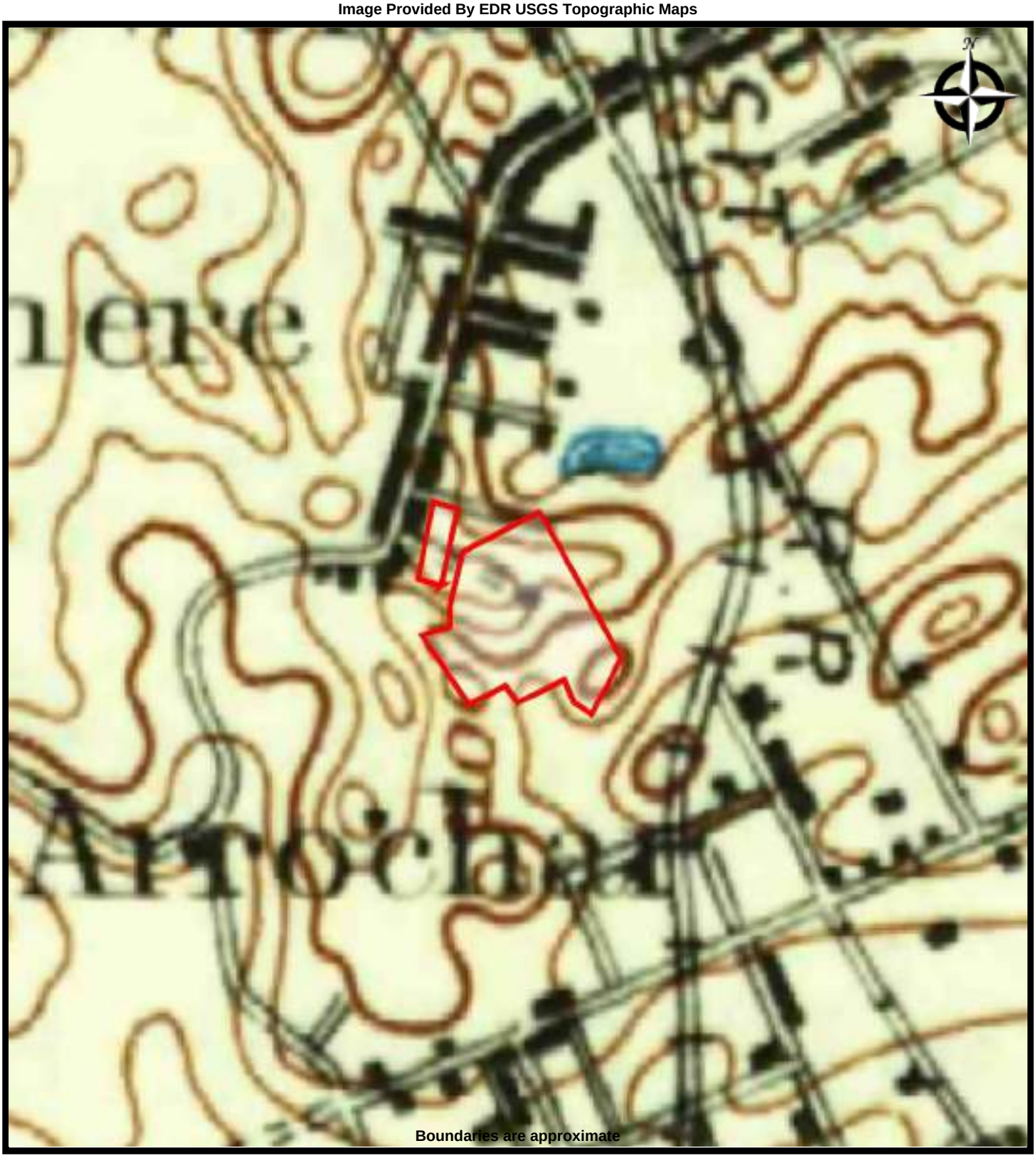
Image Provided By EDR USGS Topographic Maps

	TOPO MAP - 1905 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

Image Provided By EDR USGS Topographic Maps



	TOPO MAP - 1925 **57-61 Cleveland Place** **Staten Island, New York 10305**
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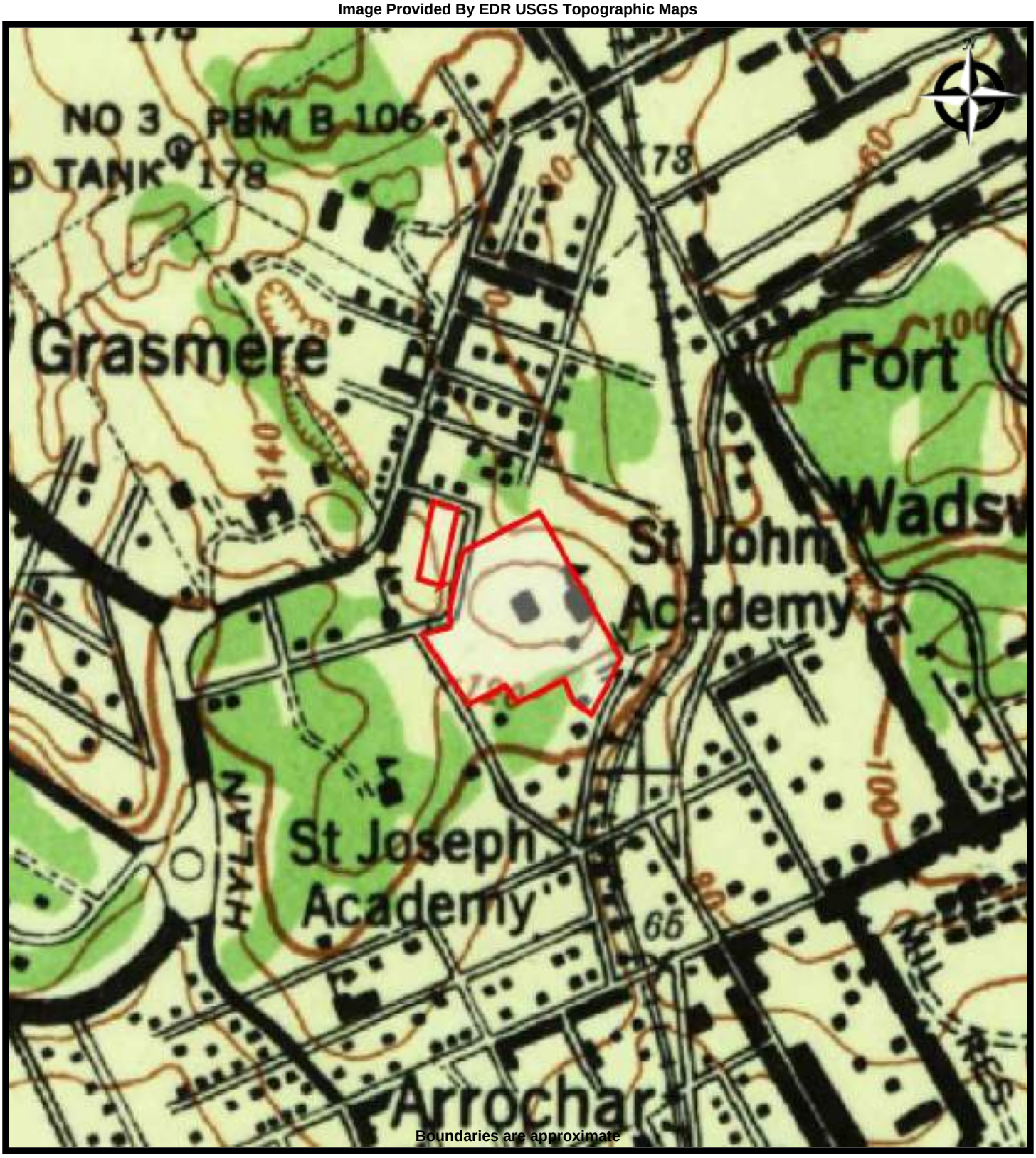
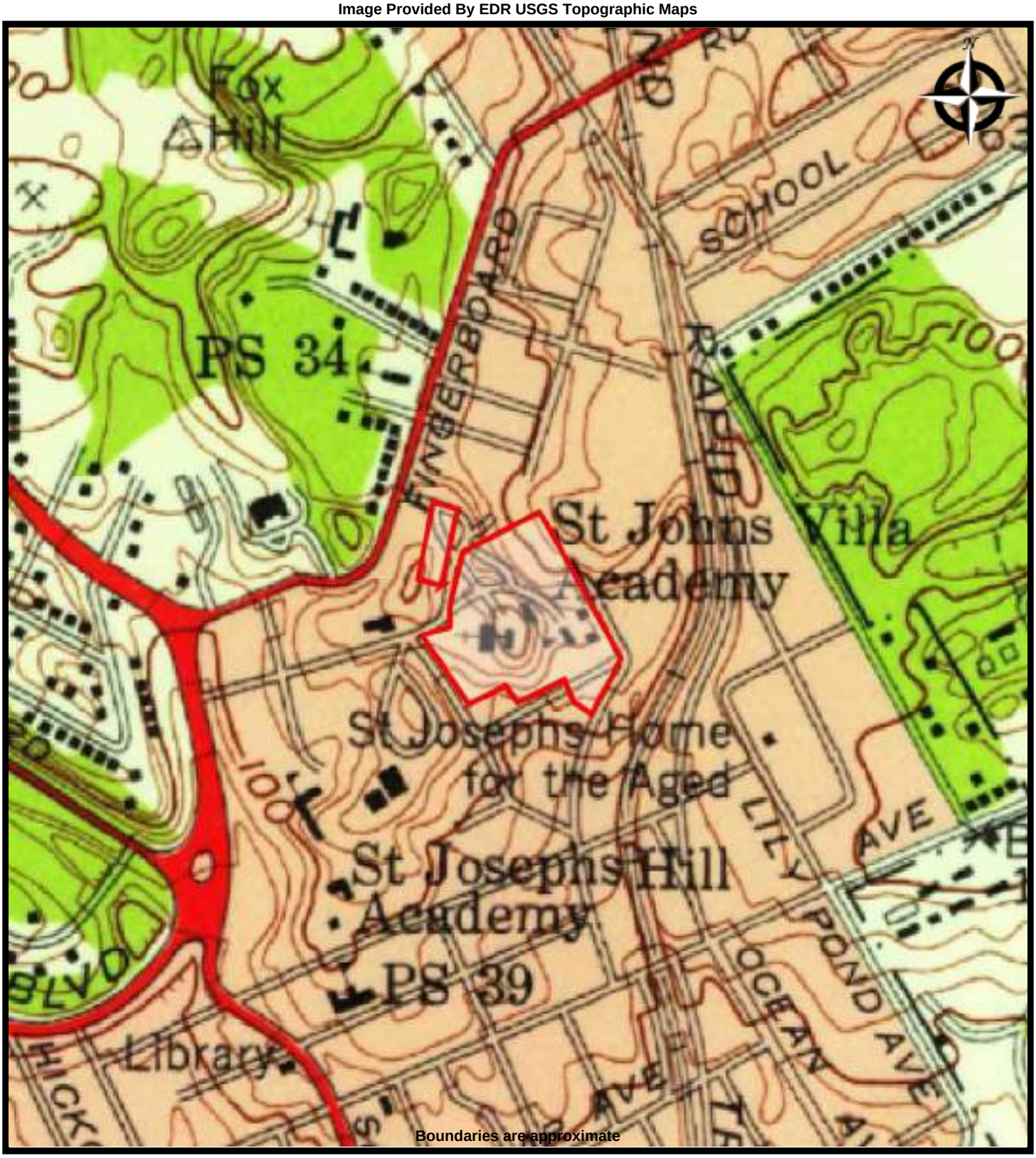
Image Provided By EDR USGS Topographic Maps



Boundaries are approximate

	TOPO MAP - 1947 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

Image Provided By EDR USGS Topographic Maps



	TOPO MAP - 1955 **57-61 Cleveland Place** **Staten Island, New York 10305**
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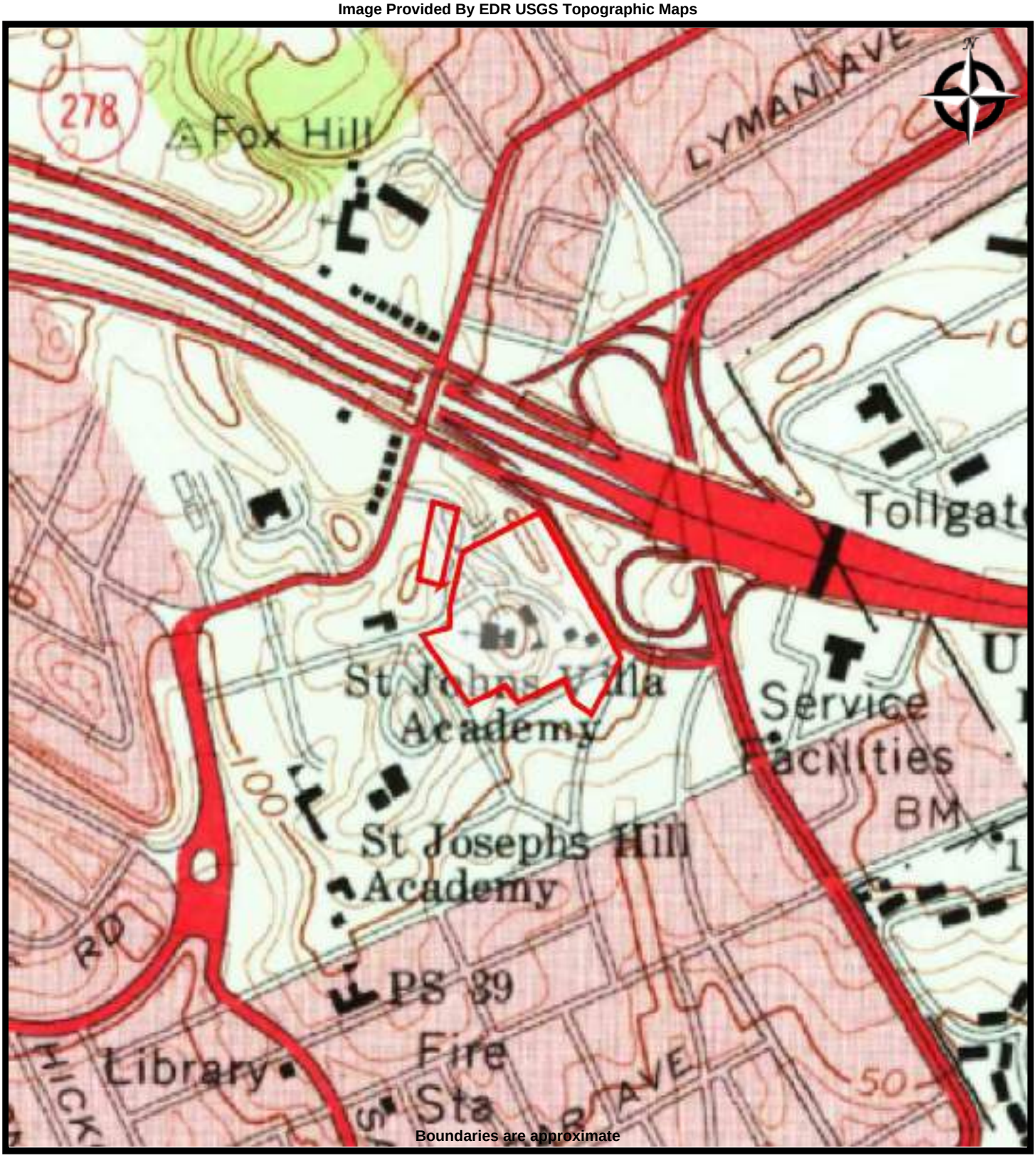
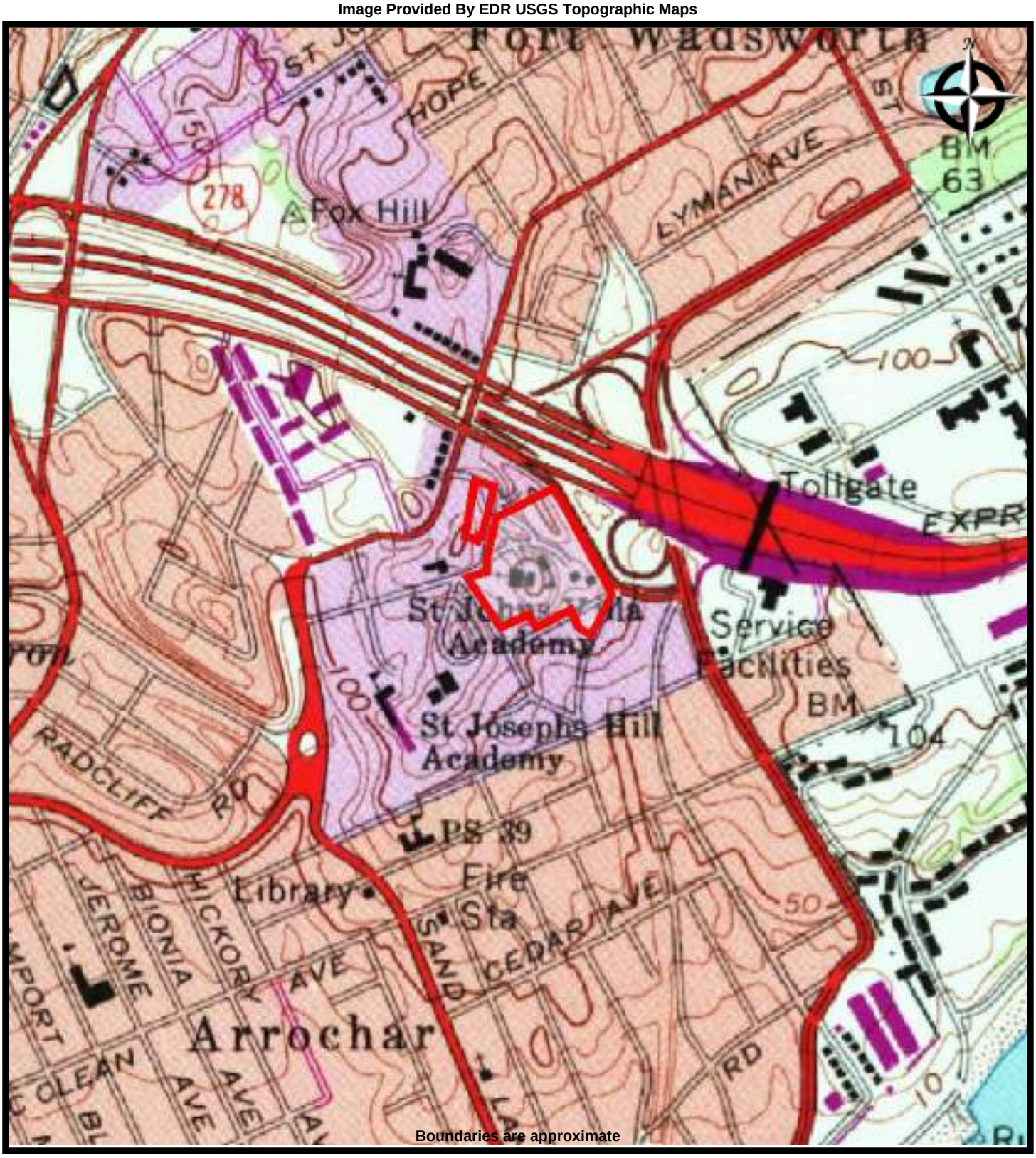
Image Provided By EDR USGS Topographic Maps



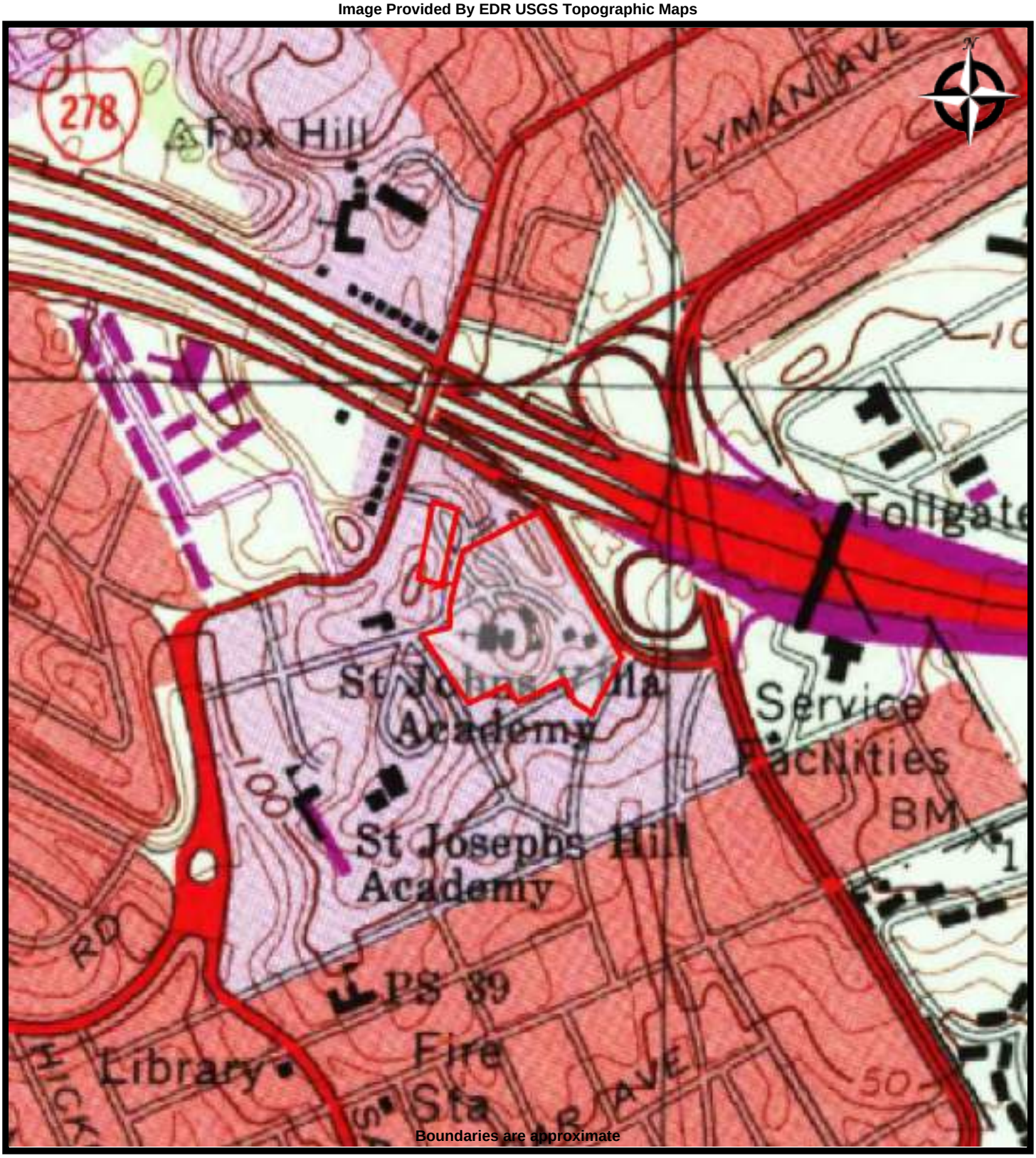
	TOPO MAP - 1966 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

Image Provided By EDR USGS Topographic Maps



	TOPO MAP - 1981 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

Image Provided By EDR USGS Topographic Maps



	TOPO MAP - 1998 **57-61 Cleveland Place** **Staten Island, New York 10305**
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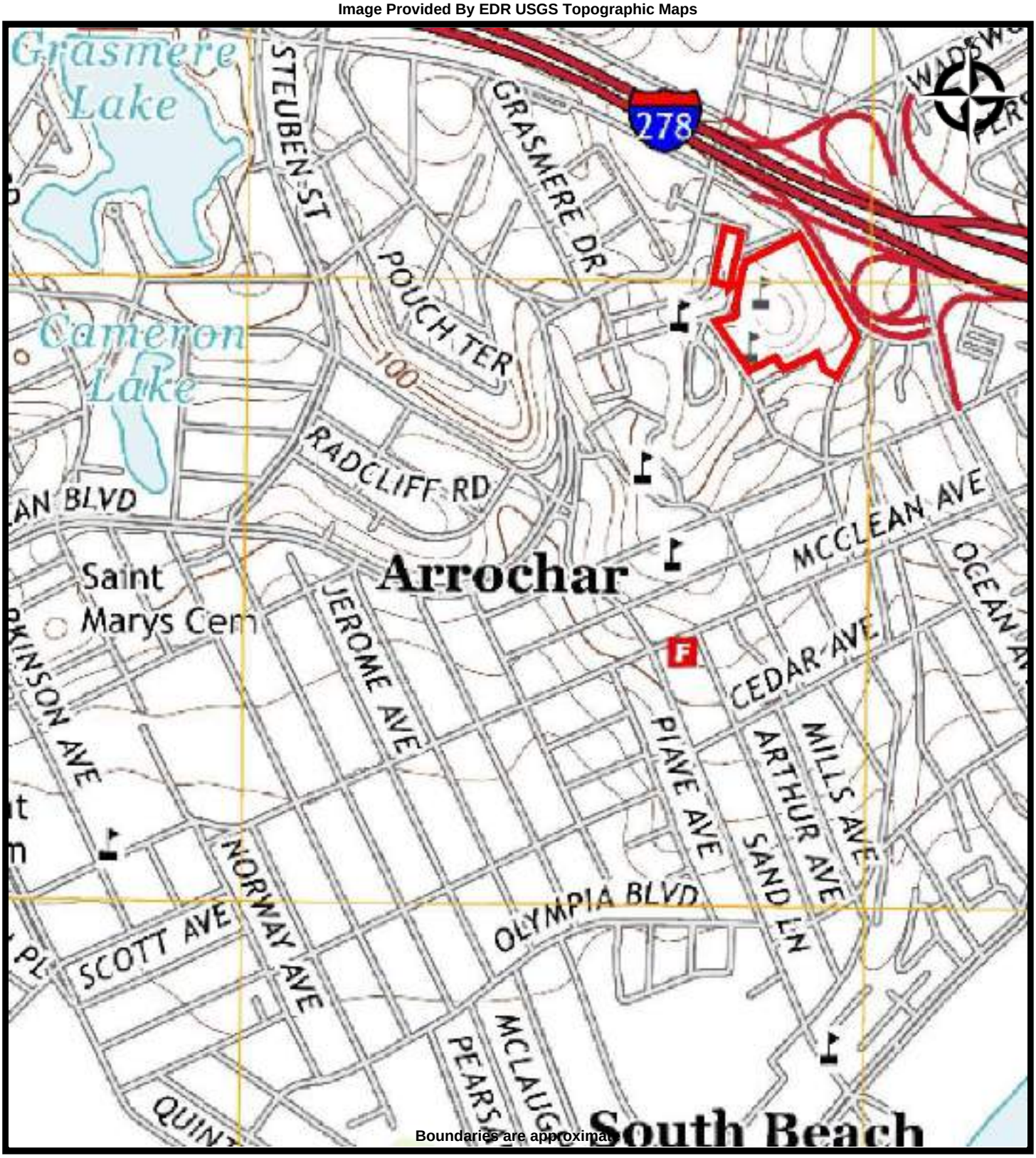
Image Provided By EDR USGS Topographic Maps



	TOPO MAP - 2013 **57-61 Cleveland Place** **Staten Island, New York 10305**
	PREPARED FOR: **PROJ. MGR:** **DATE: 5/9/2017** **DRAWN BY:** **PROJ. #:**

APPENDIX G

HISTORICAL AERIAL PHOTOGRAPHS

INQUIRY #: 4908989.12

YEAR: 1924

= 500'

N

EDR

INQUIRY #: 4908989.12
YEAR: 1940
= 500'
N
EDR

INQUIRY #: 4908989.12
YEAR: 1951
= 500'
N
EDR

INQUIRY #: 4908989.12
YEAR: 1954
= 500'
N
EDR

INQUIRY #: 4908989.12
YEAR: 1961
= 500'
N
EDR

INQUIRY #: 4908989.12
YEAR: 1966
= 500'
N
EDR

INQUIRY #: 4908989.12
YEAR: 1975
= 500'
N
EDR

INQUIRY #: 4908989.12

YEAR: 1984

= 500'

N

EDR

INQUIRY #: 4908989.12
YEAR: 1991
= 500'
N
EDR

INQUIRY #: 4908989.12
YEAR: 1995
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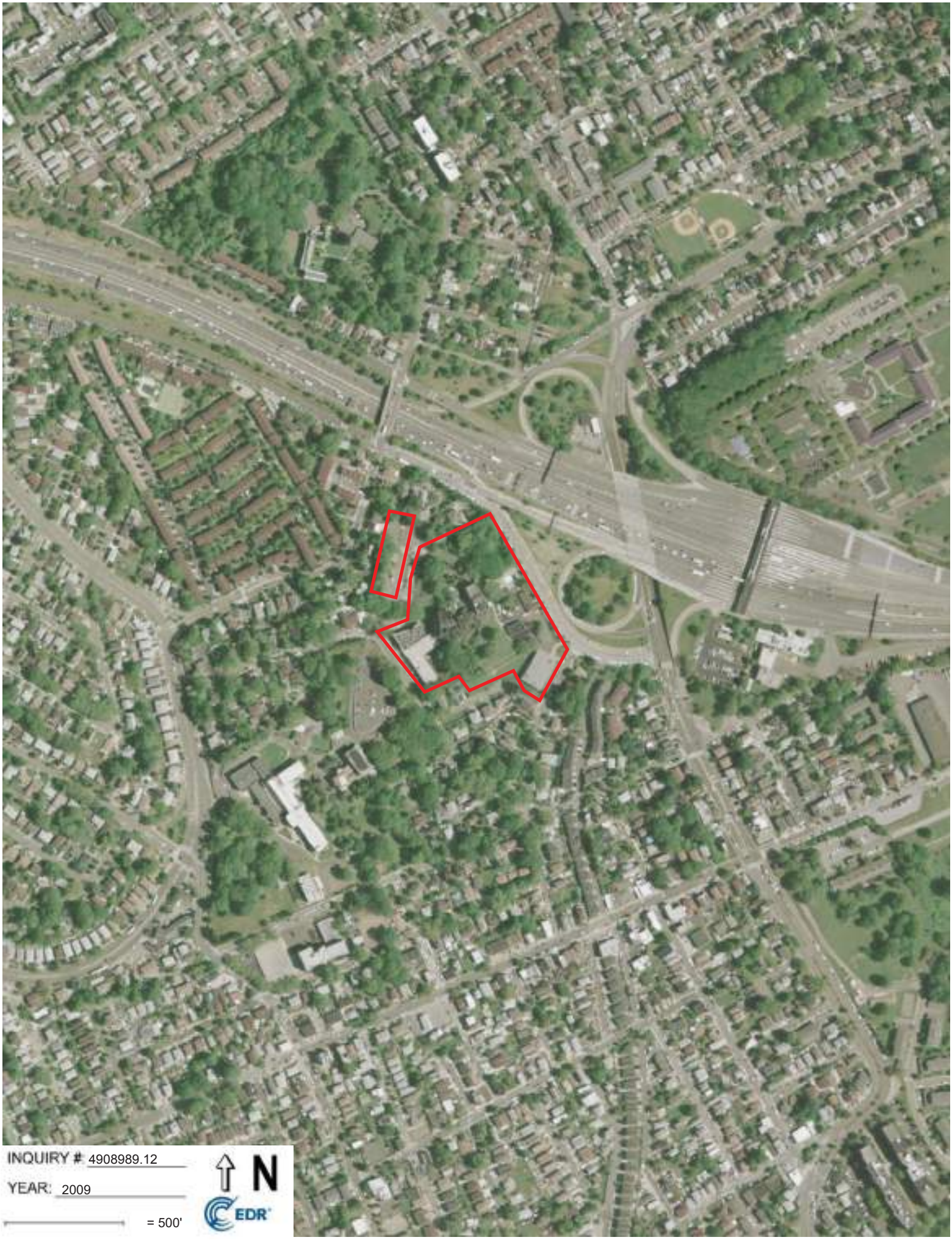
N
EDR

INQUIRY #: 4908989.12
YEAR: 2006
= 500'
N
EDR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YEAR: 2009
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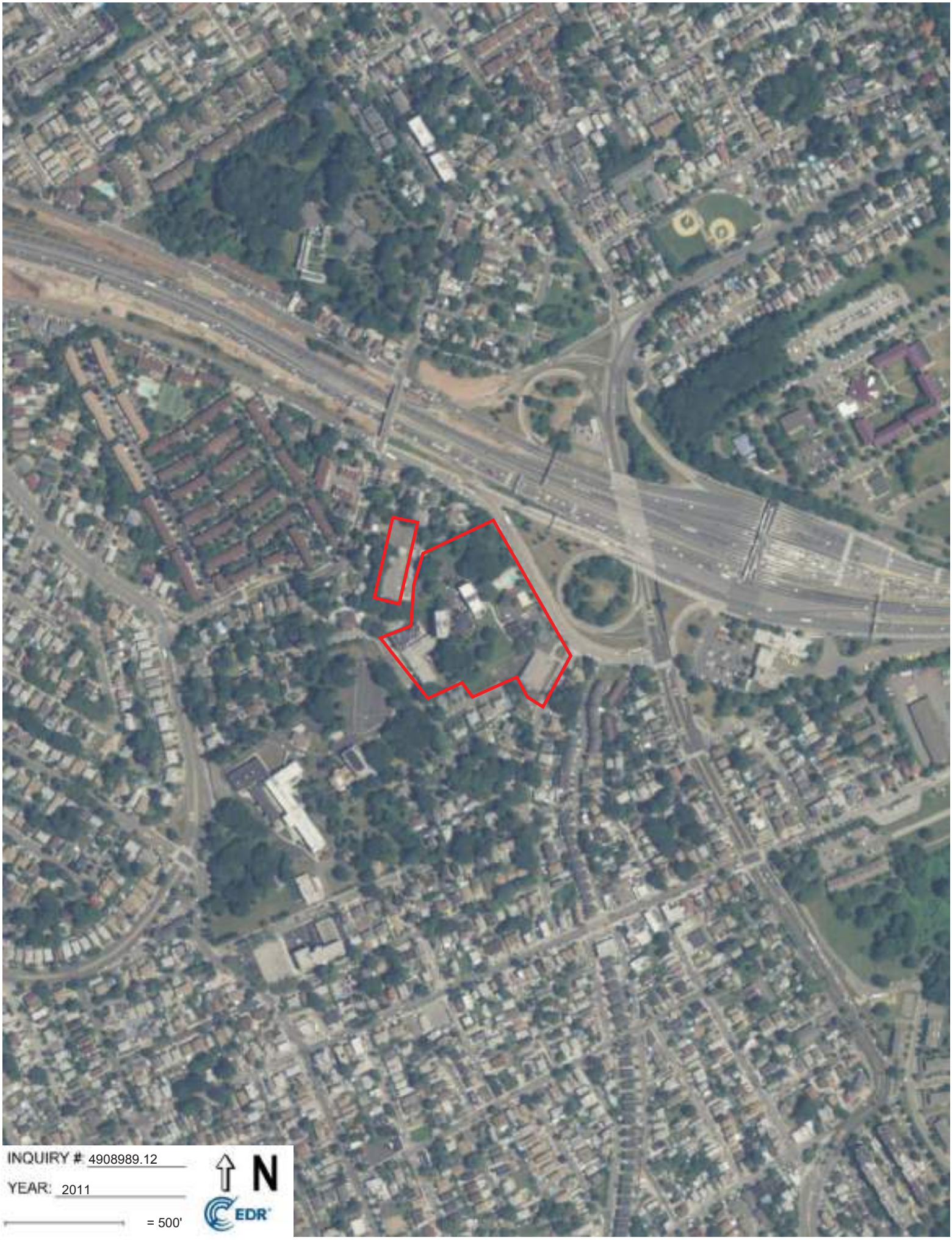
EDR


INQUIRY #: 4908989.12
YEAR: 2011
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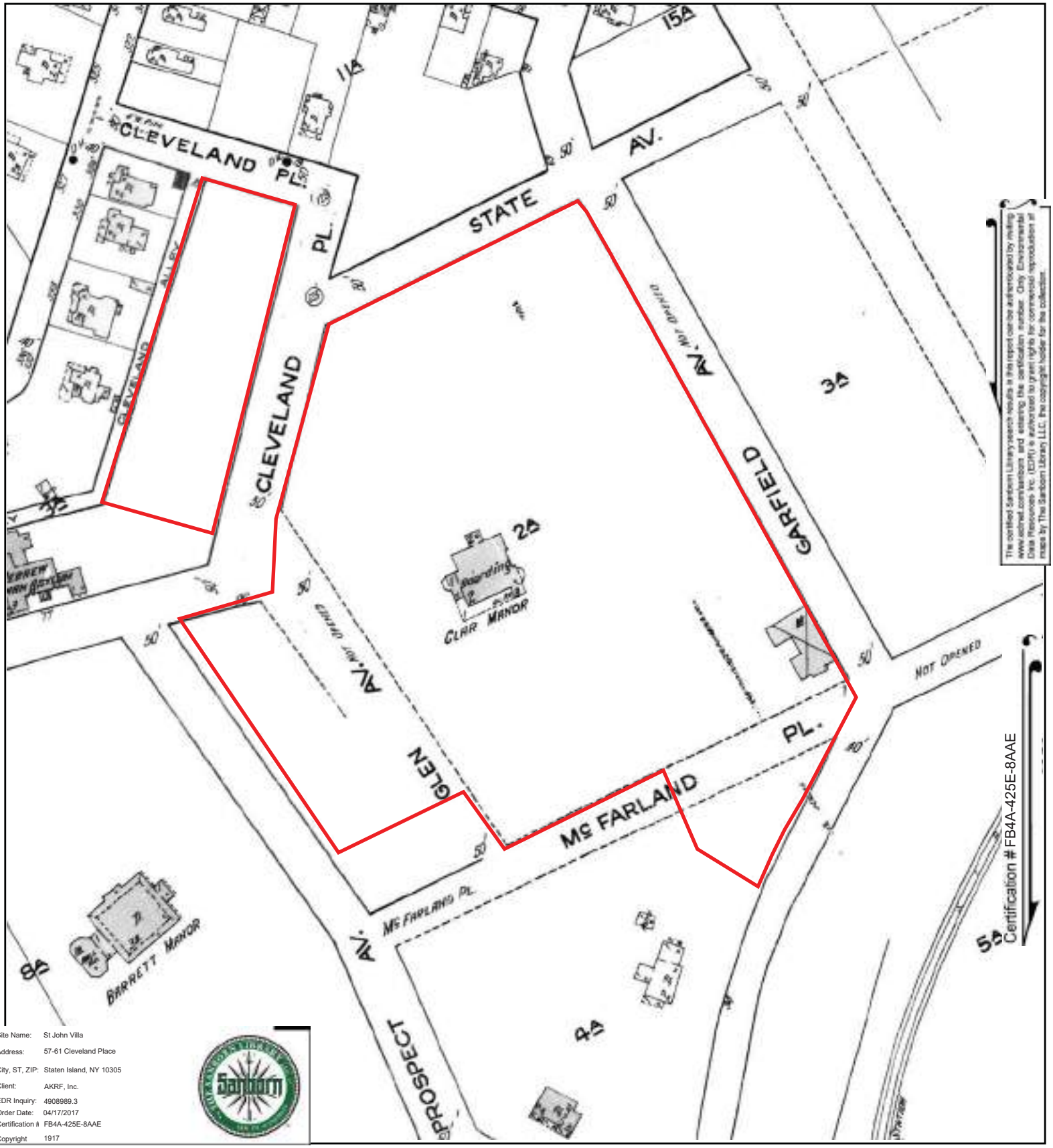
EDR

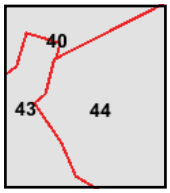
APPENDIX H

SANBORN FIRE INSURANCE MAP REPORT



Site Name:	St John Villa
Address:	57-61 Cleveland Place
City, ST, ZIP:	Staten Island, NY 10305
Client:	AKRF, Inc.
EDR Inquiry:	4908989.3
Order Date:	04/17/2017
Certification #	FB4A-425E-8AAE
Copyright	1917

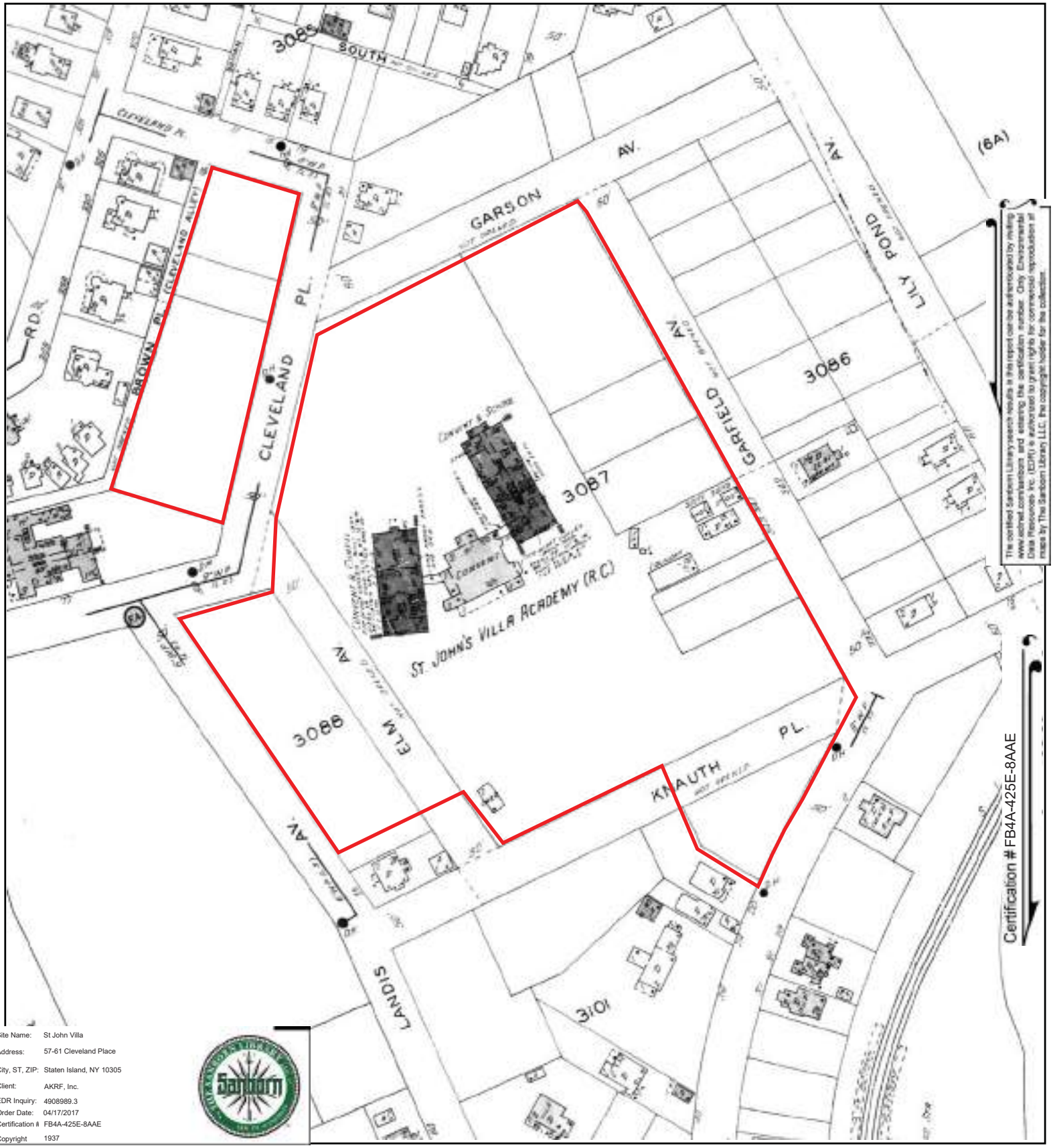
This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 44
Volume 1, Sheet 43
Volume 1, Sheet 40

0 Feet 150 300 600

N



Site Name: St John Villa
Address: 57-61 Cleveland Place
City, ST, ZIP: Staten Island, NY 10305
Client: AKRF, Inc.
EDR Inquiry: 4908989.3
Order Date: 04/17/2017
Certification #: FB4A-425E-8AAE
Copyright: 1937

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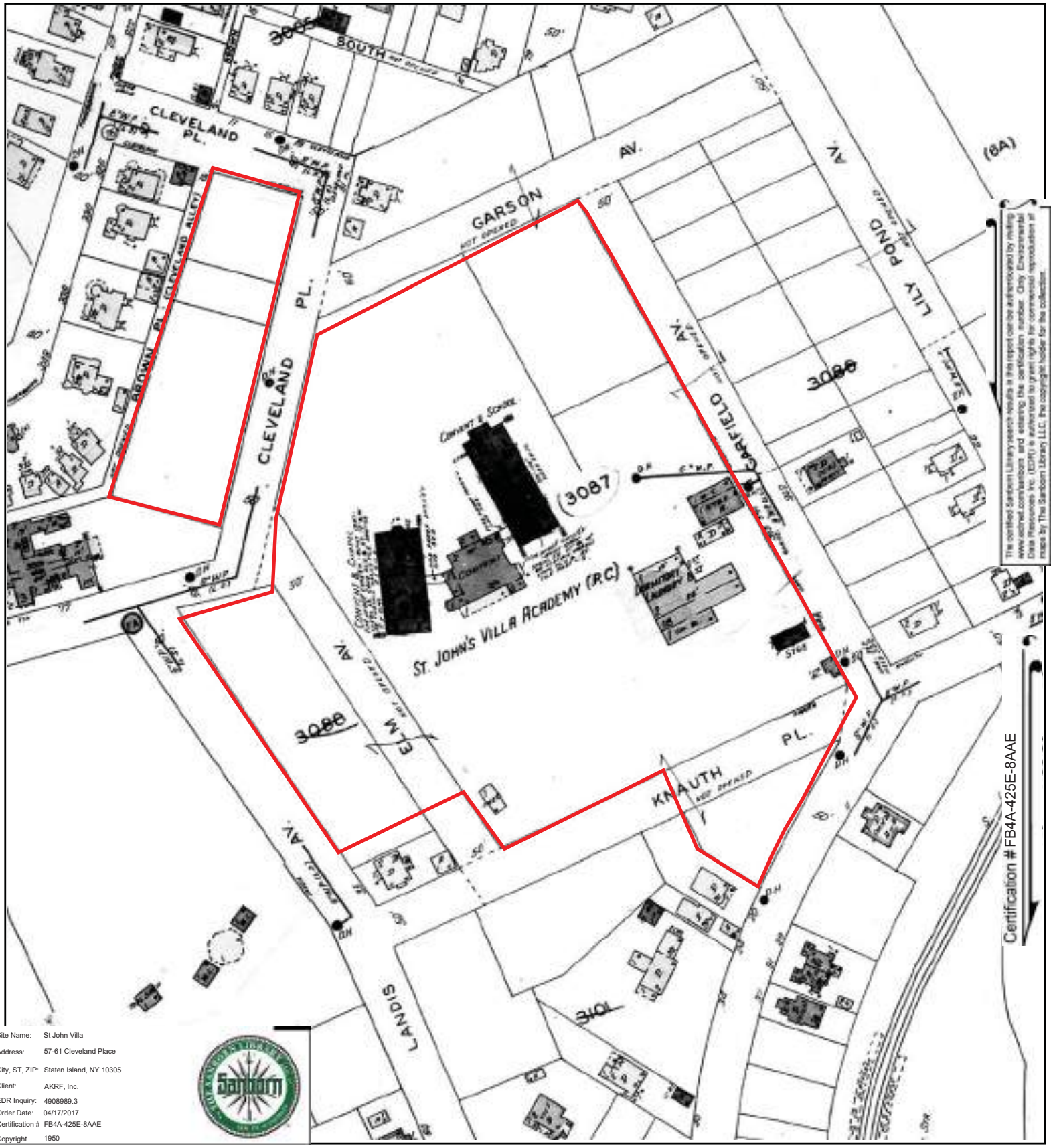
Volume 3, Sheet 313
Volume 3, Sheet 314

N



Site Name:	St John Villa
Address:	57-61 Cleveland Place
City, ST, ZIP:	Staten Island, NY 10305
Client:	AKRF, Inc.
EDR Inquiry:	4908989.3
Order Date:	04/17/2017
Certification #	FB4A-425E-8AAE
Copyright	1950

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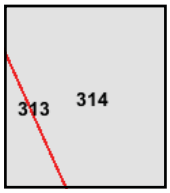

Volume 3, Sheet 314
Volume 3, Sheet 313

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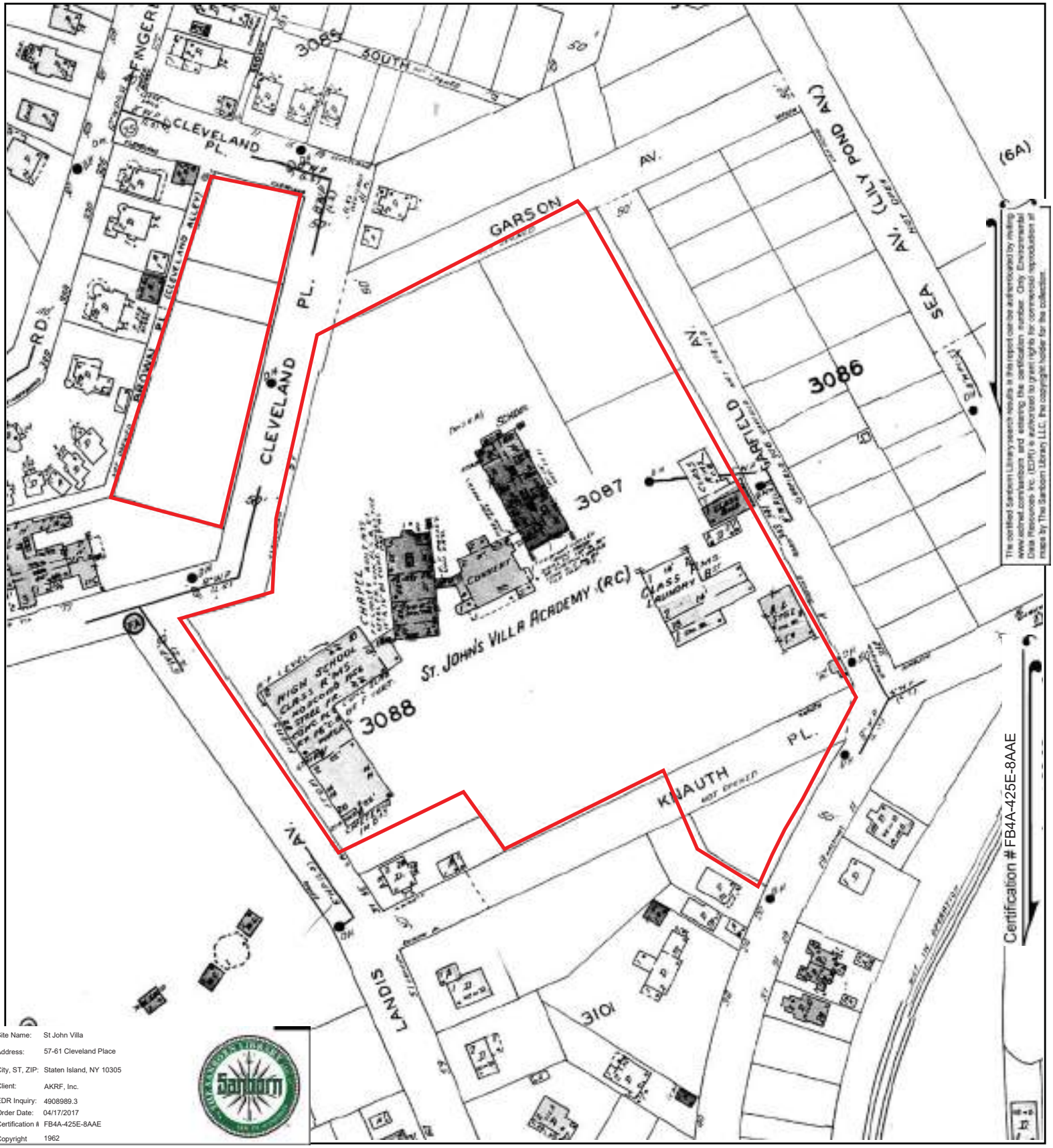

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Certification #: FB4A-425E-8AAE
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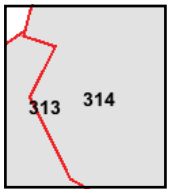

Volume 3, Sheet 314
Volume 3, Sheet 313

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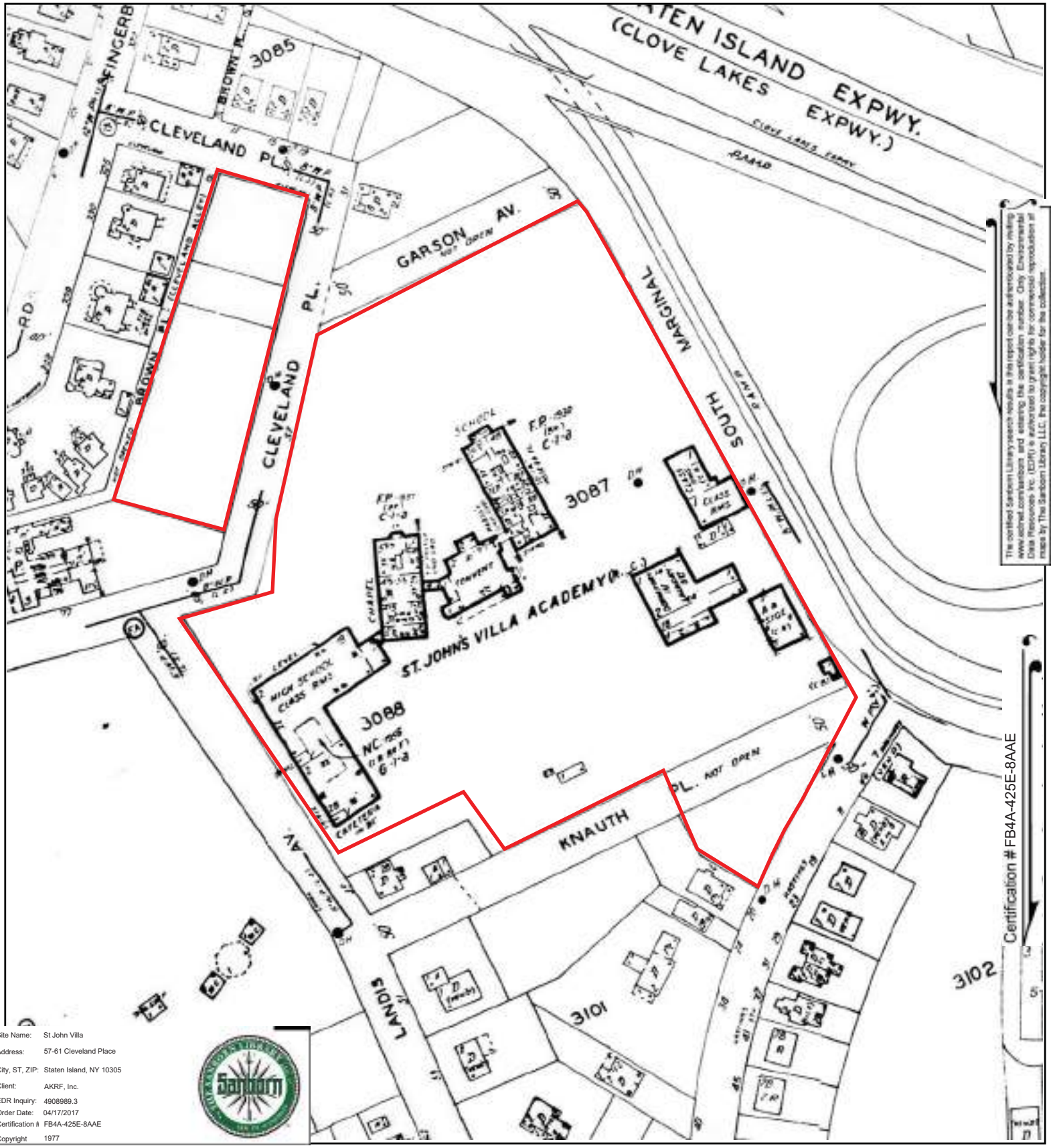

Site Name:	St John Villa
Address:	57-61 Cleveland Place
City, ST, ZIP:	Staten Island, NY 10305
Client:	AKRF, Inc.
EDR Inquiry:	4908989.3
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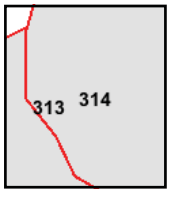

Volume 3, Sheet 314
Volume 3, Sheet 313

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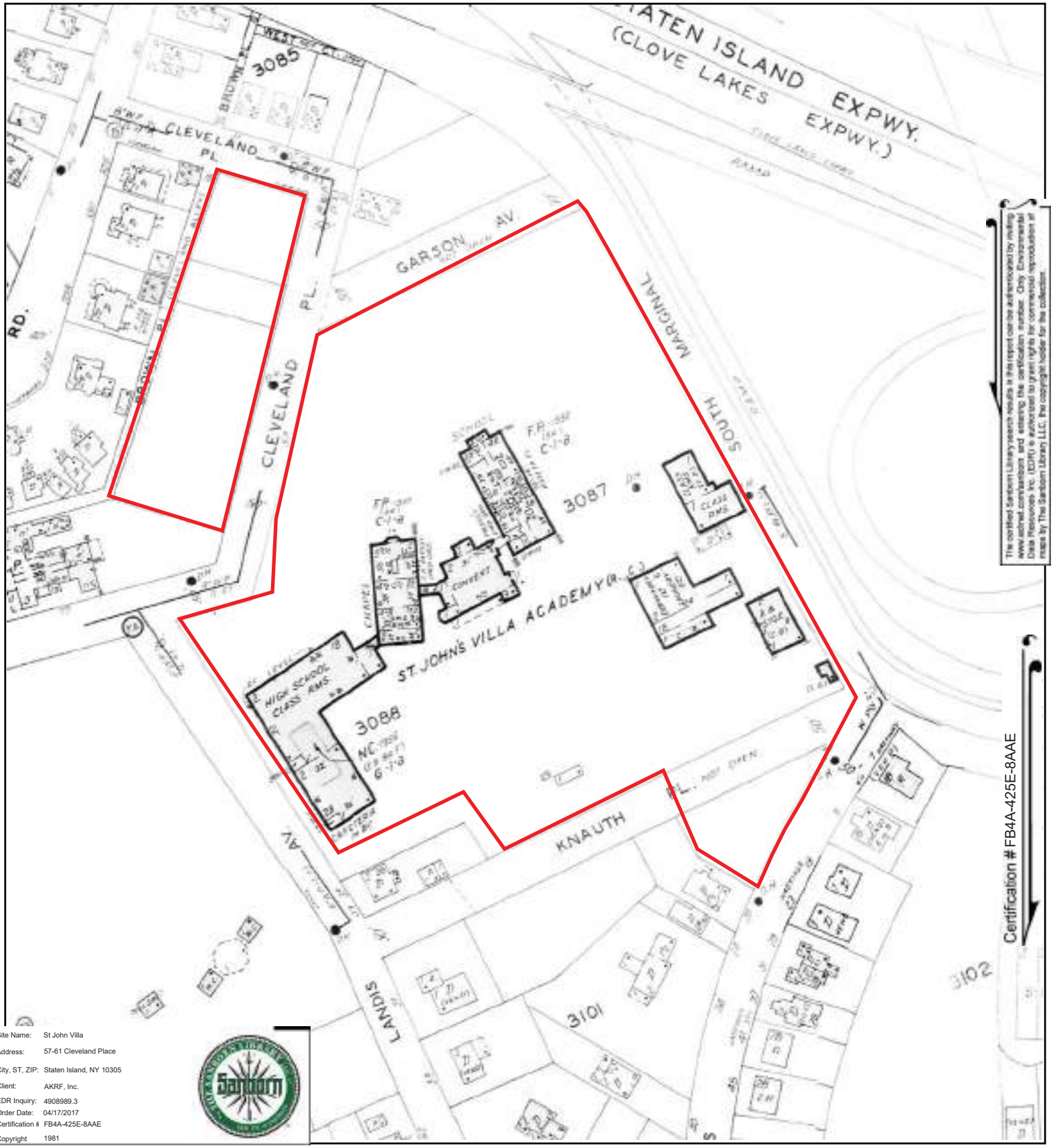

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Certification #: FB4A-425E-8AAE
Copyright: 1981

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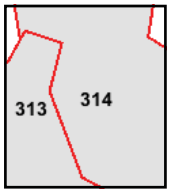

Volume 3, Sheet 313
Volume 3, Sheet 314

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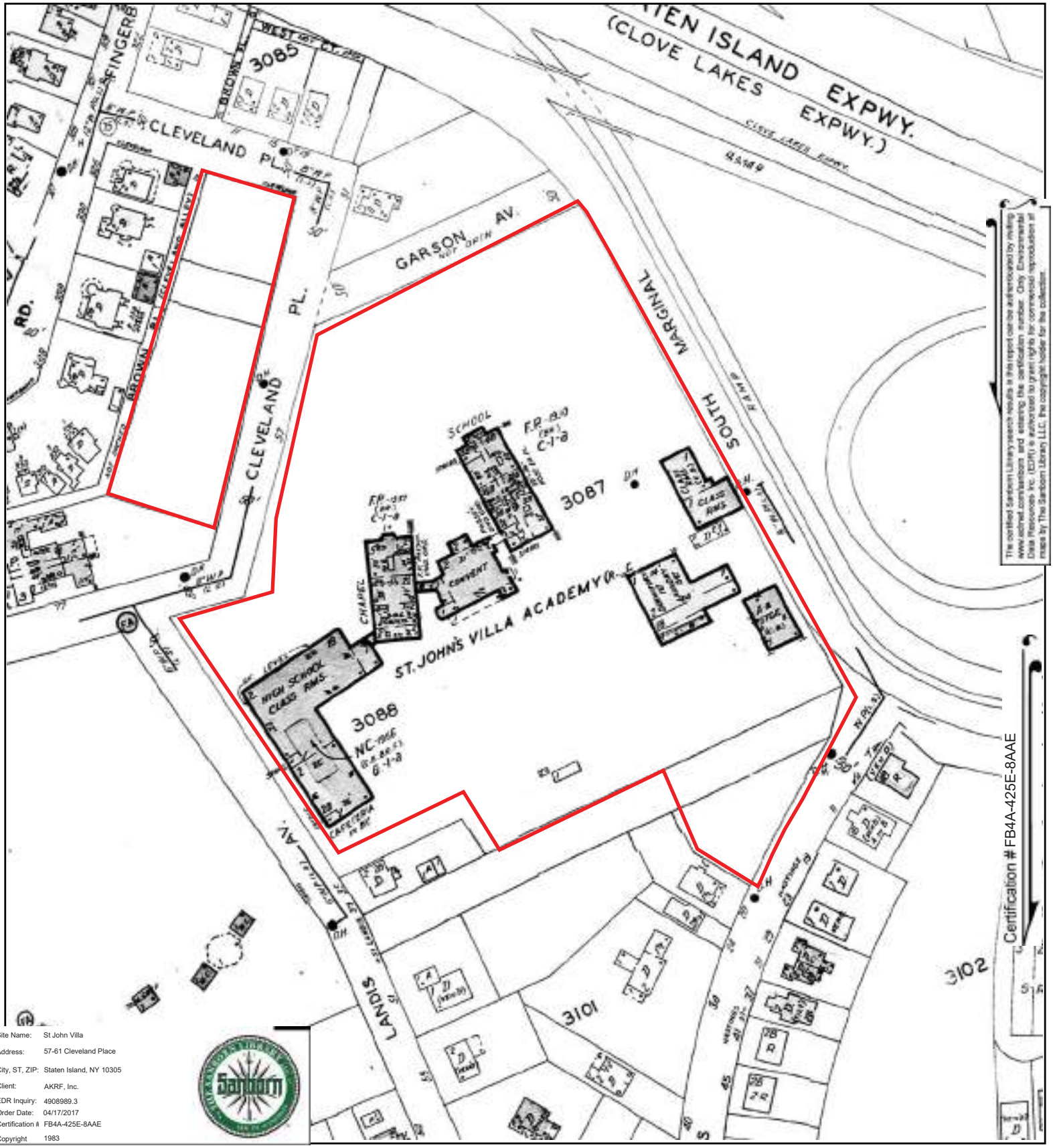

Site Name: St John Villa
Address: 57-61 Cleveland Place
City, ST, ZIP: Staten Island, NY 10305
Client: AKRF, Inc.
EDR Inquiry: 4908989.3
Order Date: 04/17/2017
Certification #: FB4A-425E-8AAE
Copyright 1983

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Volume 3, Sheet 314
Volume 3, Sheet 313

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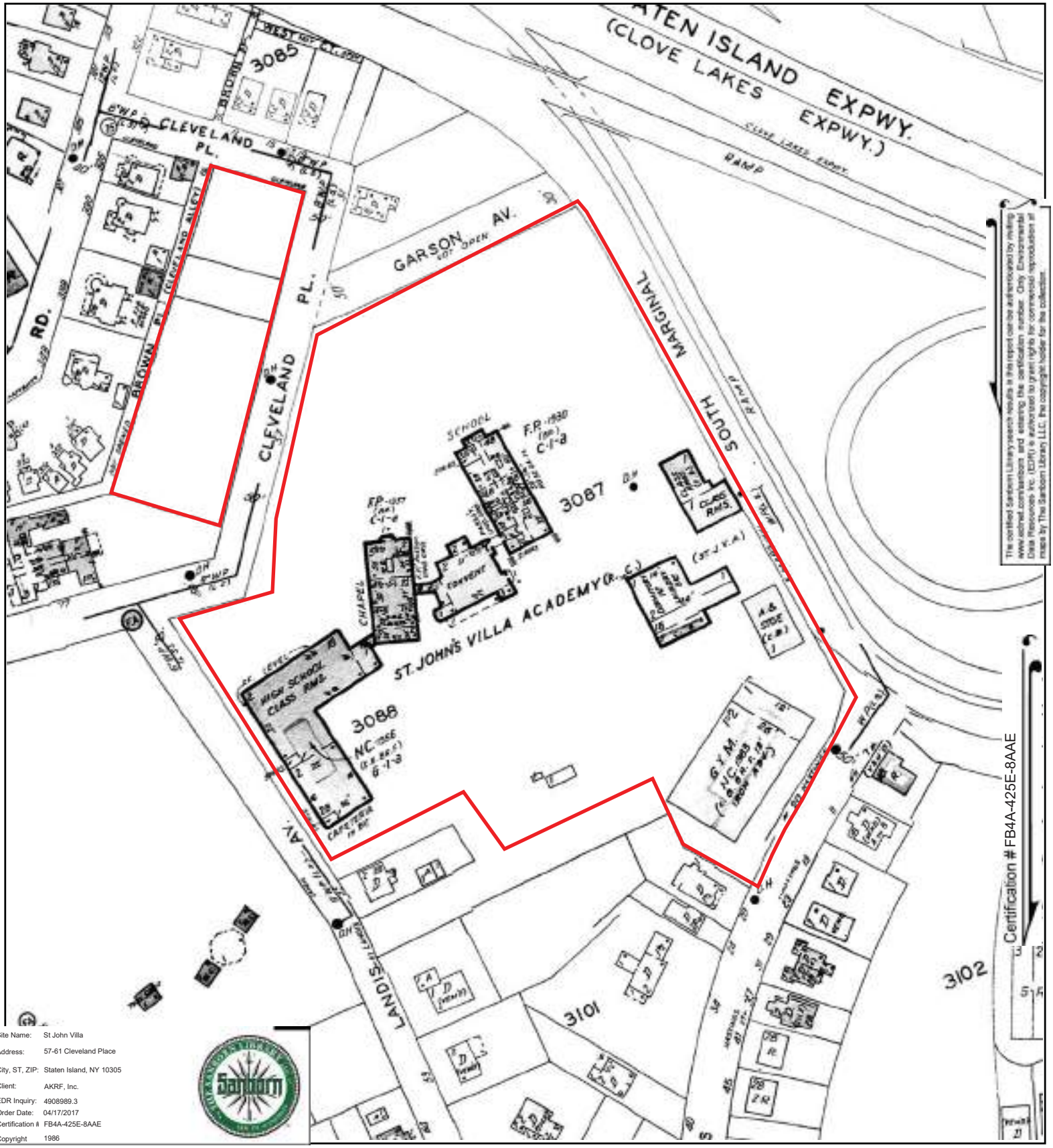

Site Name:	St John Villa
Address:	57-61 Cleveland Place
City, ST, ZIP:	Staten Island, NY 10305
Client:	AKRF, Inc.
EDR Inquiry:	4908989.3
Order Date:	04/17/2017
Certification #	FB4A-425E-8AAE
Copyright	1986

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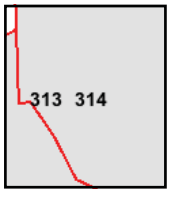

Volume 3, Sheet 314
Volume 3, Sheet 313

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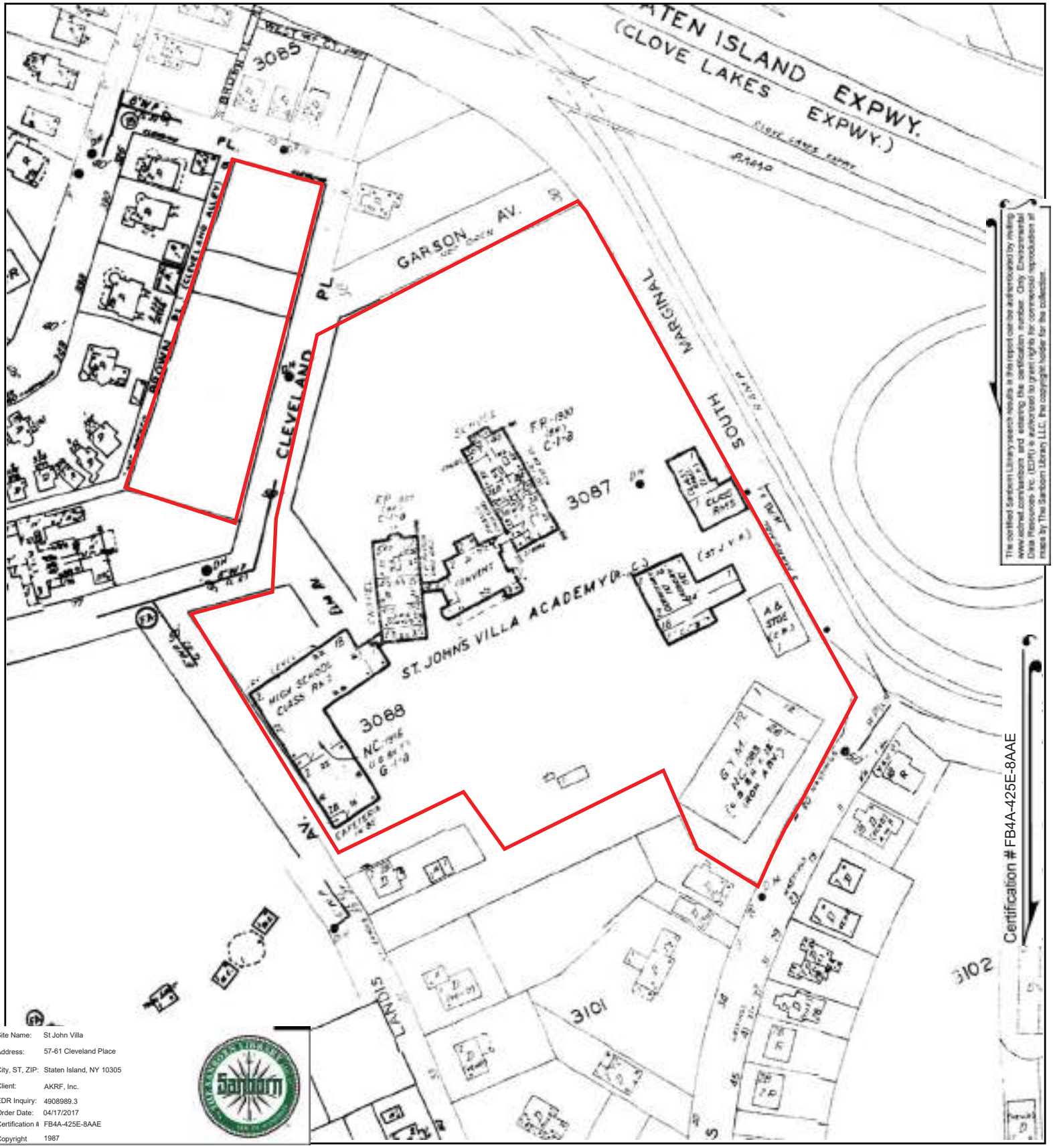

Site Name: St John Villa
Address: 57-61 Cleveland Place
City, ST, ZIP: Staten Island, NY 10305
Client: AKRF, Inc.
EDR Inquiry: 4908989.3
Order Date: 04/17/2017
Certification #: FB4A-425E-8AAE
Copyright 1987

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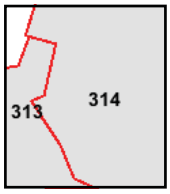

Volume 3, Sheet 314
Volume 3, Sheet 313

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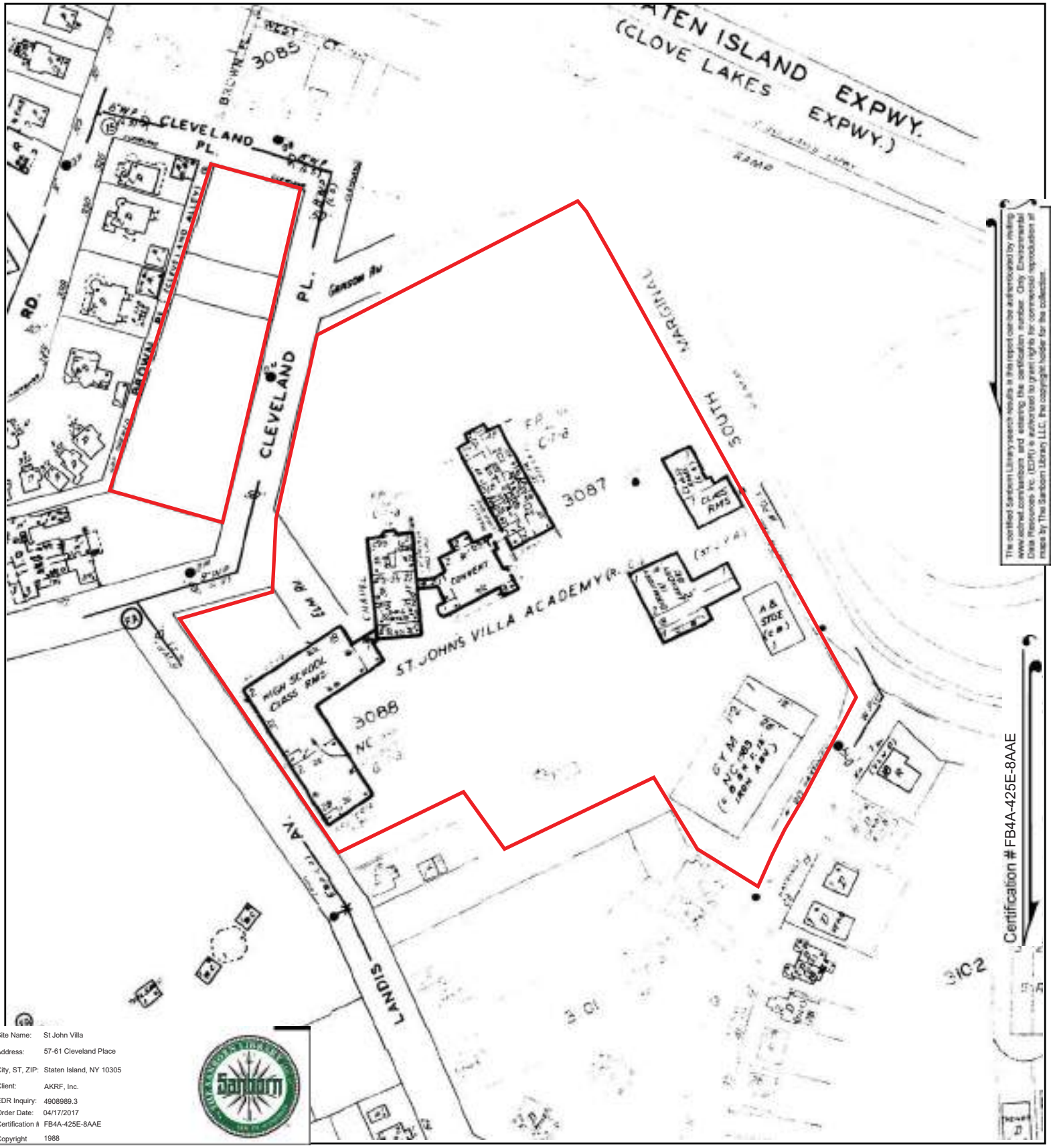

Site Name: St John Villa
Address: 57-61 Cleveland Place
City, ST, ZIP: Staten Island, NY 10305
Client: AKRF, Inc.
EDR Inquiry: 4908989.3
Order Date: 04/17/2017
Certification #: FB4A-425E-8AAE
Copyright: 1988

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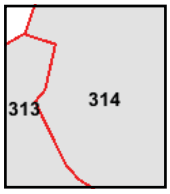

Volume 3, Sheet 314
Volume 3, Sheet 313

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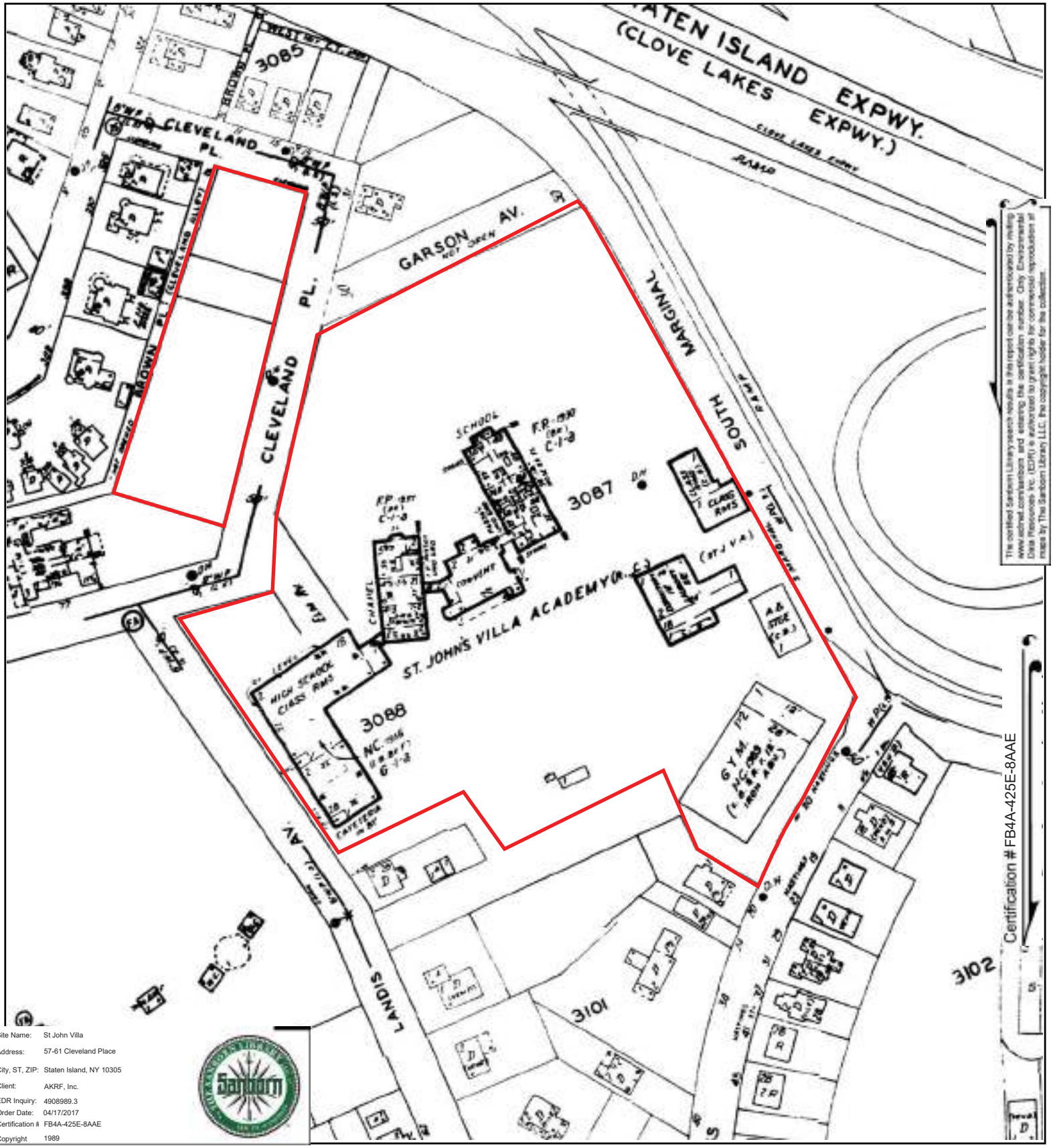

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Address:	57-61 Cleveland Place
City, ST, ZIP:	Staten Island, NY 10305
Client:	AKRF, Inc.
EDR Inquiry:	4908989.3
Order Date:	04/17/2017
Certification #:	FB4A-425E-8AAE
Copyright	1989

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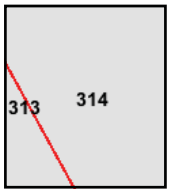

Volume 3, Sheet 314
Volume 3, Sheet 313

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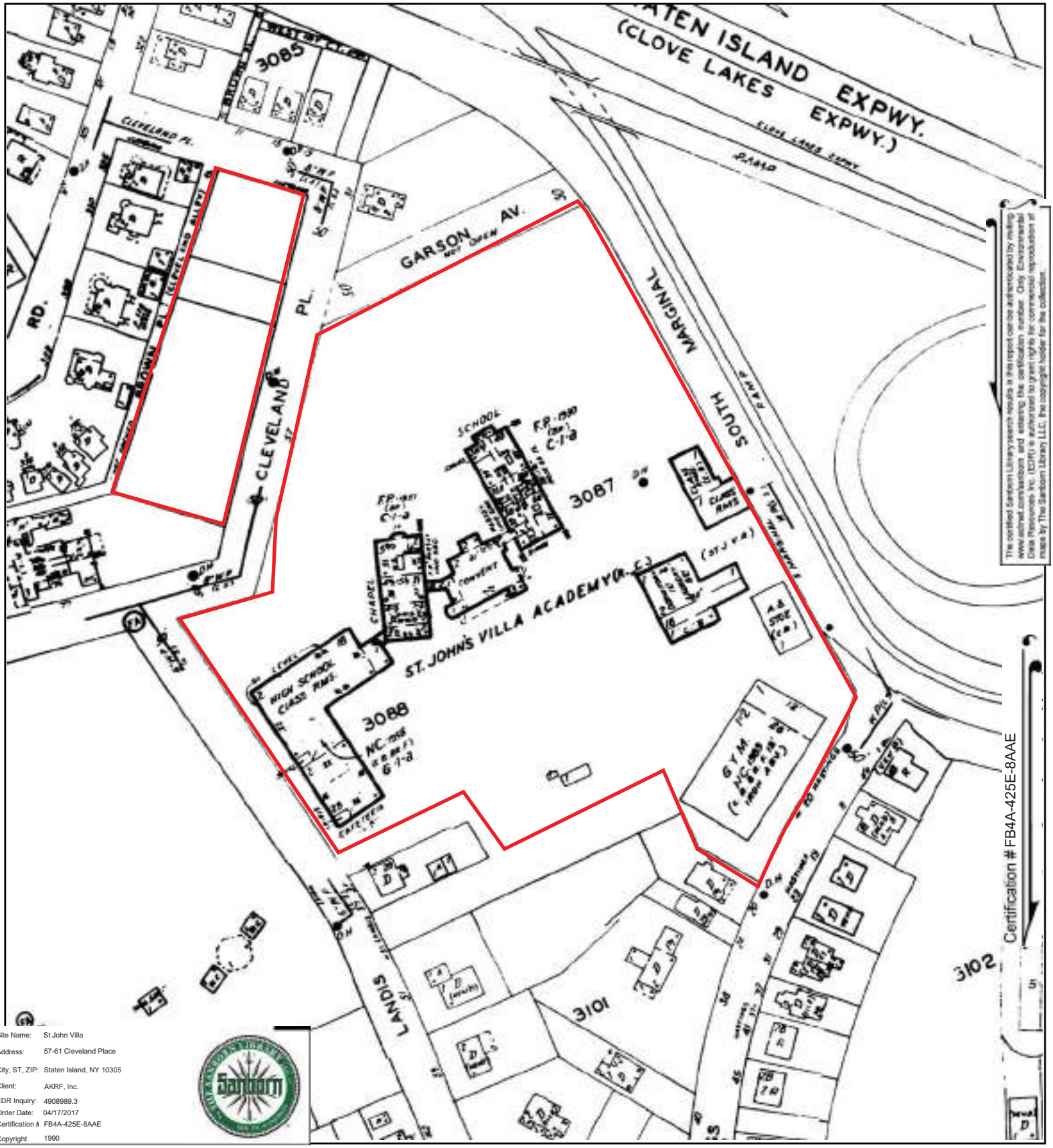

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City, ST, ZIP: Staten Island, NY 10305
Client: AKRF, Inc.
EDR Inquiry: 4908989.3
Order Date: 04/17/2017
Certification #: FB4A-425E-8AAE
Copyright: 1990

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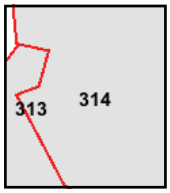

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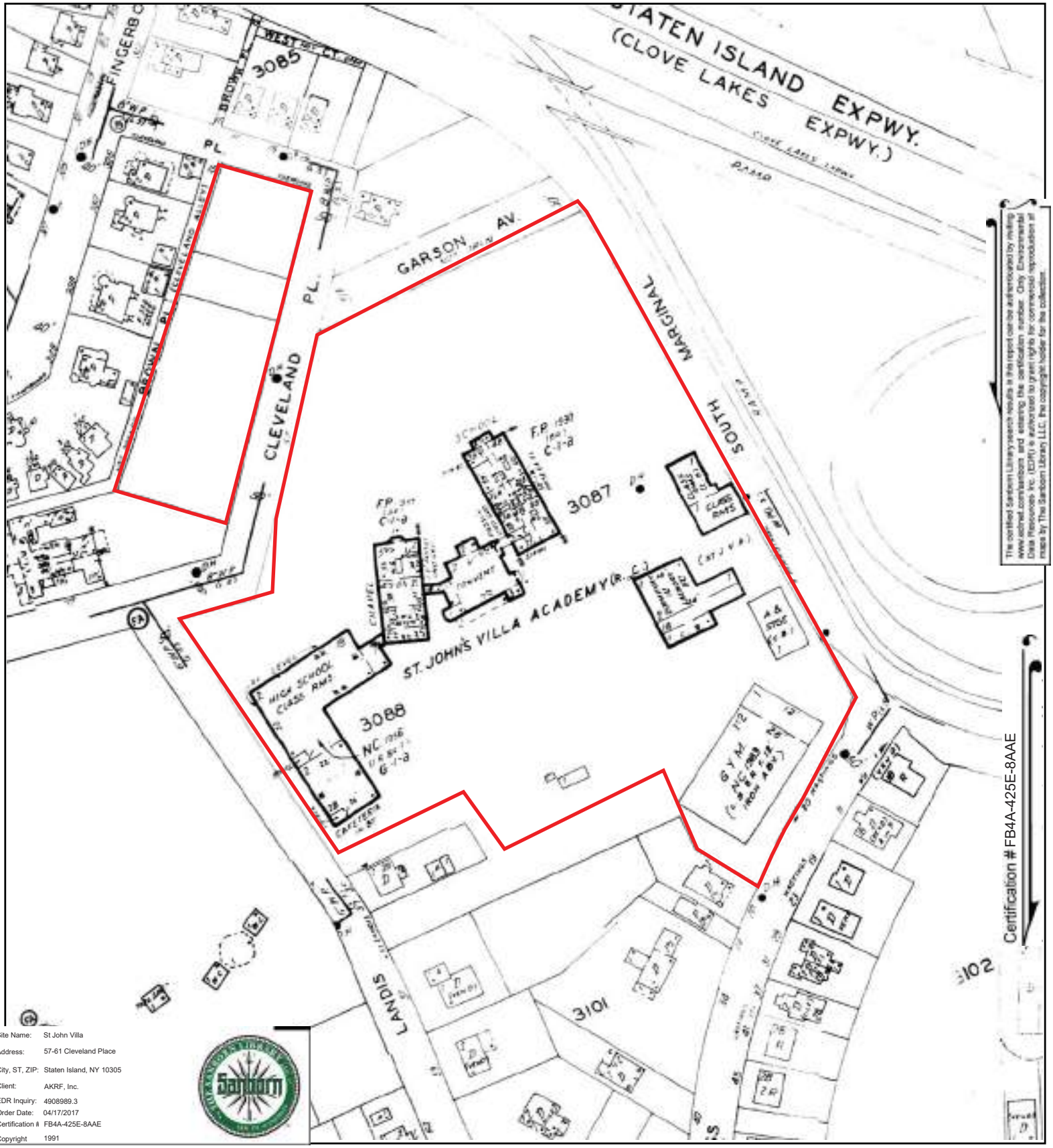

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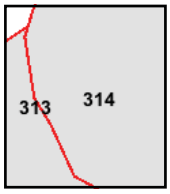

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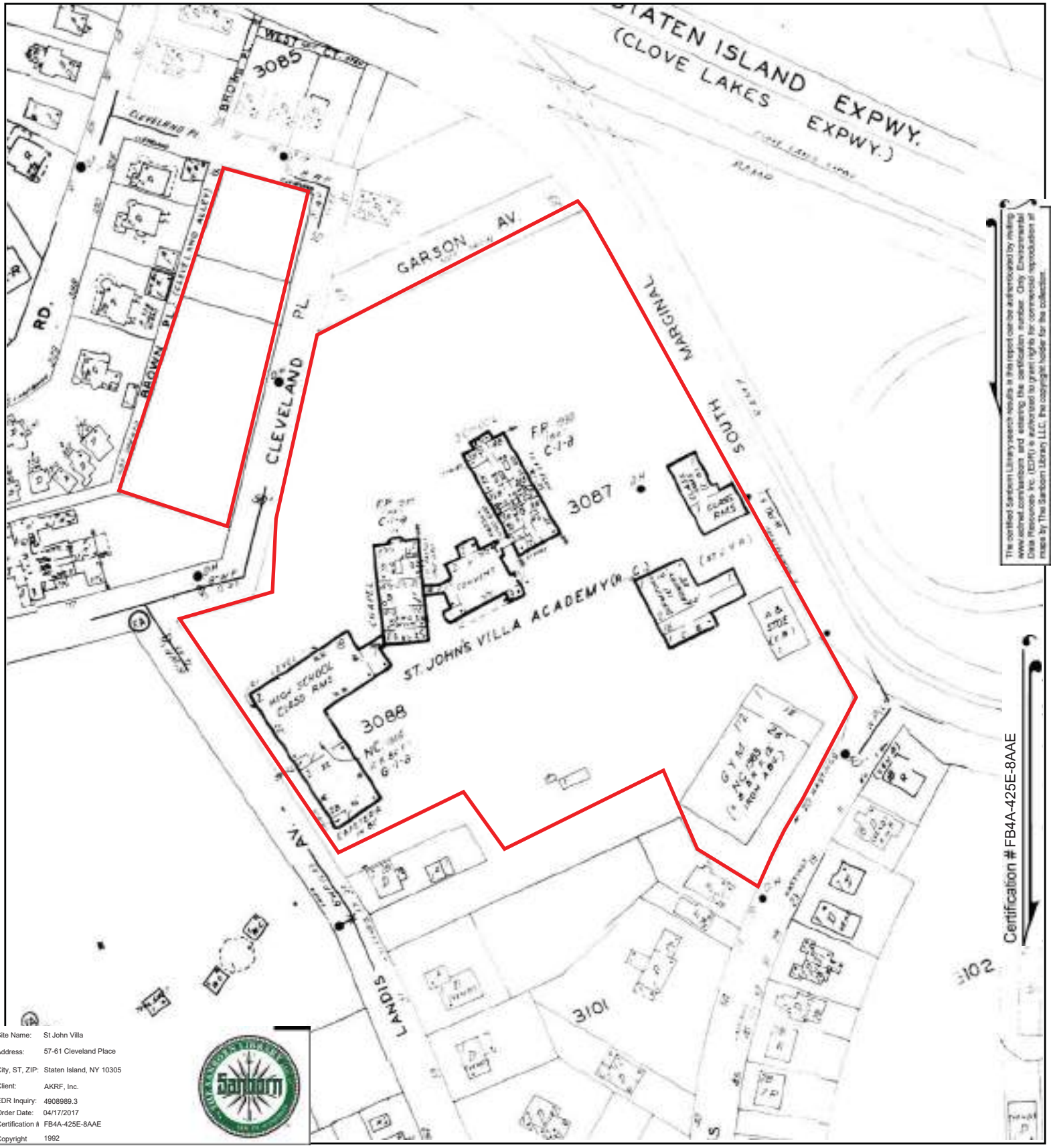

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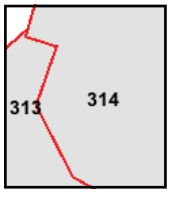

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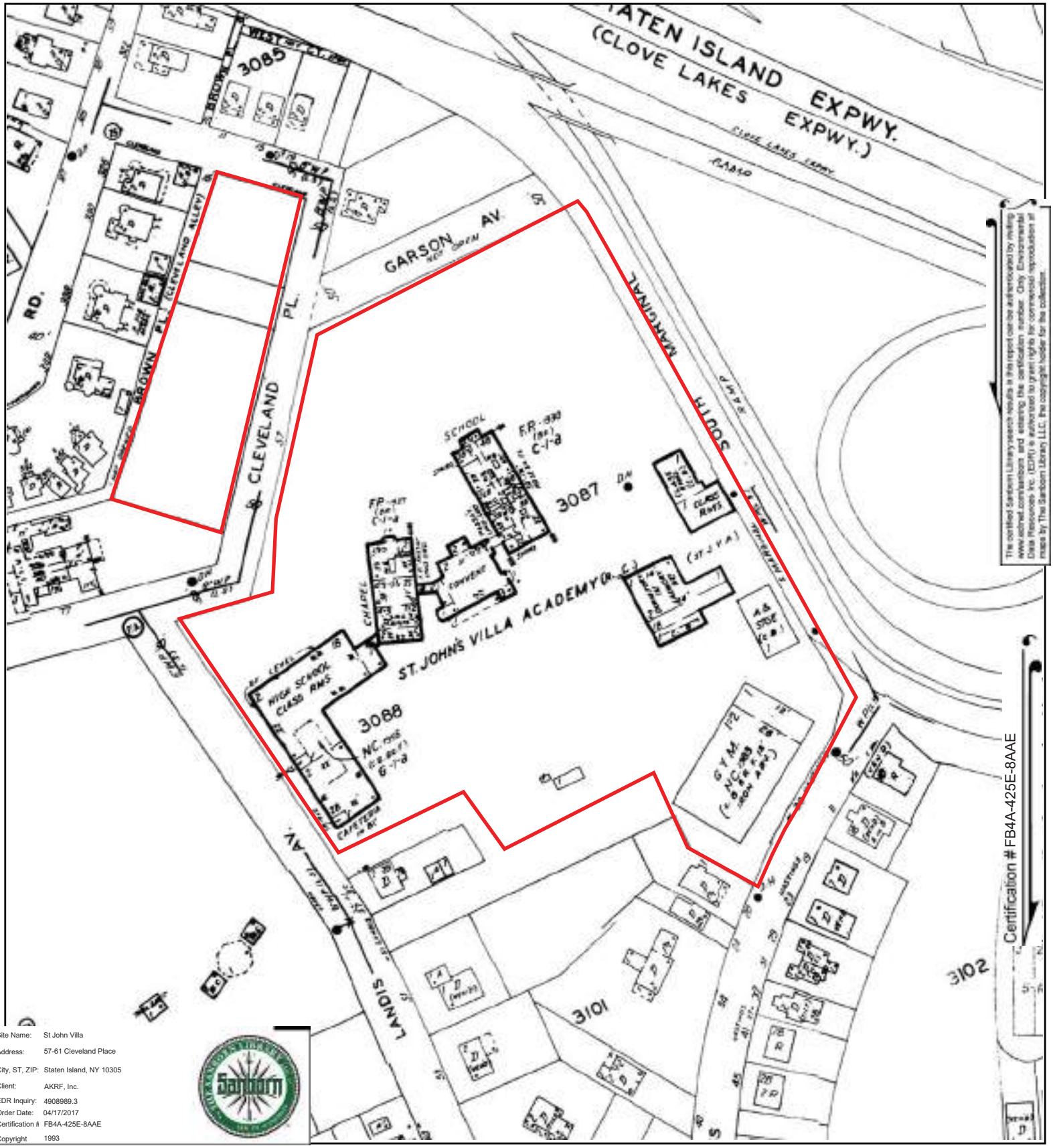

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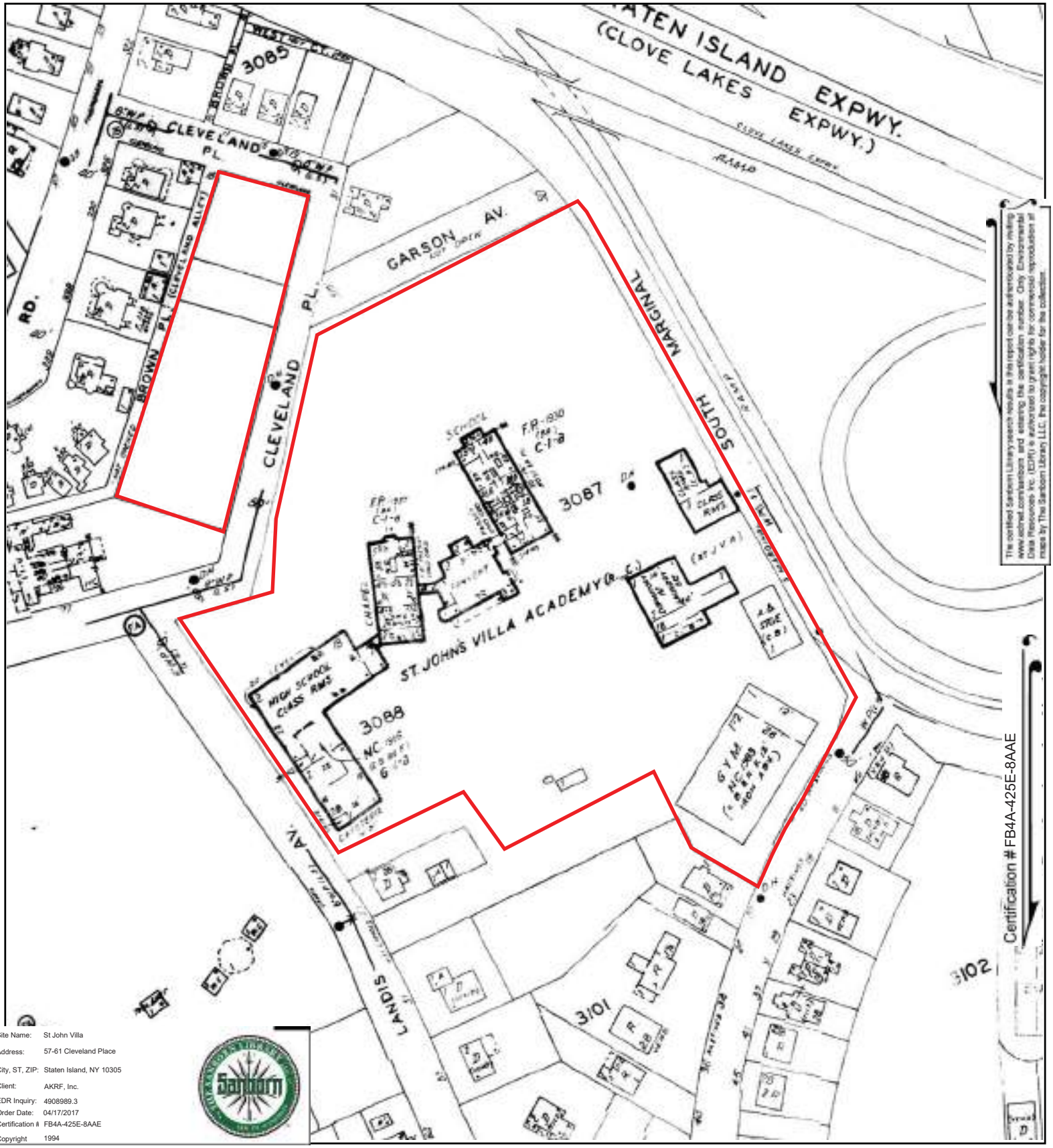

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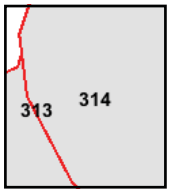

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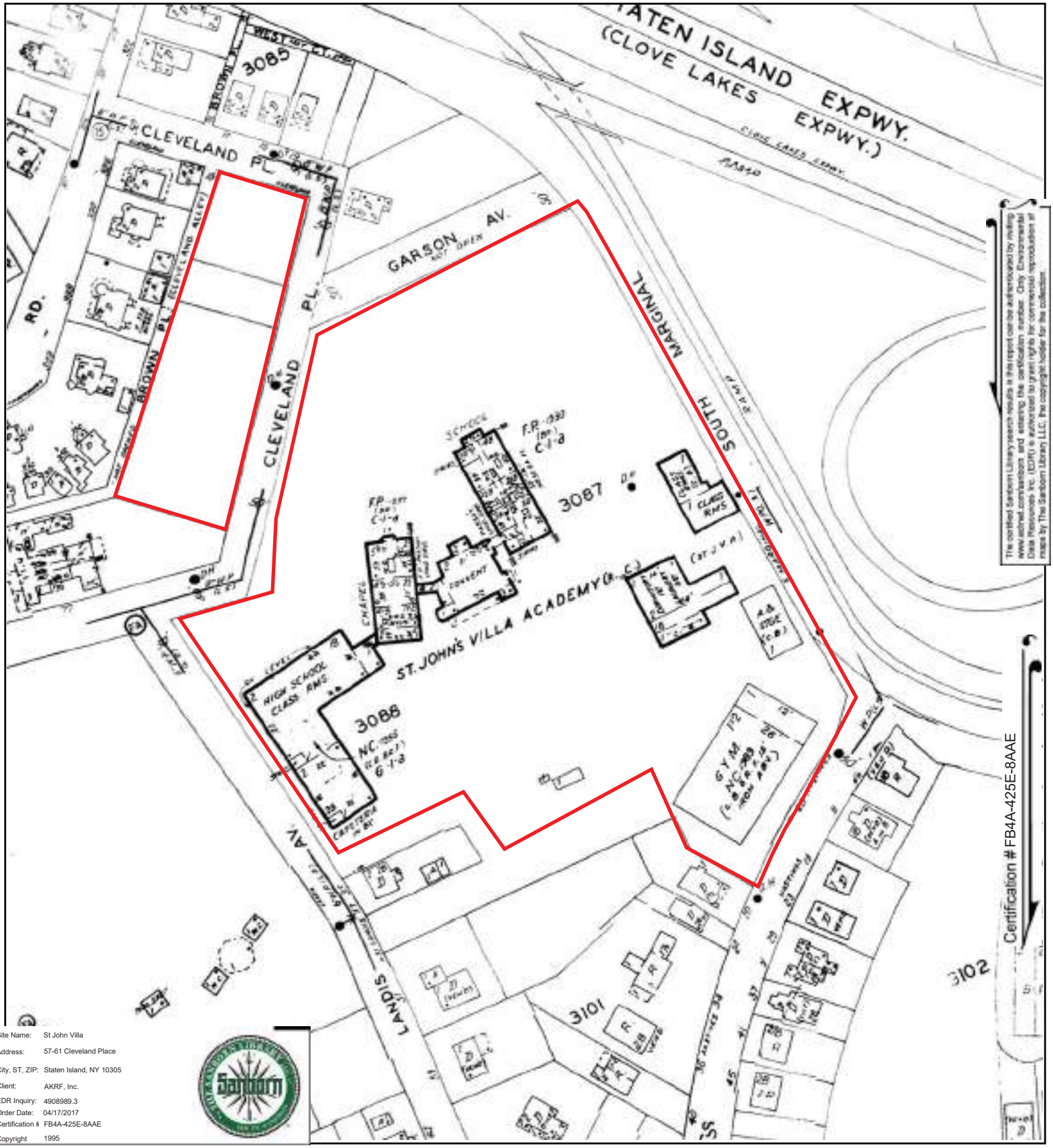

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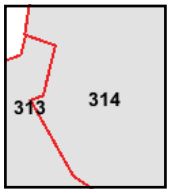

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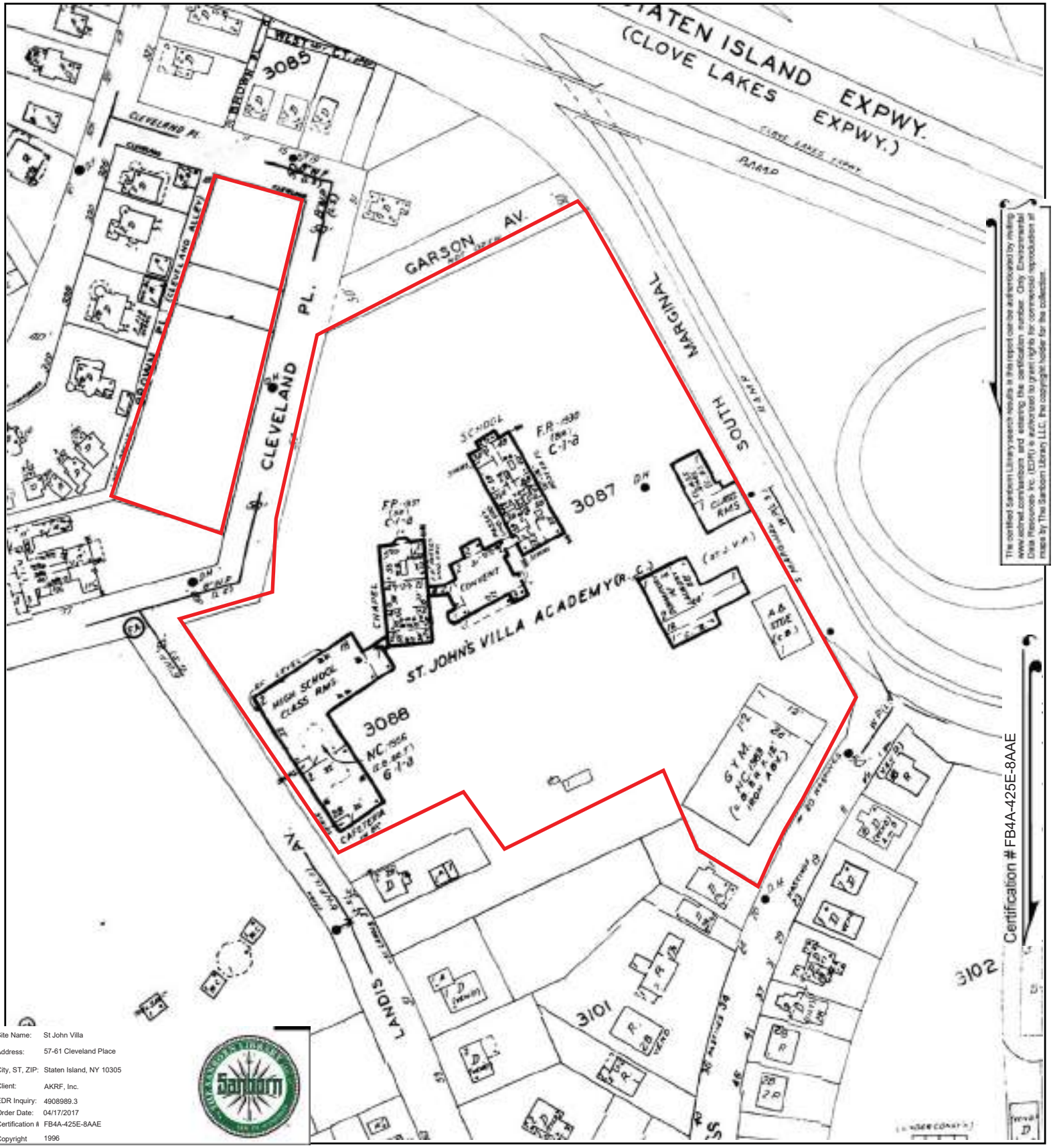

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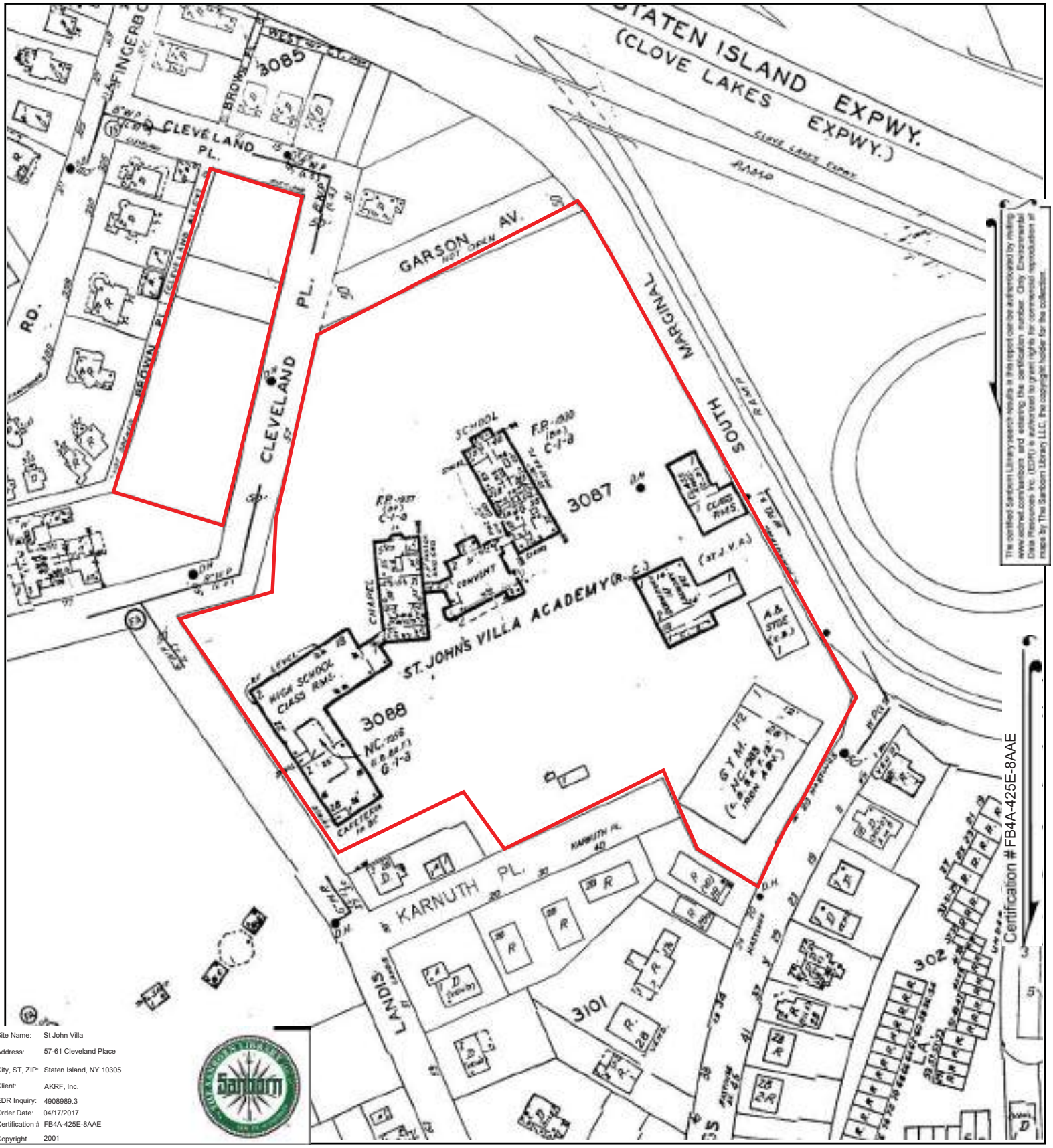

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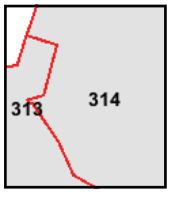

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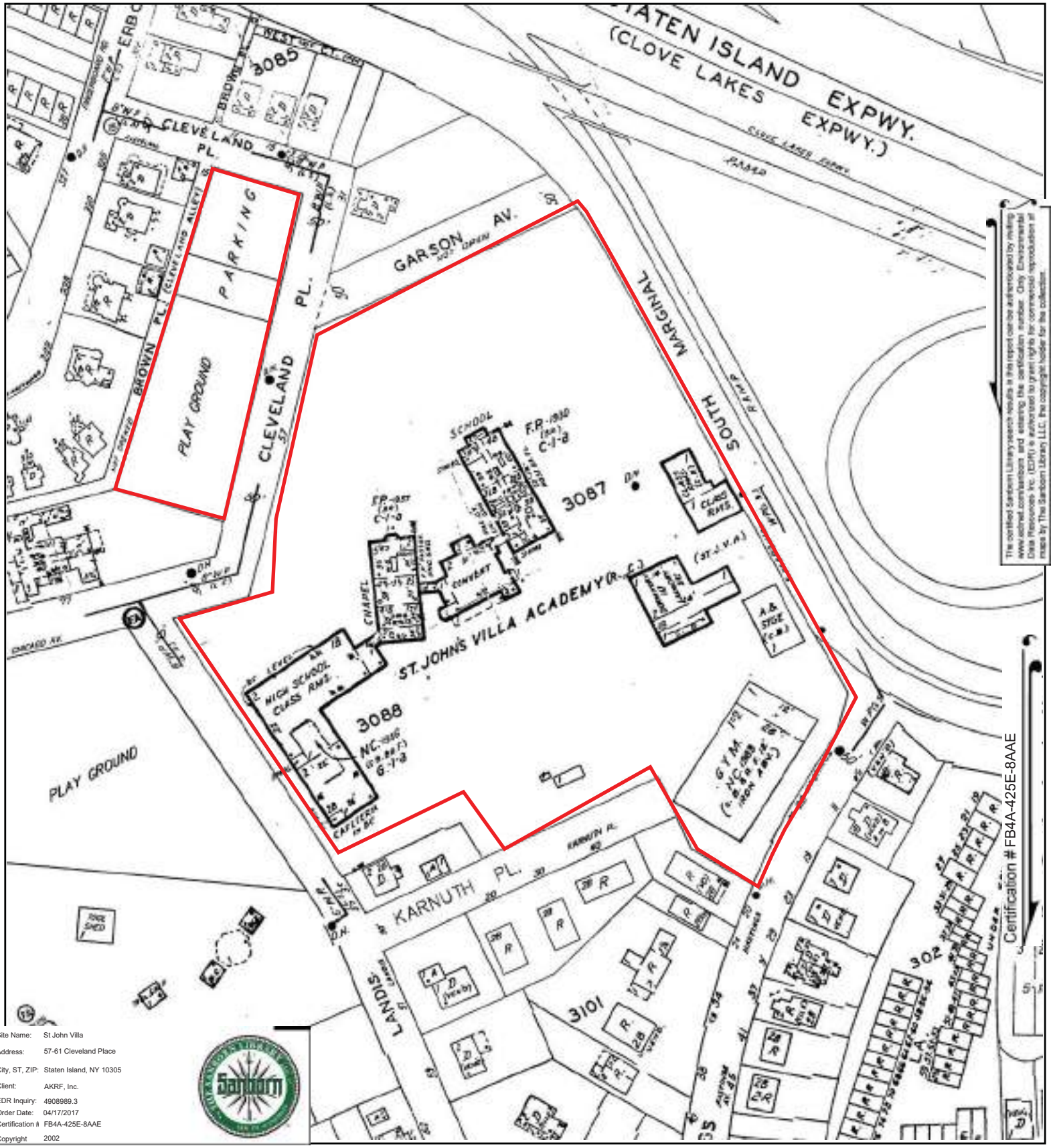

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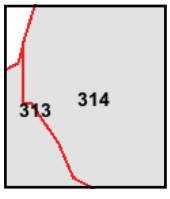

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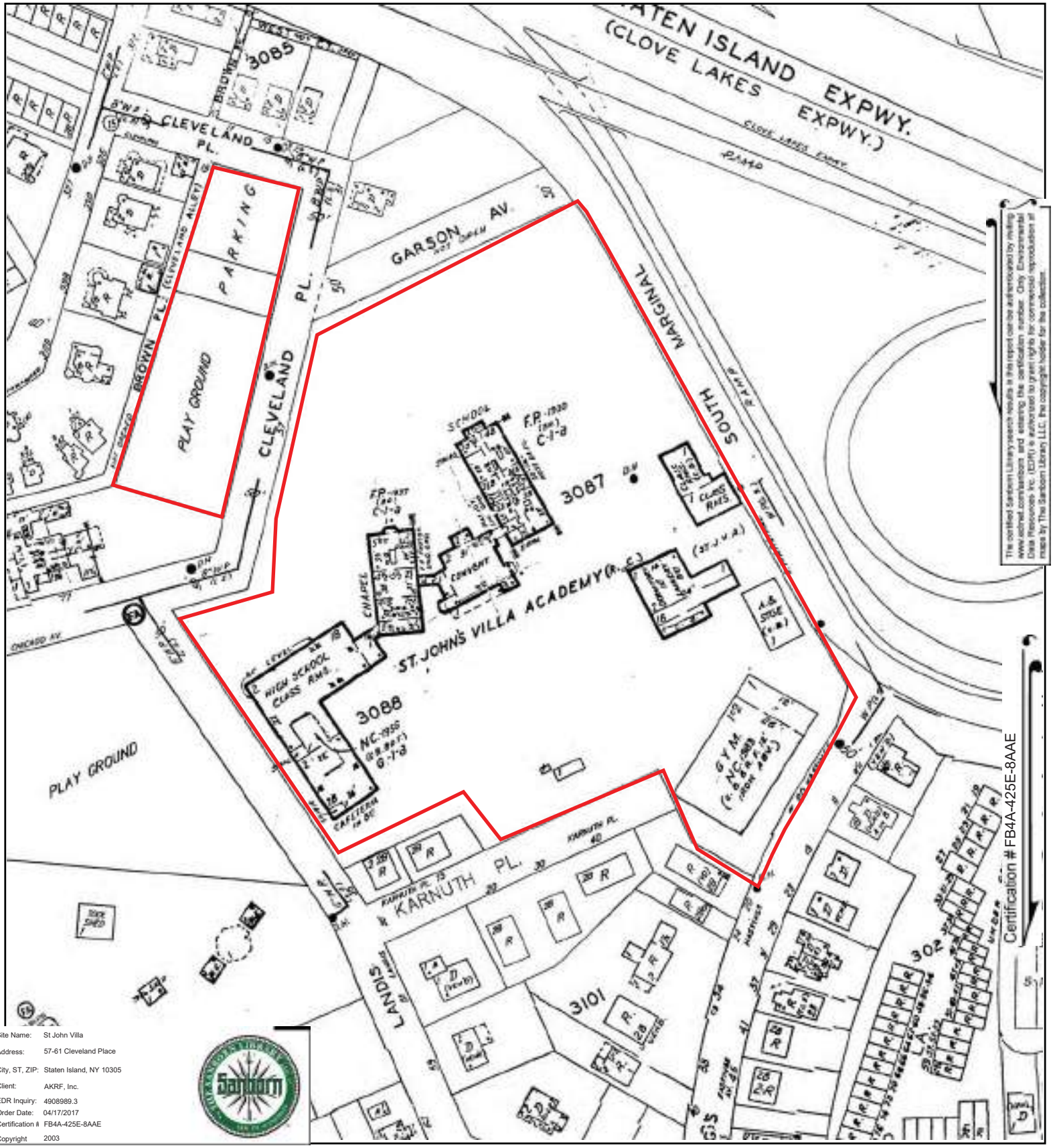

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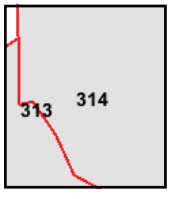

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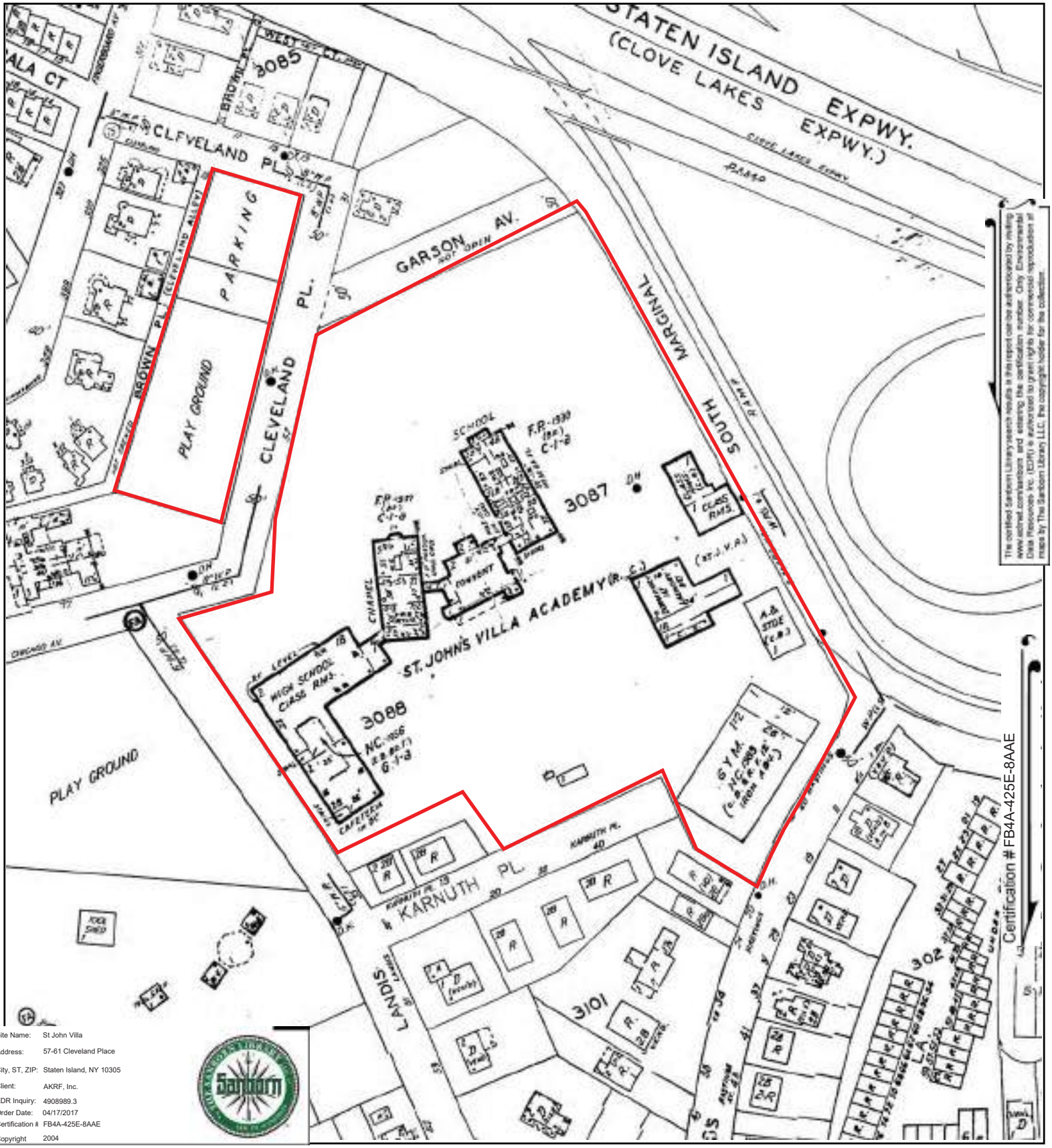

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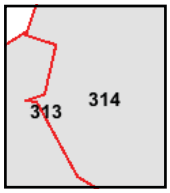

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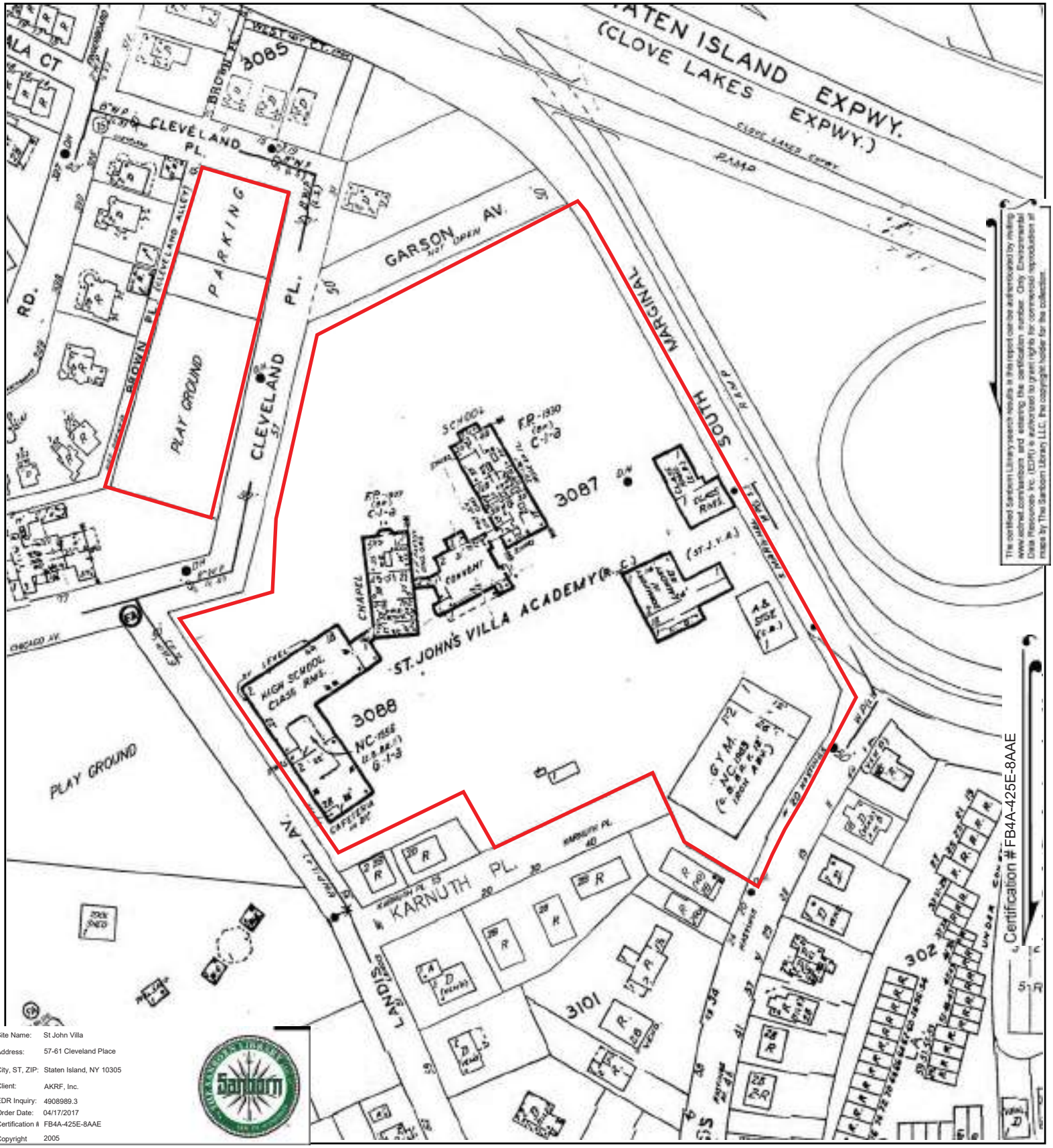

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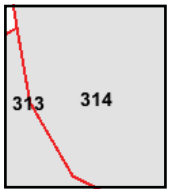

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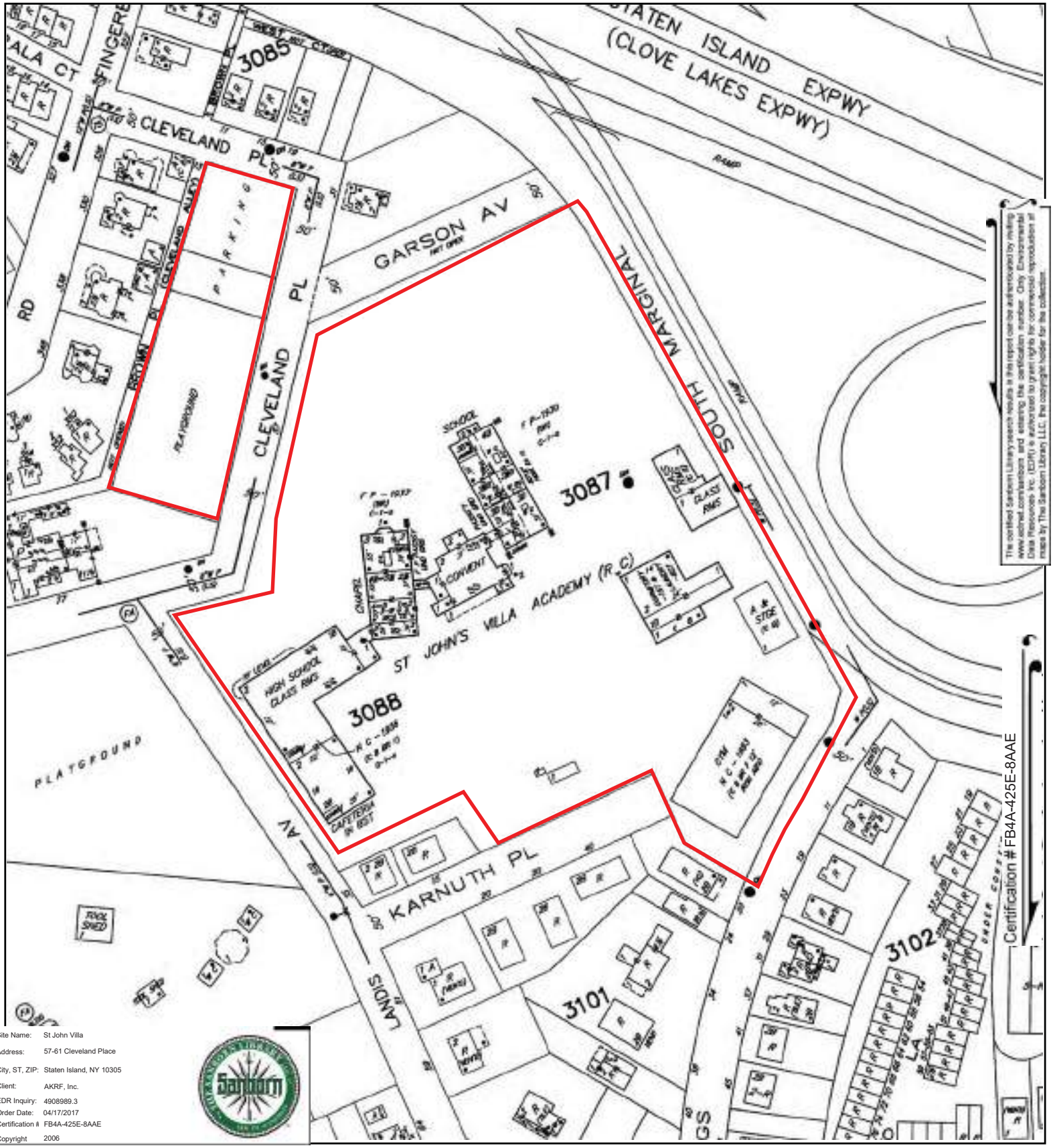

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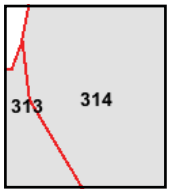

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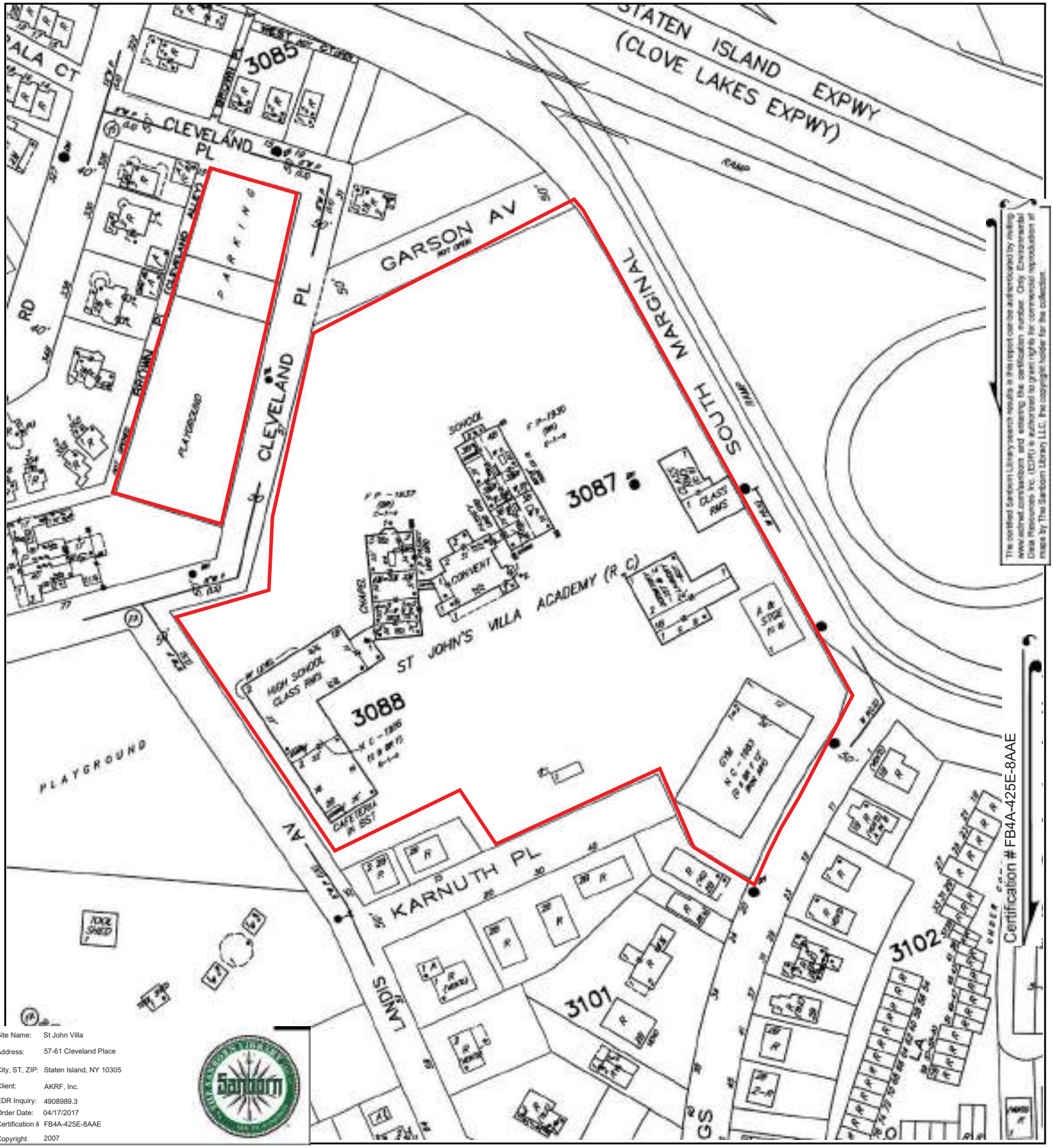

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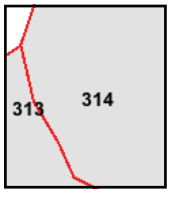

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Certified Sanborn® Map Report

04/17/17

Site Name:

St John Villa
57-61 Cleveland Place
Staten Island, NY 10305
EDR Inquiry # 4908989.3

Client Name:

AKRF, Inc.
440 Park Avenue, South 7th Floor
New York, NY 10016
Contact: Elizabeth Patricia Matamoros

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Certified Sanborn Results:

Certification # FB4A-425E-8AAE

PO # 89215

Project St John Villa

Maps Provided:

2007	1995	1987	1917
2006	1994	1986	
2005	1993	1983	
2004	1992	1981	
2003	1991	1977	
2002	1990	1962	
2001	1989	1950	
1996	1988	1937	

Sanborn® Library search results

Certification #: FB4A-425E-8AAE

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- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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St John Villa
57-61 Cleveland Place
Staten Island, NY 10305

Inquiry Number: 4908989.3
April 17, 2017

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

APPENDIX I

REGULATORY AGENCY DATABASE REPORT

St John Villa
57-61 Cleveland Place
Staten Island, NY 10305

Inquiry Number: 4908989.2s
April 17, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Physical Setting Source Map	A-7
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Physical Setting Source Records Searched	PSGR-1

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

COORDINATES

Latitude (North):	40.6016400 - 40° 36' 5.90''
Longitude (West):	74.0678450 - 74° 4' 4.24''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	578868.4
UTM Y (Meters):	4494743.0
Elevation:	137 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5939335 THE NARROWS, NY
Version Date:	2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150522
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	ST JOHNS VILLA ACADE	57 CLEVELAND PL	FINDS		TP
A2	ST JOHN VILLA ACADEM	57 CLEVELAND PLACE	NY AST, NY HIST UST		TP
A3	ST JOHN VILLA ACADEM	57 CLEVELAND PLACE	NY UST		TP
A4	ST. JOHNS VILLA ACAD	57 CLEVELAND PLACE	NY LTANKS		TP
5	NARROWS RD	SOUTH AND HASTINGS S	NY Spills	Lower	26, 0.005, East
B6	GELLER HOUSE	77 CHICAGO AVENUE	NY UST	Lower	164, 0.031, West
B7	340 HILLBROOK DR.	340 HILLBROOK DR	NY Spills	Lower	376, 0.071, WNW
C8	FORT WADSWORTH (NAVA		NY HSWDS	Lower	409, 0.077, NNE
C9	NYSDOT BIN 1067850	FINGERBOARD RD OVER	RCRA-LQG, NJ MANIFEST, NY MANIFEST	Lower	475, 0.090, NNE
D10	VERRAZANO NARROWS BR	LILY POND AVE & STAT	PA MANIFEST	Lower	533, 0.101, NE
D11	S.I. EXPWY/LILY POND	S.I. EXPWY/LILY POND	NY Spills	Lower	559, 0.106, NE
D12	STATEN ISLAND EXPRES	OFF LILY POND EXIT	NY Spills	Lower	559, 0.106, NE
13	CON EDISON - MANHOLE	LINCOLN PL. & GARFIE	RCRA NonGen / NLR, NY MANIFEST	Lower	628, 0.119, North
E14	MAJOR AV & LILY PD A	MAJOR AVE & LILY PD	NY Spills	Lower	675, 0.128, ESE
15	160 MAJOR AVENUE	160 MAJOR AVENUE	NY Spills	Lower	682, 0.129, South
E16	VERRAZANO NARROWS BR	1 VERRAZANO NARROWS	NY UST, NY AST	Lower	731, 0.138, ESE
E17	MTA - VERRAZANO NARR	1 VERRAZANO BRIDGE P	NY LTANKS, NY Spills, NY MANIFEST	Lower	747, 0.141, ESE
18	NYSDOT-VERRAZANO NAR	STATEN ISLAND EXPY B	RCRA-LQG, NJ MANIFEST, PA MANIFEST	Lower	792, 0.150, NE
F19	124 HASTINGS STREET	124 HASTINGS STREET	NY Spills	Lower	806, 0.153, SSE
20	HILLS OF GRASMERE HO	49 CLARADON LANE	NY CBS AST	Lower	829, 0.157, NW
21	POLE #18904	806 HYLAN BLVD	NY Spills	Lower	858, 0.162, WSW
G22	THOMPKINS AND	LILY POND AVE	NY Spills	Lower	909, 0.172, NNE
H23	POLE #27643	81-83 MCLEAN AVE	NY Spills	Lower	917, 0.174, SE
I24	GATX TERMINAL	4TH AVE	NY Spills	Lower	971, 0.184, SSE
G25	903 TOMPKINS AVENUE	903 TOMPKINS AVENUE	NY Spills	Lower	979, 0.185, NNE
26		78 CLARADON LN	EDR Hist Cleaner	Lower	985, 0.187, WNW
G27	VERRAZANO NARROWS BR	1 LILLY POND AVE - V	RCRA-SQG	Lower	985, 0.187, NNE
F28	ON ROADWAY	MCLEAN /CONGER ROAD	NY Spills	Lower	997, 0.189, SSE
J29	STATEN ISLAND PCB	171 GARFIELD AVE	NY Spills	Lower	1020, 0.193, North
F30	J O TAILOR INC	134 MCCLEAN AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	1035, 0.196, SSE
F31	MCCLEAN CLEANERS	134 MCCLEAN AVE	RCRA NonGen / NLR, ICIS, US AIRS, NY MANIFEST	Lower	1035, 0.196, SSE
F32	MCCLEAN CLEANERS	134 MC CLEAN AVE.	NY DRYCLEANERS	Lower	1035, 0.196, SSE
F33	JOE THE TAILOR	134 MCLEAN AVE	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Lower	1035, 0.196, SSE
F34		134 MCCLEAN AVE	EDR Hist Cleaner	Lower	1035, 0.196, SSE
J35	CON EDISON TRENCH 1	164 GARFIELD AVE	RCRA NonGen / NLR, NY MANIFEST	Lower	1060, 0.201, NNE
J36	WADSWORTH SUBSTATION	164 GARFIELD AVE	NY Spills	Lower	1060, 0.201, NNE
J37	CON EDISON	164 GARFIELD AVE	NY MANIFEST	Lower	1060, 0.201, NNE
J38	WADSWORTH #1 SUBSTAT	164 GARFIELD AVE	NY Spills	Lower	1060, 0.201, NNE
J39	CON EDISON	164 GARFIELD AVE	RCRA NonGen / NLR	Lower	1060, 0.201, NNE

MAPPED SITES SUMMARY

Target Property Address:
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40	PRIVATE HOME	138 MCCLEAN AVE	NY LTANKS	Lower	1070, 0.203, SSE
I41	NORTH QUEENS S/S - A	31-01 20 AVENUE - SU	NY Spills	Lower	1123, 0.213, SSE
H42	68 MCCLEAN AVE.	68 MCCLEAN AVE	NY Spills	Lower	1131, 0.214, SE
J43	ROADWAY WADSWORTH SU	164 GARFIELD AVE	NY Spills	Lower	1138, 0.216, NNE
I44	MERCURY REFINING COM	26 RAILROAD AVENUE	NY RGA HWS	Lower	1179, 0.223, SSE
K45	191 MCCLEAN AVE.	191 MCCLEAN AVENUE	NY Spills	Lower	1204, 0.228, South
I46	MANHOLE 5841	31ST AVE	NY Spills	Lower	1227, 0.232, SSE
L47	CAMILLE DOGERY HOME	15 JACKSON AVE	NY LTANKS, NY Spills	Lower	1229, 0.233, South
K48	SPILL NUMBER 0102690	251 MCCLEAN AVE	NY Spills	Lower	1239, 0.235, SSW
M49	ROADWAY POLE #56035	200-11 34TH AVE	NY Spills	Lower	1254, 0.237, SSE
50		26 RODERICK AVE	EDR Hist Cleaner	Lower	1262, 0.239, WNW
M51	CONSOLIDATED EDISON	36 AVE 50' W OF 22 S	NY MANIFEST	Lower	1273, 0.241, SSE
M52	SMELL OF FUEL	37TH AVE AND 78TH ST	NY Spills	Lower	1282, 0.243, SSE
N53	MINOR GARDEN SPILL	12 POUCH TERRACE	NY Spills	Lower	1286, 0.244, WSW
M54	HUNTER GARDENS APART	147-31 38TH AVE	NY Spills	Lower	1292, 0.245, SSE
55	MANHOLE # 461	LILLY POND AVE AND S	NY Spills	Lower	1293, 0.245, NNE
K56	257 MC LEAN AVE	257 MC LEAN AVE	NY Spills	Lower	1308, 0.248, SSW
57	FORT WADSWORTH	203 DRUM AVE/ NEW YO	NY Spills	Lower	1329, 0.252, ENE
N58	ROADSIDE	20 POUCH TERRACE	NY Spills	Lower	1352, 0.256, WSW
K59	257 MCCLEAN AVE	257 MCCLEAN AVE	NY LTANKS	Lower	1355, 0.257, SSW
O60		900 HYLAN BLVD	EDR Hist Cleaner	Lower	1396, 0.264, SW
O61	LIZ CUSTOM/YOUNG'S C	900 HYLAN BLVD.	NY DRYCLEANERS	Lower	1396, 0.264, SW
O62	IFO 900 HYLAN BLVD	900 HYLAN BLVD	NY Spills	Lower	1396, 0.264, SW
L63		103 CEDAR AVE	EDR Hist Cleaner	Lower	1418, 0.269, SSE
N64	FRONT OF	32 POUCH TERR	NY Spills	Lower	1429, 0.271, WSW
65	45 OCEAN AVENUE	45 OCEAN AVENUE	NY Spills	Lower	1435, 0.272, SSE
66		40 BRIDGE CT	EDR Hist Cleaner	Lower	1451, 0.275, NNE
67	SHOOTER ISLAND	212 COAST GUARD DRIV	NY LTANKS, NY Spills, NY MANIFEST	Lower	1457, 0.276, NE
M68	SPILL NUMBER 9807643	50-02 55TH AVE	NY Spills	Lower	1466, 0.278, SSE
M69	POLE #90573	73-14 57TH AVE	NY Spills	Lower	1487, 0.282, SSE
M70	APARTMENT BLDG	96-04 57TH AVE	NY Spills	Lower	1487, 0.282, SSE
71	SPILL NUMBER 9914595	3 MCCLEAN AVE	NY Spills	Lower	1499, 0.284, ESE
72	ROADWAY	108 SAND LANE	NY Spills	Lower	1519, 0.288, SSW
P73	TOMPKINS AVE/FINGERB	TOMPKINS AVE/FINGERB	NY Spills	Lower	1525, 0.289, North
P74	ROADWAY	FINGERBOARD RD/TOMPK	NY Spills	Lower	1529, 0.290, North
75	HYD FLUID FRM CON ED	80 LYMAN AVE	NY Spills	Lower	1616, 0.306, NNE
O76	26 LANDIS AVE/ST JOH	26 LANDIS AVENUE	NY LTANKS	Lower	1617, 0.306, SW
O77	ST JOSEPH HILL ACADE	850 HYLAN BOULEVARD	NY LTANKS, NY UST, NY HIST UST, NY Spills	Lower	1617, 0.306, SW
78	HILLS OF GRASMERE CO	209 GRASMERE DR	NY Spills	Higher	1631, 0.309, NW

MAPPED SITES SUMMARY

Target Property Address:
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Q79	FEEDER CABLE	70 OCEAN AVE	NY Spills	Lower	1664, 0.315, SSE
Q80	OVERHEAD CABLE	70 OCEAN AVE	NY Spills	Lower	1664, 0.315, SSE
Q81	AERIAL JOINT	72 OCEAN AVE	NY Spills	Lower	1689, 0.320, SSE
82	POLE # 25756	649 WEST FINGERBOARD	NY Spills	Lower	1695, 0.321, West
83	MANHOLE #18348	224 - 08 77TH AVENUE	NY Spills	Lower	1700, 0.322, SSE
84	SPILL NUMBER 0012316	SCHOOL RD & DENNIS S	NY Spills	Lower	1745, 0.330, NE
85	JOINT IN AERIAL CABL	777 THOMPKINS AVENUE	NY Spills	Lower	1775, 0.336, North
86	325 MAJOR AVE	325 MAJOR AVE	NY LTANKS	Lower	1800, 0.341, SW
Q87	88 OCEAN AVENUE	88 OCEAN AVENUE	NY Spills	Lower	1851, 0.351, SSE
R88		159 SAND LN	EDR Hist Cleaner	Lower	1877, 0.355, SSW
89	POLE	347 MCCLEAN AVE	NY Spills	Lower	1886, 0.357, SSW
90		565 STEUBEN ST	EDR Hist Cleaner	Lower	1923, 0.364, West
R91	NICOL RESIDENCE	154 SAND LN	NY Spills	Lower	1933, 0.366, SSW
S92	X/S SINGERBOALD RD	18 SUMMER ST	NY Spills	Lower	1945, 0.368, NNE
93	FORT WADSWORTH - BAT	NAVAL STATION - NEW	NY SHWS	Lower	1951, 0.370, East
R94	BORINQUEN PLAZA	130 HUMBODLT STREET	NY LTANKS	Lower	1995, 0.378, SSW
95	MANHOLE # 2215	104 OCEAN AVE	NY Spills	Lower	2010, 0.381, SSE
96	32 LINWOOD AVENUE	32 LINWOOD AVENUE	NY Spills	Lower	2016, 0.382, SW
R97	387 HUMBOLDT ST/BKLY	387 HUMBOLDT STREET	NY Spills	Lower	2078, 0.394, SSW
98	BEHIND 35 HILLBROOK	CONDOMINIUM	NY Spills	Lower	2117, 0.401, NNW
S99	VACANT LOT	51 HIGH ST	NY Spills	Lower	2128, 0.403, NNE
100	POLE T-4	AYRES RD AND USS TEN	NY Spills	Lower	2128, 0.403, ESE
101	600 HYLAN BLVD	600 HYLAN BLVD	NY LTANKS	Lower	2240, 0.424, WNW
T102	U S NAVY FT WADSWORT	BAY STREET	NY LTANKS	Lower	2256, 0.427, NE
103	POLE TOP TRANSFORMER	717 TOMPKINS AVE	NY Spills	Lower	2258, 0.428, North
104	117 MILLS AVENUE	117 MILLS AVENUE	NY Spills	Lower	2259, 0.428, South
105	VAULT 8872	15 SCHUBERT ST	NY Spills	Lower	2270, 0.430, NNW
106	PRIVATE RESIDENCE	128 BEVERLY RD	NY Spills	Lower	2275, 0.431, West
T107	SPILL NUMBER 0306567	1532 BAY STREET	NY Spills	Lower	2308, 0.437, NE
T108	POLE #185 TRANSFORME	1532 DAY ST	NY Spills	Lower	2356, 0.446, NE
U109	191 BELAIR RD/S.I.	191 BELAIR ROAD	NY Spills	Lower	2358, 0.447, North
110	OCEAN AVE & FATHER	CAPADDANO AVE	NY Spills	Lower	2362, 0.447, SSE
U111	191 BELL AIRE ROAD	191 BELL AIRE ROAD	NY Spills	Lower	2378, 0.450, NNW
V112	NY AVE & SOUTH AVE	NY AVE & SOUTH AVE	NY LTANKS	Lower	2382, 0.451, ENE
T113	CON EDISON VEHICLE 5	BAY ST AND WADSWORTH	NY Spills	Lower	2402, 0.455, NE
114	AERIAL POTHEAD DRIPP	BAY STREET & SCHOOL	NY Spills	Lower	2430, 0.460, NE
V115	MANHOLE 6502	SOUTH AVENUE	NY Spills	Lower	2433, 0.461, NE
V116	MARINERS HARBOR	SOUTH AVENUE	NY Spills	Lower	2433, 0.461, NE
V117	GOETHALS RD NORTH AN	SOUTH AVENUE	NY Spills	Lower	2433, 0.461, NE

MAPPED SITES SUMMARY

Target Property Address:
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
V118	RAILROAD TRACKS	SOUTH AVENUE	NY Spills	Lower	2433, 0.461, NE
119	CONSTRUCTION SITE	106/107 LINWOOD AVE	NY Spills	Lower	2433, 0.461, SSW
W120	FORT WADSWORTH	IN FRONT OF BLDG 437	NY Spills	Lower	2442, 0.463, East
W121	FT WADSWORTH/US NAVY	FT WADSWORTH/US NAVY	NY Spills	Lower	2442, 0.463, East
W122	BAY ST/FORT WADSWORT	BAY ST/FORT WADSWORT	NY Spills	Lower	2442, 0.463, East
W123	FORT WADSWORTH-TOMPK	FORT WADSWORTH-TOMPK	NY Spills	Lower	2442, 0.463, East
W124	NAVAL STA.-FT WADSWO	NAVAL STATION	NY Spills	Lower	2442, 0.463, East
W125	FT. TOMPKINS - BLDG	FT WADSWORTH	NY Spills	Lower	2442, 0.463, East
W126	FORT WADSWORTH	STATEN ISLAND	NY Spills	Lower	2442, 0.463, East
W127	FT WADSWORTH NAVAL B	FT WADSWORTH NAVAL B	NY LTANKS	Lower	2442, 0.463, East
W128	NAVY PIER	NAVY PIER	NY Spills	Lower	2442, 0.463, East
W129	FT WADSWORTH NAVAL S	FT WADSWORTH/BAY ST	NY Spills	Lower	2442, 0.463, East
W130	FORT WADSWORTH-POLE#	FT.WADSWAORTH/PL#168	NY Spills	Lower	2442, 0.463, East
131	HOUSING AREA COASTGU	USS MISSOURI LN/TENN	NY Spills	Lower	2445, 0.463, ESE
W132	FORT WADSWORTH	210 NEW YORK AVE	NY Spills	Lower	2461, 0.466, East
133	216 ST JOHNS AVENUE	216 ST JOHNS AVENUE	NY Spills	Lower	2476, 0.469, NNW
134	KITCHEN DRAID / TRAP	44 SEASIDE LANE	NY Spills	Lower	2478, 0.469, SSE
X135	AERIAL CABLE	24 FINGERBOARD RD	NY Spills	Lower	2486, 0.471, NNE
Y136	35 JEROME AVENUE	35 JEROME AVENUE	NY Spills	Lower	2522, 0.478, WSW
Y137	35 JEROME AVE	35 JEROME AVE	NY Spills	Lower	2525, 0.478, WSW
X138	SPILL NUMBER 9913077	10 FINGERBOARD RD	NY Spills	Lower	2553, 0.484, NNE
139	SAND LANE & OLYMPIA	SAND LANE / OLYMPIA	NY Spills	Lower	2564, 0.486, South
140		1477 BAY ST	EDR Hist Cleaner	Lower	2592, 0.491, NE
Z141	CHATEAU VILLA	390-424 MARYLAND AVE	NY LTANKS	Higher	2593, 0.491, NW
Z142	APARTMENT BUILDING	390 MARYLAND AVE	NY LTANKS	Higher	2593, 0.491, NW
143	POND	SHORE ACRES ROAD AND	NY Spills	Lower	2624, 0.497, NNE
AA144	SUN CHEMICAL CORPORA	441-443 TOMPKINS AVE	NY BROWNFIELDS	Lower	4662, 0.883, NNW
AA145	SUN CHEMICAL CORPORA	441 TOMPKINS AVENUE	RCRA-LQG, NY CBS AST, NY VCP, FTTS, NJ MANIFEST	Lower	4662, 0.883, NNW
AA146	SUN CHEMICAL CORP	441 TOMPKINS AVENUE	NY SHWS, NY CBS, NY AST, NY Spills, NY MANIFEST	Lower	4662, 0.883, NNW
147	NARROWS METERING AND	41 WYMAN PLACE	NY VCP	Lower	4824, 0.914, North

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
ST JOHNS VILLA ACADE 57 CLEVELAND PL STATEN ISLAND, NY 10305	FINDS Registry ID:: 110055268650	N/A
ST JOHN VILLA ACADEM 57 CLEVELAND PLACE STATEN ISLAND, NY 10305	NY AST Database: AST, Date of Government Version: 12/28/2016 Facility Id: 2-092401 NY HIST UST Facility Status: 1 PBS Number: 2-092401 Tank Status: 1	N/A
ST JOHN VILLA ACADEM 57 CLEVELAND PLACE STATEN ISLAND, NY 10305	NY UST Database: UST, Date of Government Version: 12/28/2016	N/A
ST. JOHNS VILLA ACAD 57 CLEVELAND PLACE STATEN ISLAND, NY	NY LTANKS Spill Number/Closed Date: 9005671 / 1992-09-30 Spill Number/Closed Date: 0612683 / 2008-04-03 Site ID: 211259 Site ID: 377584 Program Number: 9005671 Program Number: 0612683	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites

NPL LIENS ---- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---- Federal Facility Site Information listing
SEMS ---- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---- Land Use Control Information System
US ENG CONTROLS ---- Engineering Controls Sites List
US INST CONTROL ---- Sites with Institutional Controls

Federal ERNS list

ERNS ---- Emergency Response Notification System

State- and tribal - equivalent CERCLIS

NY VAPOR REOPENED ---- Vapor Intrusion Legacy Site List

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF ---- Facility Register

State and tribal leaking storage tank lists

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land
NY HIST LTANKS ---- Listing of Leaking Storage Tanks

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
NY CBS UST ---- Chemical Bulk Storage Database
NY MOSF UST ---- Major Oil Storage Facilities Database

NY MOSF Major Oil Storage Facility Site Listing
NY MOSF AST Major Oil Storage Facilities Database
INDIAN UST Underground Storage Tanks on Indian Land
NY TANKS Storage Tank Faciliy Listing

State and tribal institutional control / engineering control registries

NY RES DECL Restrictive Declarations Listing
NY ENG CONTROLS Registry of Engineering Controls
NY INST CONTROL Registry of Institutional Controls

State and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NY ERP Environmental Restoration Program Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

NY SWRCY Registered Recycling Facility List
NY SWTIRE Registered Waste Tire Storage & Facility List
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
NY DEL SHWS Delisted Registry Sites
US CDL National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

NY HIST AST Historical Petroleum Bulk Storage Database

Local Land Records

NY LIENS Spill Liens Information
LIENS 2 CERCLA Lien Information

Records of Emergency Release Reports

HMIRS Hazardous Materials Information Reporting System
NY Hist Spills SPILLS Database

Other Ascertainable Records

FUDS Formerly Used Defense Sites

DOD Department of Defense Sites
SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR Financial Assurance Information
EPA WATCH LIST EPA WATCH LIST
2020 COR ACTION 2020 Corrective Action Program List
TSCA Toxic Substances Control Act
TRIS Toxic Chemical Release Inventory System
SSTS Section 7 Tracking Systems
ROD Records Of Decision
RMP Risk Management Plans
RAATS RCRA Administrative Action Tracking System
PRP Potentially Responsible Parties
PADS PCB Activity Database System
MLTS Material Licensing Tracking System
COAL ASH DOE Steam-Electric Plant Operation Data
COAL ASH EPA Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER PCB Transformer Registration Database
RADINFO Radiation Information Database
HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS Incident and Accident Data
CONSENT Superfund (CERCLA) Consent Decrees
INDIAN RESERV Indian Reservations
FUSRAP Formerly Utilized Sites Remedial Action Program
UMTRA Uranium Mill Tailings Sites
LEAD SMELTERS Lead Smelter Sites
US MINES Mines Master Index File
UXO Unexploded Ordnance Sites
DOCKET HWC Hazardous Waste Compliance Docket Listing
NY AIRS Air Emissions Data
NY COAL ASH Coal Ash Disposal Site Listing
NY E DESIGNATION E DESIGNATION SITE LISTING
NY Financial Assurance Financial Assurance Information Listing
NY SPDES State Pollutant Discharge Elimination System
NY UIC Underground Injection Control Wells
ABANDONED MINES Abandoned Mines
FUELS PROGRAM EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historic Gas Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA LF Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NYSDOT BIN 1067850	***FINGERBOARD RD OVER***	***NNE 0 - 1/8 (0.090 mi.)***	***C9***	***24***
NYSDOT-VERRAZANO NAR	***STATEN ISLAND EXPY B***	***NE 1/8 - 1/4 (0.150 mi.)***	***18***	***64***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
VERRAZANO NARROWS BR	1 LILLY POND AVE - V	NNE 1/8 - 1/4 (0.187 mi.)	G27	101

State- and tribal - equivalent CERCLIS

NY SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Conservation's Inactive Hazardous waste Disposal Sites in New York State.

A review of the NY SHWS list, as provided by EDR, and dated 11/14/2016 has revealed that there are 2

NY SHWS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORT WADSWORTH - BAT Site Code: 58302	NAVAL STATION - NEW	E 1/4 - 1/2 (0.370 mi.)	93	247
SUN CHEMICAL CORP Site Code: 55940	***441 TOMPKINS AVENUE***	***NNW 1/2 - 1 (0.883 mi.)***	***AA146***	***343***

State and tribal leaking storage tank lists

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 02/06/2017 has revealed that there are 15 NY LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHATEAU VILLA Spill Number/Closed Date: 9612389 / 2012-08-29 Site ID: 254167 Program Number: 9612389	390-424 MARYLAND AVE	NW 1/4 - 1/2 (0.491 mi.)	Z141	308
APARTMENT BUILDING Spill Number/Closed Date: 0310312 / 2006-10-13 Site ID: 280830 Program Number: 0310312	390 MARYLAND AVE	NW 1/4 - 1/2 (0.491 mi.)	Z142	309

Lower Elevation	Address	Direction / Distance	Map ID	Page
MTA - VERRAZANO NARR Spill Number/Closed Date: 9100368 / 2003-11-07 Spill Number/Closed Date: 9403549 / 2005-10-19 Spill Number/Closed Date: 9407908 / 2003-11-07 Site ID: 285922 Site ID: 285924 Site ID: 285925 Program Number: 9100368 Program Number: 9403549 Program Number: 9407908	***1 VERRAZANO BRIDGE P***	***ESE 1/8 - 1/4 (0.141 mi.)***	***E17***	***52***
PRIVATE HOME Spill Number/Closed Date: 0613115 / 2007-03-07 Site ID: 378084 Program Number: 0613115	138 MCCLEAN AVE	SSE 1/8 - 1/4 (0.203 mi.)	I40	143
CAMILLE DOGERY HOME Spill Number/Closed Date: 0103611 / 2006-03-30 Site ID: 305928 Program Number: 0103611	***15 JACKSON AVE***	***S 1/8 - 1/4 (0.233 mi.)***	***L47***	***151***
257 MCCLEAN AVE Spill Number/Closed Date: 9404093 / 1994-06-23	257 MCCLEAN AVE	SSW 1/4 - 1/2 (0.257 mi.)	K59	171

Site ID: 147876
Program Number: 9404093

SHOOTER ISLAND	***212 COAST GUARD DRIV***	***NE 1/4 - 1/2 (0.276 mi.)***	***67***	***202***
Spill Number/Closed Date: 0313709 / 2004-04-06 Site ID: 273008 Program Number: 0313709				
26 LANDIS AVE/ST JOH	26 LANDIS AVENUE	SW 1/4 - 1/2 (0.306 mi.)	O76	218
Spill Number/Closed Date: 9005644 / 1990-10-29 Site ID: 140478 Program Number: 9005644				
ST JOSEPH HILL ACADE	***850 HYLAN BOULEVARD***	***SW 1/4 - 1/2 (0.306 mi.)***	***O77***	***219***
Spill Number/Closed Date: 8801510 / 1992-11-19 Site ID: 130604 Program Number: 8801510				
325 MAJOR AVE	325 MAJOR AVE	SW 1/4 - 1/2 (0.341 mi.)	86	239
Spill Number/Closed Date: 9201050 / 1992-04-27 Site ID: 217882 Program Number: 9201050				
BORINQUEN PLAZA	130 HUMBODLT STREET	SSW 1/4 - 1/2 (0.378 mi.)	R94	249
Spill Number/Closed Date: 9100135 / 1995-04-25 Site ID: 79858 Program Number: 9100135				
600 HYLAN BLVD	600 HYLAN BLVD	WNW 1/4 - 1/2 (0.424 mi.)	101	258
Spill Number/Closed Date: 9514740 / 2004-04-29 Site ID: 309144 Program Number: 9514740				
U S NAVY FT WADSWORT	BAY STREET	NE 1/4 - 1/2 (0.427 mi.)	T102	259
Spill Number/Closed Date: 8910121 / 1992-09-30 Site ID: 156701 Program Number: 8910121				
NY AVE & SOUTH AVE	NY AVE & SOUTH AVE	ENE 1/4 - 1/2 (0.451 mi.)	V112	272
Spill Number/Closed Date: 9301446 / 1993-04-30 Site ID: 295009 Program Number: 9301446				
FT WADSWORTH NAVAL B	FT WADSWORTH NAVAL B	E 1/4 - 1/2 (0.463 mi.)	W127	290
Spill Number/Closed Date: 9003865 / 1990-07-06 Site ID: 113741 Program Number: 9003865				

State and tribal registered storage tank lists

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, has revealed that there are 2 NY UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GELLER HOUSE	77 CHICAGO AVENUE	W 0 - 1/8 (0.031 mi.)	B6	19
Database: UST, Date of Government Version: 12/28/2016				

Lower Elevation	Address	Direction / Distance	Map ID	Page
VERRAZANO NARROWS BR	***1 VERRAZANO NARROWS***	***ESE 1/8 - 1/4 (0.138 mi.)***	***E16***	***39***
Database: UST, Date of Government Version: 12/28/2016				

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, has revealed that there is 1 NY AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
VERRAZANO NARROWS BR	***1 VERRAZANO NARROWS***	***ESE 1/8 - 1/4 (0.138 mi.)***	***E16***	***39***
Database: AST, Date of Government Version: 12/28/2016				
Facility Id: 2-481653				

NY CBS AST: Chemical Bulk Storage Database. Registration data collected as required by 6 NYCRR Part 596. It includes facilities storing hazardous substances listed in 6 NYCRR Part 597, in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size. Includes facilities registered (and closed) since effective date of CBS regulations (July 15, 1988) through the date request is processed.

A review of the NY CBS AST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 NY CBS AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HILLS OF GRASMERE HO	49 CLARADON LANE	NW 1/8 - 1/4 (0.157 mi.)	20	93
Facility Status: 1				
Facility Status: 1				
CBS Number: 2-000199				

State and tribal voluntary cleanup sites

NY VCP: Voluntary Cleanup Agreements. The voluntary remedial program uses private monies to get contaminated sites remediated to levels allowing for the sites' productive use. The program covers virtually any kind of site and contamination.

A review of the NY VCP list, as provided by EDR, and dated 11/14/2016 has revealed that there are 2 NY VCP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUN CHEMICAL CORPORA	***441 TOMPKINS AVENUE***	***NNW 1/2 - 1 (0.883 mi.)***	***AA145***	***316***
NARROWS METERING AND	41 WYMAN PLACE	N 1/2 - 1 (0.914 mi.)	147	366
Site Code: 57065				

State and tribal Brownfields sites

NY BROWNFIELDS: Brownfields Site List

A review of the NY BROWNFIELDS list, as provided by EDR, and dated 11/14/2016 has revealed that there is 1 NY BROWNFIELDS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUN CHEMICAL CORPORA Site Code: 397639	441-443 TOMPKINS AVE	NNW 1/2 - 1 (0.883 mi.)	AA144	311

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

NY Spills: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, and dated 02/06/2017 has revealed that there are 99 NY Spills sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HILLS OF GRASMERE CO Spill Number/Closed Date: 0302747 / 2003-06-16 spillno: 0302747 Site ID: 186526	209 GRASMERE DR	NW 1/4 - 1/2 (0.309 mi.)	78	230

Lower Elevation	Address	Direction / Distance	Map ID	Page
NARROWS RD Spill Number/Closed Date: 9511889 / 1996-01-02 spillno: 9511889 Site ID: 126423	SOUTH AND HASTINGS S	E 0 - 1/8 (0.005 mi.)	5	18
340 HILLBROOK DR. Spill Number/Closed Date: 9313503 / 1994-02-18 spillno: 9313503 Site ID: 183330	340 HILLBROOK DR	WNW 0 - 1/8 (0.071 mi.)	B7	21
S.I. EXPWY/LILY POND Spill Number/Closed Date: 8708389 / 1987-12-30 spillno: 8708389 Site ID: 169907	S.I. EXPWY/LILY POND	NE 0 - 1/8 (0.106 mi.)	D11	32
STATEN ISLAND EXPRES Spill Number/Closed Date: 9903586 / 2004-02-09 spillno: 9903586 Site ID: 315597	OFF LILY POND EXIT	NE 0 - 1/8 (0.106 mi.)	D12	33
MAJOR AV & LILY PD A Spill Number/Closed Date: 9001267 / 1990-12-17 spillno: 9001267	MAJOR AVE & LILY PD	ESE 1/8 - 1/4 (0.128 mi.)	E14	37

Site ID: 72671

160 MAJOR AVENUE	160 MAJOR AVENUE	S 1/8 - 1/4 (0.129 mi.)	15	38
Spill Number/Closed Date: 9502626 / 1995-06-02				
spillno: 9502626				
Site ID: 192448				
MTA - VERRAZANO NARR	***1 VERRAZANO BRIDGE P***	***ESE 1/8 - 1/4 (0.141 mi.)***	***E17***	***52***
Spill Number/Closed Date: 9500836 / 2003-11-07				
Spill Number/Closed Date: 9415918 / 1995-03-09				
Spill Number/Closed Date: 9415350 / 2003-11-07				
Spill Number/Closed Date: 9412719 / 2003-11-07				
Spill Number/Closed Date: 9201984 / 2014-01-10				
**Additional key fields are available in the Map Findings section*				
spillno: 8804077				
spillno: 9201984				
spillno: 9412719				
spillno: 9415350				
spillno: 9415918				
**Additional key fields are available in the Map Findings section*				
Site ID: 285921				
Site ID: 285923				
Site ID: 285926				
Site ID: 285927				
Site ID: 285928				
**Additional key fields are available in the Map Findings section*				
124 HASTINGS STREET	124 HASTINGS STREET	SSE 1/8 - 1/4 (0.153 mi.)	F19	92
Spill Number/Closed Date: 1212419 / 2012-11-15				
spillno: 1212419				
Site ID: 475567				
POLE #18904	806 HYLAN BLVD	WSW 1/8 - 1/4 (0.162 mi.)	21	94
Spill Number/Closed Date: 0404807 / 2004-10-22				
spillno: 0404807				
Site ID: 276009				
THOMPKINS AND	LILY POND AVE	NNE 1/8 - 1/4 (0.172 mi.)	G22	96
Spill Number/Closed Date: 9801317 / 1998-05-01				
spillno: 9801317				
Site ID: 320518				
POLE #27643	81-83 MCLEAN AVE	SE 1/8 - 1/4 (0.174 mi.)	H23	97
Spill Number/Closed Date: 0105058 / 2003-07-23				
spillno: 0105058				
Site ID: 300108				
GATX TERMINAL	4TH AVE	SSE 1/8 - 1/4 (0.184 mi.)	I24	98
Spill Number/Closed Date: 0001041 / 2002-10-29				
spillno: 0001041				
Site ID: 285402				
903 TOMPKINS AVENUE	903 TOMPKINS AVENUE	NNE 1/8 - 1/4 (0.185 mi.)	G25	100
Spill Number/Closed Date: 9506154 / 1995-08-18				
spillno: 9506154				
Site ID: 221091				
ON ROADWAY	MCLEAN /CONGER ROAD	SSE 1/8 - 1/4 (0.189 mi.)	F28	103
Spill Number/Closed Date: 0411957 / 2005-02-22				
spillno: 0411957				
Site ID: 337282				
STATEN ISLAND PCB	171 GARFIELD AVE	N 1/8 - 1/4 (0.193 mi.)	J29	104

Spill Number/Closed Date: 8602292 / 1986-07-08
spillno: 8602292
Site ID: 192786

WADSWORTH SUBSTATION	164 GARFIELD AVE	NNE 1/8 - 1/4 (0.201 mi.)	J36	132

Spill Number/Closed Date: 1107604 / 2011-09-15
Spill Number/Closed Date: 0408392 / 2008-05-20
Spill Number/Closed Date: 0211938 / 2003-05-05
Spill Number/Closed Date: 0012695 / 2003-06-24
spillno: 0012695
spillno: 0211938
spillno: 0408392
spillno: 1107604
Site ID: 226904
Site ID: 226905
Site ID: 333115
Site ID: 455309

WADSWORTH #1 SUBSTAT	164 GARFIELD AVE	NNE 1/8 - 1/4 (0.201 mi.)	J38	141

Spill Number/Closed Date: 1500807 / Not Reported
spillno: 1500807
Site ID: 506978

NORTH QUEENS S/S - A	31-01 20 AVENUE - SU	SSE 1/8 - 1/4 (0.213 mi.)	I41	144

Spill Number/Closed Date: 0702787 / 2007-08-20
spillno: 0702787
Site ID: 382579

68 MCCLEAN AVE.	68 MCCLEAN AVE	SE 1/8 - 1/4 (0.214 mi.)	H42	145

Spill Number/Closed Date: 9208674 / 1992-11-02
spillno: 9208674
Site ID: 99554

ROADWAY WADSWORTH SU	164 GARFIELD AVE	NNE 1/8 - 1/4 (0.216 mi.)	J43	147

Spill Number/Closed Date: 1107390 / 2012-05-10
spillno: 1107390
Site ID: 455087

191 MCCLEAN AVE.	191 MCCLEAN AVENUE	S 1/8 - 1/4 (0.228 mi.)	K45	148

Spill Number/Closed Date: 9415718 / 1995-03-04
spillno: 9415718
Site ID: 191980

MANHOLE 5841	31ST AVE	SSE 1/8 - 1/4 (0.232 mi.)	I46	149

Spill Number/Closed Date: 0102948 / 2001-06-22
spillno: 0102948
Site ID: 234143

CAMILLE DOGERY HOME	***15 JACKSON AVE***	***S 1/8 - 1/4 (0.233 mi.)***	***L47***	***151***

Spill Number/Closed Date: 0103616 / 2009-11-04
spillno: 0103616
Site ID: 305929

SPILL NUMBER 0102690	251 MCCLEAN AVE	SSW 1/8 - 1/4 (0.235 mi.)	K48	155

Spill Number/Closed Date: 0102690 / 2003-07-17
spillno: 0102690
Site ID: 191627

ROADWAY POLE #56035	200-11 34TH AVE	SSE 1/8 - 1/4 (0.237 mi.)	M49	156

Spill Number/Closed Date: 1011590 / 2011-03-22
spillno: 1011590

Site ID: 445475

SMELL OF FUEL Spill Number/Closed Date: 1403379 / 2014-07-02 spillno: 1403379 Site ID: 496734	37TH AVE AND 78TH ST	SSE 1/8 - 1/4 (0.243 mi.)	M52	159
MINOR GARDEN SPILL Spill Number/Closed Date: 1108547 / 2011-11-03 spillno: 1108547 Site ID: 456287	12 POUCH TERRACE	WSW 1/8 - 1/4 (0.244 mi.)	N53	161
HUNTER GARDENS APART Spill Number/Closed Date: 0801932 / 2011-09-26 spillno: 0801932 Site ID: 397982	147-31 38TH AVE	SSE 1/8 - 1/4 (0.245 mi.)	M54	162
MANHOLE # 461 Spill Number/Closed Date: 0507651 / 2005-11-17 spillno: 0507651 Site ID: 353095	LILLY POND AVE AND S	NNE 1/8 - 1/4 (0.245 mi.)	55	166
257 MC LEAN AVE Spill Number/Closed Date: 9409509 / 1994-10-17 spillno: 9409509 Site ID: 307632	257 MC LEAN AVE	SSW 1/8 - 1/4 (0.248 mi.)	K56	167
FORT WADSWORTH Spill Number/Closed Date: 1005051 / 2010-08-13 spillno: 1005051 Site ID: 438354	203 DRUM AVE/ NEW YO	ENE 1/4 - 1/2 (0.252 mi.)	57	169
ROADSIDE Spill Number/Closed Date: 0909486 / 2009-11-25 spillno: 0909486 Site ID: 422192	20 POUCH TERRACE	WSW 1/4 - 1/2 (0.256 mi.)	N58	170
IFO 900 HYLAN BLVD Spill Number/Closed Date: 0805460 / Not Reported Spill Number/Closed Date: 9802637 / 1998-06-30 spillno: 0805460 spillno: 9802637 Site ID: 402564 Site ID: 247167	900 HYLAN BLVD	SW 1/4 - 1/2 (0.264 mi.)	O62	173
FRONT OF Spill Number/Closed Date: 0211054 / 2003-04-03 spillno: 0211054 Site ID: 143709	32 POUCH TERR	WSW 1/4 - 1/2 (0.271 mi.)	N64	198
45 OCEAN AVENUE Spill Number/Closed Date: 9502874 / 1995-08-07 spillno: 9502874 Site ID: 230824	45 OCEAN AVENUE	SSE 1/4 - 1/2 (0.272 mi.)	65	201
SHOOTER ISLAND Spill Number/Closed Date: 0310219 / 2004-03-05 spillno: 0310219 Site ID: 116090	***212 COAST GUARD DRIV***	***NE 1/4 - 1/2 (0.276 mi.)***	***67***	***202***
SPILL NUMBER 9807643 Spill Number/Closed Date: 9807643 / 2003-08-01 spillno: 9807643	50-02 55TH AVE	SSE 1/4 - 1/2 (0.278 mi.)	M68	206

Site ID: 259548				
POLE #90573 Spill Number/Closed Date: 0812834 / 2009-03-30 spillno: 0812834 Site ID: 410478	73-14 57TH AVE	SSE 1/4 - 1/2 (0.282 mi.)	M69	207
APARTMENT BLDG Spill Number/Closed Date: 9708811 / 1998-04-02 Spill Number/Closed Date: 9701941 / 1997-05-14 spillno: 9701941 spillno: 9708811 Site ID: 244361 Site ID: 244362	96-04 57TH AVE	SSE 1/4 - 1/2 (0.282 mi.)	M70	208
SPILL NUMBER 9914595 Spill Number/Closed Date: 9914595 / 2002-03-27 Spill Number/Closed Date: 9913065 / 2002-02-27 spillno: 9913065 spillno: 9914595 Site ID: 319535 Site ID: 319536	3 MCCLEAN AVE	ESE 1/4 - 1/2 (0.284 mi.)	71	210
ROADWAY Spill Number/Closed Date: 1011213 / 2011-03-22 spillno: 1011213 Site ID: 444852	108 SAND LANE	SSW 1/4 - 1/2 (0.288 mi.)	72	212
TOMPKINS AVE/FINGERB Spill Number/Closed Date: 9002523 / 1990-06-05 spillno: 9002523 Site ID: 99157	TOMPKINS AVE/FINGERB	N 1/4 - 1/2 (0.289 mi.)	P73	213
ROADWAY Spill Number/Closed Date: 0204595 / 2005-05-20 spillno: 0204595 Site ID: 250641	FINGERBOARD RD/TOMPK	N 1/4 - 1/2 (0.290 mi.)	P74	215
HYD FLUID FRM CON ED Spill Number/Closed Date: 0609715 / 2007-01-17 spillno: 0609715 Site ID: 374013	80 LYMAN AVE	NNE 1/4 - 1/2 (0.306 mi.)	75	216
ST JOSEPH HILL ACADE Spill Number/Closed Date: 8805902 / 1989-10-12 spillno: 8805902 Site ID: 130605	***850 HYLAN BOULEVARD***	***SW 1/4 - 1/2 (0.306 mi.)***	***O77***	***219***
FEEDER CABLE Spill Number/Closed Date: 1605966 / 2016-10-24 spillno: 1605966 Site ID: 532529	70 OCEAN AVE	SSE 1/4 - 1/2 (0.315 mi.)	Q79	231
OVERHEAD CABLE Spill Number/Closed Date: 1603283 / Not Reported spillno: 1603283 Site ID: 529737	70 OCEAN AVE	SSE 1/4 - 1/2 (0.315 mi.)	Q80	232
AERIAL JOINT Spill Number/Closed Date: 1109565 / 2011-12-13 spillno: 1109565 Site ID: 457344	72 OCEAN AVE	SSE 1/4 - 1/2 (0.320 mi.)	Q81	233
POLE # 25756	649 WEST FINGERBOARD	W 1/4 - 1/2 (0.321 mi.)	82	234

Spill Number/Closed Date: 0400411 / 2004-07-16
spillno: 0400411
Site ID: 63995

MANHOLE #18348	224 - 08 77TH AVENUE	SSE 1/4 - 1/2 (0.322 mi.)	83	236
Spill Number/Closed Date: 0006012 / 2001-12-13 spillno: 0006012 Site ID: 255159				
SPILL NUMBER 0012316	SCHOOL RD & DENNIS S	NE 1/4 - 1/2 (0.330 mi.)	84	237
Spill Number/Closed Date: 0012316 / 2002-07-11 spillno: 0012316 Site ID: 108731				
JOINT IN AERIAL CABL	777 THOMPKINS AVENUE	N 1/4 - 1/2 (0.336 mi.)	85	238
Spill Number/Closed Date: 0703237 / 2008-02-20 spillno: 0703237 Site ID: 383128				
88 OCEAN AVENUE	88 OCEAN AVENUE	SSE 1/4 - 1/2 (0.351 mi.)	Q87	240
Spill Number/Closed Date: 0303360 / 2005-05-24 spillno: 0303360 Site ID: 321319				
POLE	347 MCCLEAN AVE	SSW 1/4 - 1/2 (0.357 mi.)	89	244
Spill Number/Closed Date: 1003990 / 2010-10-18 spillno: 1003990 Site ID: 437243				
NICOL RESIDENCE	154 SAND LN	SSW 1/4 - 1/2 (0.366 mi.)	R91	245
Spill Number/Closed Date: 9512378 / 1996-01-24 spillno: 9512378 Site ID: 71708				
X/S SINGERBOALD RD	18 SUMMER ST	NNE 1/4 - 1/2 (0.368 mi.)	S92	246
Spill Number/Closed Date: 0305529 / 2003-12-15 spillno: 0305529 Site ID: 135321				
MANHOLE # 2215	104 OCEAN AVE	SSE 1/4 - 1/2 (0.381 mi.)	95	250
Spill Number/Closed Date: 1200762 / 2012-06-15 spillno: 1200762 Site ID: 463420				
32 LINWOOD AVENUE	32 LINWOOD AVENUE	SW 1/4 - 1/2 (0.382 mi.)	96	251
Spill Number/Closed Date: 9413756 / 1995-01-16 spillno: 9413756 Site ID: 141273				
387 HUMBOLDT ST/BKLY	387 HUMBOLDT STREET	SSW 1/4 - 1/2 (0.394 mi.)	R97	252
Spill Number/Closed Date: 9000154 / 1990-04-05 spillno: 9000154 Site ID: 91839				
BEHIND 35 HILLBROOK	CONDOMINIUM	NNW 1/4 - 1/2 (0.401 mi.)	98	254
Spill Number/Closed Date: 0006852 / 2004-03-26 spillno: 0006852 Site ID: 130164				
VACANT LOT	51 HIGH ST	NNE 1/4 - 1/2 (0.403 mi.)	S99	255
Spill Number/Closed Date: 0605484 / 2006-12-06 spillno: 0605484 Site ID: 368651				
POLE T-4	AYRES RD AND USS TEN	ESE 1/4 - 1/2 (0.403 mi.)	100	257

Spill Number/Closed Date: 1209347 / 2014-03-04
spillno: 1209347
Site ID: 472411

POLE TOP TRANSFORMER	717 TOMPKINS AVE	N 1/4 - 1/2 (0.428 mi.)	103	260
Spill Number/Closed Date: 1606073 / 2016-12-06 spillno: 1606073 Site ID: 532665				
117 MILLS AVENUE	117 MILLS AVENUE	S 1/4 - 1/2 (0.428 mi.)	104	261
Spill Number/Closed Date: 9501446 / 1995-05-04 spillno: 9501446 Site ID: 293160				
VAULT 8872	15 SCHUBERT ST	NNW 1/4 - 1/2 (0.430 mi.)	105	262
Spill Number/Closed Date: 1400796 / 2014-06-18 spillno: 1400796 Site ID: 494046				
PRIVATE RESIDENCE	128 BEVERLY RD	W 1/4 - 1/2 (0.431 mi.)	106	264
Spill Number/Closed Date: 0311684 / 2004-01-20 spillno: 0311684 Site ID: 92303				
SPILL NUMBER 0306567	1532 BAY STREET	NE 1/4 - 1/2 (0.437 mi.)	T107	265
Spill Number/Closed Date: 0306567 / 2003-10-15 spillno: 0306567 Site ID: 213531				
POLE #185 TRANSFORME	1532 DAY ST	NE 1/4 - 1/2 (0.446 mi.)	T108	267
Spill Number/Closed Date: 0313087 / 2004-06-01 spillno: 0313087 Site ID: 106804				
191 BELAIR RD/S.I.	191 BELAIR ROAD	N 1/4 - 1/2 (0.447 mi.)	U109	268
Spill Number/Closed Date: 9100917 / 1991-04-24 spillno: 9100917 Site ID: 97089				
OCEAN AVE & FATHER	CAPADDANO AVE	SSE 1/4 - 1/2 (0.447 mi.)	110	269
Spill Number/Closed Date: 9905406 / 1999-08-27 spillno: 9905406 Site ID: 217082				
191 BELL AIRE ROAD	191 BELL AIRE ROAD	NNW 1/4 - 1/2 (0.450 mi.)	U111	270
Spill Number/Closed Date: 9702080 / 2003-02-25 spillno: 9702080 Site ID: 93503				
CON EDISON VEHICLE 5	BAY ST AND WADSWORTH	NE 1/4 - 1/2 (0.455 mi.)	T113	273
Spill Number/Closed Date: 1100302 / 2011-06-30 spillno: 1100302 Site ID: 447699				
AERIAL POTHEAD DRIPP	BAY STREET & SCHOOL	NE 1/4 - 1/2 (0.460 mi.)	114	274
Spill Number/Closed Date: 0710958 / 2008-05-12 spillno: 0710958 Site ID: 392352				
MANHOLE 6502	SOUTH AVENUE	NE 1/4 - 1/2 (0.461 mi.)	V115	275
Spill Number/Closed Date: 0007192 / 2001-11-27 spillno: 0007192 Site ID: 215972				
MARINERS HARBOR	SOUTH AVENUE	NE 1/4 - 1/2 (0.461 mi.)	V116	276

Spill Number/Closed Date: 0011308 / 2003-09-15 spillno: 0011308 Site ID: 215973				
GOETHALS RD NORTH AN Spill Number/Closed Date: 0401284 / 2005-07-01 Spill Number/Closed Date: 9913732 / 2001-05-21 spillno: 0401284 spillno: 9913732 Site ID: 215974 Site ID: 215975	SOUTH AVENUE	NE 1/4 - 1/2 (0.461 mi.)	V117	277
RAILROAD TRACKS Spill Number/Closed Date: 9801217 / 1998-05-15 spillno: 9801217 Site ID: 167365	SOUTH AVENUE	NE 1/4 - 1/2 (0.461 mi.)	V118	280
CONSTRUCTION SITE Spill Number/Closed Date: 9512000 / 1995-12-22 spillno: 9512000 Site ID: 107045	106/107 LINWOOD AVE	SSW 1/4 - 1/2 (0.461 mi.)	119	281
FORT WADSWORTH Spill Number/Closed Date: 9613886 / 1997-10-16 spillno: 9613886 Site ID: 281050	IN FRONT OF BLDG 437	E 1/4 - 1/2 (0.463 mi.)	W120	282
FT WADSWORTH/US NAVY Spill Number/Closed Date: 9203479 / 1992-06-23 spillno: 9203479 Site ID: 166765	FT WADSWORTH/US NAVY	E 1/4 - 1/2 (0.463 mi.)	W121	283
BAY ST/FORT WADSWORT Spill Number/Closed Date: 9202280 / 1992-05-26 spillno: 9202280 Site ID: 237616	BAY ST/FORT WADSWORT	E 1/4 - 1/2 (0.463 mi.)	W122	285
FORT WADSWORTH-TOMPK Spill Number/Closed Date: 9404301 / 1994-06-28 spillno: 9404301 Site ID: 157216	FORT WADSWORTH-TOMPK	E 1/4 - 1/2 (0.463 mi.)	W123	286
NAVAL STA.-FT WADSWO Spill Number/Closed Date: 9405075 / 1995-10-03 spillno: 9405075 Site ID: 66508	NAVAL STATION	E 1/4 - 1/2 (0.463 mi.)	W124	287
FT. TOMPKINS - BLDG Spill Number/Closed Date: 9604322 / 2003-02-28 spillno: 9604322 Site ID: 228761	FT WADSWORTH	E 1/4 - 1/2 (0.463 mi.)	W125	288
FORT WADSWORTH Spill Number/Closed Date: 9601054 / 1996-04-22 spillno: 9601054 Site ID: 172703	STATEN ISLAND	E 1/4 - 1/2 (0.463 mi.)	W126	289
NAVY PIER Spill Number/Closed Date: 9202117 / 1992-05-20 spillno: 9202117 Site ID: 109555	NAVY PIER	E 1/4 - 1/2 (0.463 mi.)	W128	291
FT WADSWORTH NAVAL S	FT WADSWORTH/BAY ST	E 1/4 - 1/2 (0.463 mi.)	W129	292

Spill Number/Closed Date: 9204721 / 1995-03-30 spillno: 9204721 Site ID: 239326				
FORT WADSWORTH-POLE#	FT.WADSWAORTH/PL#168	E 1/4 - 1/2 (0.463 mi.)	W130	293
Spill Number/Closed Date: 8703260 / 1987-07-22 spillno: 8703260 Site ID: 158315				
HOUSING AREA COASTGU	USS MISSOURI LN/TENN	ESE 1/4 - 1/2 (0.463 mi.)	131	295
Spill Number/Closed Date: 9608850 / 2004-02-02 spillno: 9608850 Site ID: 173267				
FORT WADSWORTH	210 NEW YORK AVE	E 1/4 - 1/2 (0.466 mi.)	W132	296
Spill Number/Closed Date: 0006103 / 2000-08-25 Spill Number/Closed Date: 9813498 / 2012-05-04 spillno: 0006103 spillno: 9813498 Site ID: 123672 Site ID: 303810				
216 ST JOHNS AVENUE	216 ST JOHNS AVENUE	NNW 1/4 - 1/2 (0.469 mi.)	133	298
Spill Number/Closed Date: 9502586 / 1995-05-31 spillno: 9502586 Site ID: 292314				
KITCHEN DRAID / TRAP	44 SEASIDE LANE	SSE 1/4 - 1/2 (0.469 mi.)	134	299
Spill Number/Closed Date: 1109258 / 2011-10-24 spillno: 1109258 Site ID: 457017				
AERIAL CABLE	24 FINGERBOARD RD	NNE 1/4 - 1/2 (0.471 mi.)	X135	300
Spill Number/Closed Date: 0401346 / 2005-07-01 spillno: 0401346 Site ID: 59574				
35 JEROME AVENUE	35 JEROME AVENUE	WSW 1/4 - 1/2 (0.478 mi.)	Y136	302
Spill Number/Closed Date: 9415426 / 1995-05-30 spillno: 9415426 Site ID: 185529				
35 JEROME AVE	35 JEROME AVE	WSW 1/4 - 1/2 (0.478 mi.)	Y137	303
Spill Number/Closed Date: 9415208 / 2003-02-10 spillno: 9415208 Site ID: 136624				
SPILL NUMBER 9913077	10 FINGERBOARD RD	NNE 1/4 - 1/2 (0.484 mi.)	X138	304
Spill Number/Closed Date: 0001688 / 2004-03-24 Spill Number/Closed Date: 9913077 / 2002-02-27 spillno: 0001688 spillno: 9913077 Site ID: 199408 Site ID: 199409				
SAND LANE & OLYMPIA	SAND LANE / OLYMPIA	S 1/4 - 1/2 (0.486 mi.)	139	306
Spill Number/Closed Date: 9208996 / 2003-03-07 spillno: 9208996 Site ID: 319905				
POND	SHORE ACRES ROAD AND	NNE 1/4 - 1/2 (0.497 mi.)	143	310
Spill Number/Closed Date: 0500395 / 2005-04-12				

spillno: 0500395
Site ID: 343348

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/12/2016 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CON EDISON - MANHOLE	***LINCOLN PL. & GARFIE***	***N 0 - 1/8 (0.119 mi.)***	***13***	***35***
J O TAILOR INC	***134 MCCLEAN AVE***	***SSE 1/8 - 1/4 (0.196 mi.)***	***F30***	***105***
MCCLEAN CLEANERS	***134 MCCLEAN AVE***	***SSE 1/8 - 1/4 (0.196 mi.)***	***F31***	***107***
JOE THE TAILOR	***134 MCLEAN AVE***	***SSE 1/8 - 1/4 (0.196 mi.)***	***F33***	***114***
CON EDISON TRENCH 1	***164 GARFIELD AVE***	***NNE 1/8 - 1/4 (0.201 mi.)***	***J35***	***124***
CON EDISON	164 GARFIELD AVE	NNE 1/8 - 1/4 (0.201 mi.)	J39	142

NY DRYCLEANERS: A listing of all registered drycleaning facilities.

A review of the NY DRYCLEANERS list, as provided by EDR, and dated 10/27/2016 has revealed that there are 2 NY DRYCLEANERS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MCCLEAN CLEANERS Facility Id: 2-6404-00610	134 MC CLEAN AVE.	SSE 1/8 - 1/4 (0.196 mi.)	F32	113
LIZ CUSTOM/YOUNG'S C Facility Id: 2-6404-00612	900 HYLAN BLVD.	SW 1/4 - 1/2 (0.264 mi.)	O61	173

NY HSWDS: The List includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity The latest version of the study is frozen in time. The sites on the study will not automatically be made superfund sites, rather each site will be further evaluated for listing in the registry. So overtime they will be added to the registry or not.

A review of the NY HSWDS list, as provided by EDR, and dated 01/01/2003 has revealed that there is 1 NY HSWDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORT WADSWORTH (NAVA Facility Id: HS2027		NNE 0 - 1/8 (0.077 mi.)	C8	22

EXECUTIVE SUMMARY

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 01/30/2017 has revealed that there are 8 NY MANIFEST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NYSDOT BIN 1067850 EPA ID: NYD986952885	***FINGERBOARD RD OVER***	***NNE 0 - 1/8 (0.090 mi.)***	***C9***	***24***
CON EDISON - MANHOLE EPA ID: NYP004135919	***LINCOLN PL. & GARFIE***	***N 0 - 1/8 (0.119 mi.)***	***13***	***35***
MTA - VERRAZANO NARR EPA ID: NYR000154252	***1 VERRAZANO BRIDGE P***	***ESE 1/8 - 1/4 (0.141 mi.)***	***E17***	***52***
MCCLEAN CLEANERS EPA ID: NYD981087687	***134 MCCLEAN AVE***	***SSE 1/8 - 1/4 (0.196 mi.)***	***F31***	***107***
JOE THE TAILOR EPA ID: NYD981482276	***134 MCLEAN AVE***	***SSE 1/8 - 1/4 (0.196 mi.)***	***F33***	***114***
CON EDISON TRENCH 1 EPA ID: NYP004242087	***164 GARFIELD AVE***	***NNE 1/8 - 1/4 (0.201 mi.)***	***J35***	***124***
CON EDISON EPA ID: NYP004784914	164 GARFIELD AVE	NNE 1/8 - 1/4 (0.201 mi.)	J37	138
CONSOLIDATED EDISON EPA ID: NYP004109419	36 AVE 50' W OF 22 S	SSE 1/8 - 1/4 (0.241 mi.)	M51	158

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 12/31/2015 has revealed that there are 2 PA MANIFEST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
VERRAZANO NARROWS BR Generator EPA Id: NYD982796443	LILY POND AVE & STAT	NE 0 - 1/8 (0.101 mi.)	D10	31
NYSDOT-VERRAZANO NAR Generator EPA Id: NYD982796443	***STATEN ISLAND EXPY B***	***NE 1/8 - 1/4 (0.150 mi.)***	***18***	***64***

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 12/31/2015 has revealed that there are 2 NJ MANIFEST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NYSDOT BIN 1067850 EPA ID: NYD986952885	***FINGERBOARD RD OVER***	***NNE 0 - 1/8 (0.090 mi.)***	***C9***	***24***
NYSDOT-VERRAZANO NAR Generator EPA Id: NYD982796443	***STATEN ISLAND EXPY B***	***NE 1/8 - 1/4 (0.150 mi.)***	***18***	***64***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 9 EDR Hist Cleaner sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	78 CLARADON LN	WNW 1/8 - 1/4 (0.187 mi.)	26	101
Not reported	134 MCCLEAN AVE	SSE 1/8 - 1/4 (0.196 mi.)	F34	124
Not reported	26 RODERICK AVE	WNW 1/8 - 1/4 (0.239 mi.)	50	158
Not reported	900 HYLAN BLVD	SW 1/4 - 1/2 (0.264 mi.)	O60	172
Not reported	103 CEDAR AVE	SSE 1/4 - 1/2 (0.269 mi.)	L63	198
Not reported	40 BRIDGE CT	NNE 1/4 - 1/2 (0.275 mi.)	66	202
Not reported	159 SAND LN	SSW 1/4 - 1/2 (0.355 mi.)	R88	243
Not reported	565 STEUBEN ST	W 1/4 - 1/2 (0.364 mi.)	90	245
Not reported	1477 BAY ST	NE 1/4 - 1/2 (0.491 mi.)	140	307

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA HWS: The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

A review of the NY RGA HWS list, as provided by EDR, has revealed that there is 1 NY RGA HWS site within approximately 1 mile of the target property.

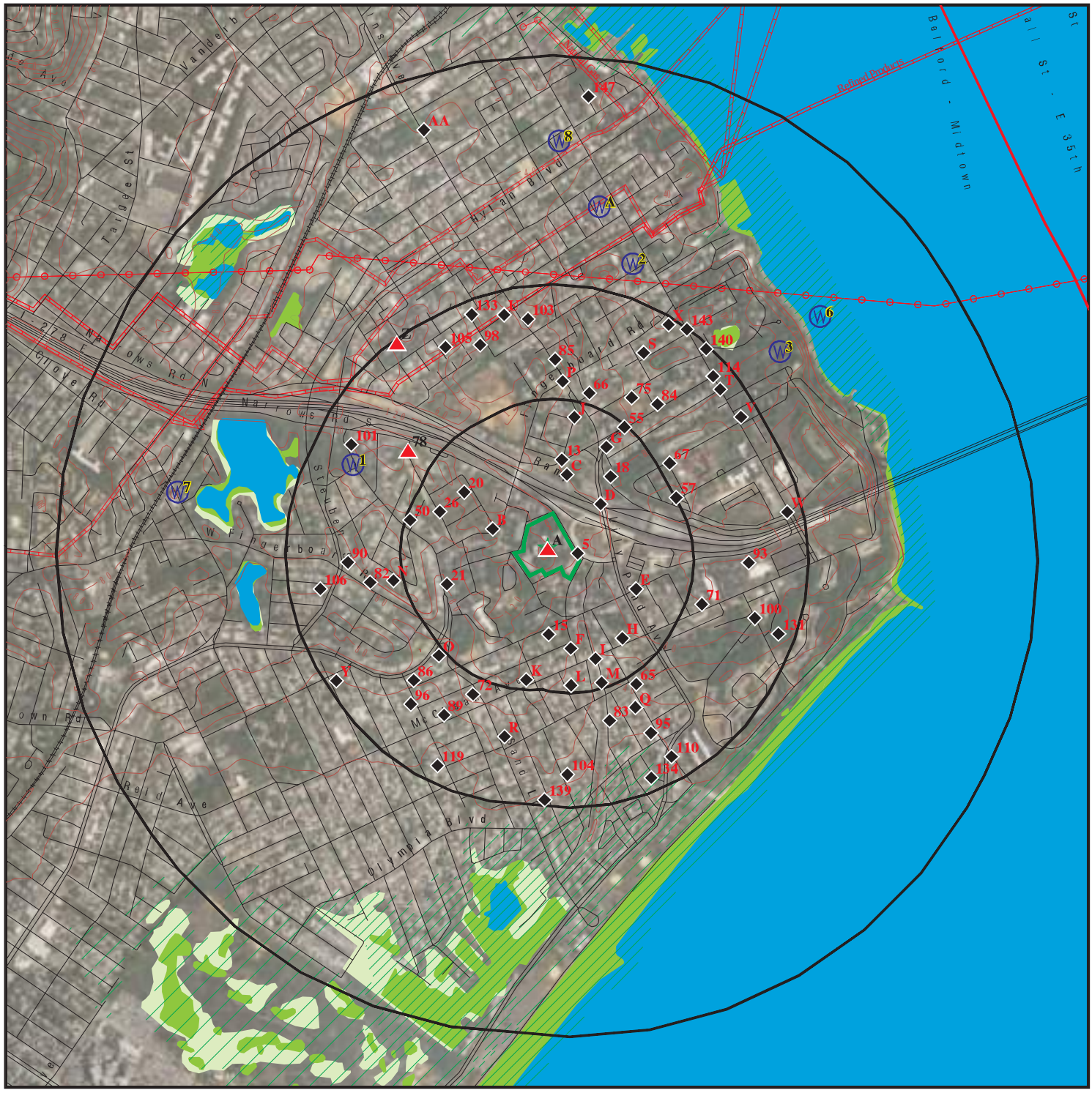
Lower Elevation	Address	Direction / Distance	Map ID	Page
MERCURY REFINING COM Facility ID: 401025	26 RAILROAD AVENUE	SSE 1/8 - 1/4 (0.223 mi.)	I44	148

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 6 records.

Site Name	Database(s)
ARDEN WOODS ESTATES INC.	NY VAPOR REOPENED
OUTER BRIDGE CROSSING	NY LTANKS
NYC DEP FACILITY	NY LTANKS
SPILL NUMBER 0104248	NY LTANKS
STAPLETON ANCHORAGE	NY LTANKS
BROOKFIELD LANDFILL	ODI

OVERVIEW MAP - 4908989.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	St John Villa	CLIENT:	AKRF, Inc.
ADDRESS:	57-61 Cleveland Place Staten Island NY 10305	CONTACT:	Elizabeth Patricia Matamoros
LAT/LONG:	40.60164 / 74.067845	INQUIRY #:	4908989.2s
		DATE:	April 17, 2017 8:29 am

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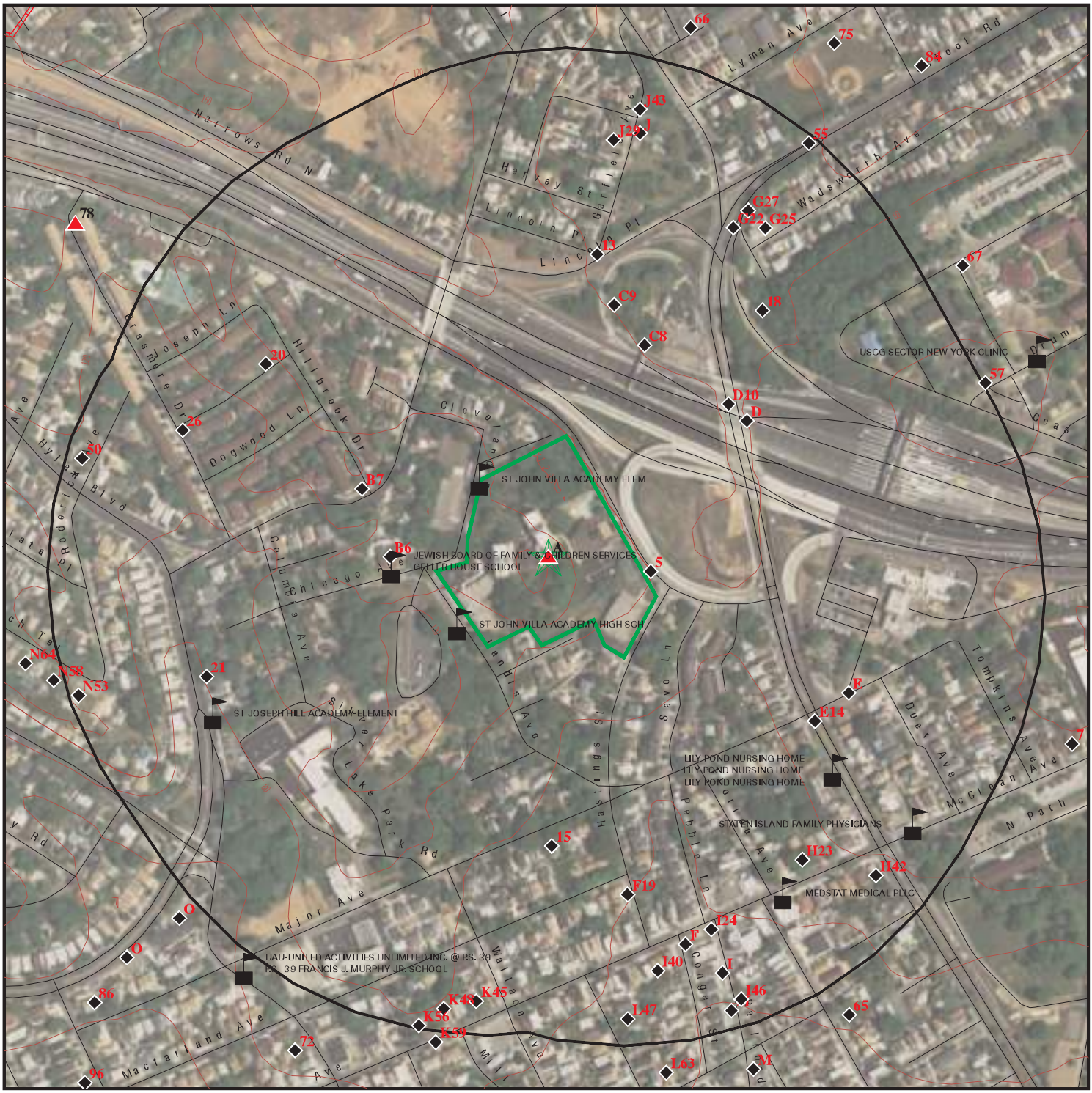
DETAIL MAP - 4908989.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Pipelines
- 100-year flood zone
- 500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	St John Villa	CLIENT:	AKRF, Inc.
ADDRESS:	57-61 Cleveland Place Staten Island NY 10305	CONTACT:	Elizabeth Patricia Matamoros
LAT/LONG:	40.60164 / 74.067845	INQUIRY #:	4908989.2s
		DATE:	April 17, 2017 8:30 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		1	1	NR	NR	NR	2
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
NY SHWS	1.000		0	0	1	1	NR	2
NY VAPOR REOPENED	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
NY SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
INDIAN LUST	0.500		0	0	0	NR	NR	0
NY LTANKS	0.500	1	0	3	12	NR	NR	16
NY HIST LTANKS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
NY UST	0.250	1	1	1	NR	NR	NR	3
NY CBS UST	0.250		0	0	NR	NR	NR	0
NY MOSF UST	0.500		0	0	0	NR	NR	0
NY MOSF	0.500		0	0	0	NR	NR	0
NY CBS	0.250		0	0	NR	NR	NR	0
NY AST	0.250	1	0	1	NR	NR	NR	2
NY CBS AST	0.250		0	1	NR	NR	NR	1
NY MOSF AST	0.500		0	0	0	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
NY TANKS	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
NY RES DECL	0.180		0	0	NR	NR	NR	0
NY ENG CONTROLS	0.500		0	0	0	NR	NR	0
NY INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
NY VCP	1.000		0	0	0	2	NR	2
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
NY BROWNFIELDS	1.000		0	0	0	1	NR	1
NY ERP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
NY SWRCY	0.500		0	0	0	NR	NR	0
NY SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
NY DEL SHWS	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
NY HIST UST	0.250	1	0	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY HIST AST	TP		NR	NR	NR	NR	NR	0
Local Land Records								
NY LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
NY Spills	0.500		4	26	69	NR	NR	99
NY Hist Spills	0.125		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	5	NR	NR	NR	6
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	0.250		0	0	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
NY AIRS	TP		NR	NR	NR	NR	NR	0
NY COAL ASH	0.500		0	0	0	NR	NR	0
NY DRYCLEANERS	0.500		0	1	1	NR	NR	2
NY E DESIGNATION	0.250		0	0	NR	NR	NR	0
NY Financial Assurance	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY HSWDS	0.500		1	0	0	NR	NR	1
NY MANIFEST	0.250		2	6	NR	NR	NR	8
PA MANIFEST	0.250		1	1	NR	NR	NR	2
NJ MANIFEST	0.250		1	1	NR	NR	NR	2
NY SPDES	TP		NR	NR	NR	NR	NR	0
NY UIC	TP		NR	NR	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.250		0	0	NR	NR	NR	0
EDR Hist Cleaner	0.500		0	3	6	NR	NR	9
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
NY RGA HWS	1.000		0	1	0	0	NR	1
NY RGA LF	0.500		0	0	0	NR	NR	0
- Totals --		5	12	52	89	4	0	162

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **ST JOHNS VILLA ACADEMY** **FINDS** **1016393074**
Target **57 CLEVELAND PL** **N/A**
Property **STATEN ISLAND, NY 10305**

Site 1 of 4 in cluster A

Actual:
137 ft.

FINDS:

Registry ID: 110055268650

Environmental Interest/Information System
FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

A2 **ST JOHN VILLA ACADEMY** **NY AST** **U003074337**
Target **57 CLEVELAND PLACE** **NY HIST UST** **N/A**
Property **STATEN ISLAND, NY 10305**

Site 2 of 4 in cluster A

Actual:
137 ft.

AST:

Region:	STATE
DEC Region:	2
Site Status:	Active
Facility Id:	2-092401
Program Type:	PBS
UTM X:	578808.50831
UTM Y:	4495022.57000
Expiration Date:	05/07/2017
Site Type:	School

Affiliation Records:

Site Id:	2379
Affiliation Type:	Emergency Contact
Company Name:	SRS ST JOHN THE BAPTIST
Contact Type:	Not reported
Contact Name:	ROBERT BUSTAMANTI
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	999
Phone:	(718) 447-4150 196
EMail:	Not reported
Fax Number:	Not reported
Modified By:	KAKYER
Date Last Modified:	2012-08-07

Site Id:	2379
Affiliation Type:	Facility Owner
Company Name:	SRS ST JOHN THE BAPTIST
Contact Type:	DIRECTOR
Contact Name:	NICHOLAS MAZZA
Address1:	57 CLEVELAND PLACE
Address2:	Not reported
City:	STATEN ISLAND
State:	NY

ST JOHN VILLA ACADEMY (Continued) **U003074337**

Zip Code:	10305
Country Code:	001
Phone:	(718) 447-4150
EMail:	Not reported
Fax Number:	Not reported
Modified By:	msbaptis
Date Last Modified:	2007-07-05

Site Id:	2379
Affiliation Type:	Mail Contact
Company Name:	SRS ST JOHN THE BAPTIST
Contact Type:	Not reported
Contact Name:	DR. NICHOLAS F. MAZZA
Address1:	57 CLEVELAND PLACE
Address2:	Not reported
City:	STATEN ISLAND
State:	NY
Zip Code:	10305
Country Code:	001
Phone:	(718) 447-4150
EMail:	NMAZZA@SJVA.ORG
Fax Number:	Not reported
Modified By:	KAKYER
Date Last Modified:	2012-08-07

Site Id:	2379
Affiliation Type:	On-Site Operator
Company Name:	ST JOHN VILLA ACADEMY
Contact Type:	Not reported
Contact Name:	DR. NICHOLAS F. MAZZA
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	001
Phone:	(718) 447-4150
EMail:	Not reported
Fax Number:	Not reported
Modified By:	KAKYER
Date Last Modified:	2012-08-07

Tank Info:

Tank Number:	004
Tank Id:	4198
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)

Equipment Records:

L09 - Piping Leak Detection - Exempt Suction Piping
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
K00 - Spill Prevention - None
E00 - Piping Secondary Containment - None
G03 - Tank Secondary Containment - Vault (w/o access)

ST JOHN VILLA ACADEMY (Continued) **U003074337**

I04 - Overfill - Product Level Gauge (A/G)
C00 - Pipe Location - No Piping
D02 - Pipe Type - Galvanized Steel
H00 - Tank Leak Detection - None
F00 - Pipe External Protection - None
B00 - Tank External Protection - None

Tank Location:	1
Tank Type:	Steel/Carbon Steel/Iron
Tank Status:	In Service
Pipe Model:	Not reported
Install Date:	01/01/1983
Capacity Gallons:	275
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Date Tank Closed:	Not reported
Register:	True
Modified By:	CGFREEDM
Last Modified:	04/27/2012
Material Name:	Not reported

HIST UST:

PBS Number:	2-092401
SPDES Number:	Not reported
Emergency Contact:	KEVIN CHIFFRILLER
Emergency Telephone:	(718) 945-5077
Operator:	SR BONAVENTURE
Operator Telephone:	(718) 447-4150
Owner Name:	SRS ST JOHN THE BAPTIST
Owner Address:	57 CLEVELAND PLACE
Owner City,St,Zip:	STATEN ISLAND, NY 10305
Owner Telephone:	(718) 447-4150
Owner Type:	Corporate/Commercial
Owner Subtype:	Not reported
Mailing Name:	SRS ST JOHN THE BAPTIST
Mailing Address:	57 CLEVELAND PLACE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	STATEN ISLAND, NY 10305
Mailing Contact:	SR. BONAVENTURE C.S. JB
Mailing Telephone:	(718) 447-4150
Owner Mark:	First Owner
Facility Status:	1 - Active PBS facility, i.e. total capacity of the PBS tanks is greater than 1,100 gallons, regardless if Subpart 360-14 tanks exist or not at the facility.
Facility Addr2:	57 CLEVELAND PLACE
SWIS ID:	6401
Old PBS Number:	Not reported
Facility Type:	SCHOOL
Inspected Date:	Not reported
Inspector:	Not reported
Inspection Result:	Not reported
Federal ID:	Not reported
Certification Flag:	False
Certification Date:	07/18/1997
Expiration Date:	05/07/2002
Renew Flag:	False
Renewal Date:	Not reported

ST JOHN VILLA ACADEMY (Continued) **U003074337**

Total Capacity:	9000
FAMT:	True
Facility Screen:	No Missing Data
Owner Screen:	No Missing Data
Tank Screen:	Minor Data Missing
Dead Letter:	False
CBS Number:	Not reported
Town or City:	NEW YORK CITY
County Code:	64
Town or City:	01
Region:	2

Tank Id:	002
Tank Location:	UNDERGROUND
Tank Status:	In Service
Install Date:	Not reported
Capacity (gals):	2000
Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Type:	Steel/carbon steel
Tank Internal:	Not reported
Tank External:	Not reported
Pipe Location:	Not reported
Pipe Type:	STEEL/IRON
Pipe Internal:	Not reported
Pipe External:	Not reported
Second Containment:	None
Leak Detection:	None
Overfill Prot:	Not reported
Dispenser:	Suction
Date Tested:	05/01/1997
Next Test Date:	05/01/2002
Missing Data for Tank:	Minor Data Missing
Date Closed:	Not reported
Test Method:	Horner EZ Check
Deleted:	False
Updated:	True
Lat/long:	Not reported

Tank Id:	003
Tank Location:	UNDERGROUND
Tank Status:	In Service
Install Date:	Not reported
Capacity (gals):	2000
Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Type:	Steel/carbon steel
Tank Internal:	Not reported
Tank External:	Not reported
Pipe Location:	Not reported
Pipe Type:	STEEL/IRON
Pipe Internal:	Not reported
Pipe External:	Not reported
Second Containment:	None
Leak Detection:	None
Overfill Prot:	Not reported
Dispenser:	Suction
Date Tested:	05/01/1997

ST JOHN VILLA ACADEMY (Continued) **U003074337**

Next Test Date: 05/01/2002
Missing Data for Tank: Minor Data Missing
Date Closed: Not reported
Test Method: Horner EZ Check
Deleted: False
Updated: True
Lat/long: Not reported

A3 Target Property **ST JOHN VILLA ACADEMY** **NY UST** **U004064412**
57 CLEVELAND PLACE **N/A**
STATEN ISLAND, NY 10305

Site 3 of 4 in cluster A

Actual: 137 ft.

UST:
Id/Status: 2-092401 / Active
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 05/07/2017
UTM X: 578808.50831
UTM Y: 4495022.57000
Site Type: School

Affiliation Records:
Site Id: 2379
Affiliation Type: Emergency Contact
Company Name: SRS ST JOHN THE BAPTIST
Contact Type: Not reported
Contact Name: ROBERT BUSTAMANTI
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (718) 447-4150 196
EMail: Not reported
Fax Number: Not reported
Modified By: KAKYER
Date Last Modified: 2012-08-07

Site Id: 2379
Affiliation Type: Facility Owner
Company Name: SRS ST JOHN THE BAPTIST
Contact Type: DIRECTOR
Contact Name: NICHOLAS MAZZA
Address1: 57 CLEVELAND PLACE
Address2: Not reported
City: STATEN ISLAND
State: NY
Zip Code: 10305
Country Code: 001
Phone: (718) 447-4150
EMail: Not reported
Fax Number: Not reported
Modified By: msbaptis
Date Last Modified: 2007-07-05

ST JOHN VILLA ACADEMY (Continued) **U004064412**

Site Id:	2379
Affiliation Type:	Mail Contact
Company Name:	SRS ST JOHN THE BAPTIST
Contact Type:	Not reported
Contact Name:	DR. NICHOLAS F. MAZZA
Address1:	57 CLEVELAND PLACE
Address2:	Not reported
City:	STATEN ISLAND
State:	NY
Zip Code:	10305
Country Code:	001
Phone:	(718) 447-4150
EMail:	NMAZZA@SJVA.ORG
Fax Number:	Not reported
Modified By:	KAKYER
Date Last Modified:	2012-08-07

Site Id:	2379
Affiliation Type:	On-Site Operator
Company Name:	ST JOHN VILLA ACADEMY
Contact Type:	Not reported
Contact Name:	DR. NICHOLAS F. MAZZA
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	001
Phone:	(718) 447-4150
EMail:	Not reported
Fax Number:	Not reported
Modified By:	KAKYER
Date Last Modified:	2012-08-07

Tank Info:

Tank Number:	001
Tank ID:	4195
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	5000
Install Date:	11/01/1956
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)

Tightness Test Method:	21
Date Test:	03/12/2012
Next Test Date:	10/11/2016
Pipe Model:	Not reported
Modified By:	BKFALVEY
Last Modified:	05/18/2012

Equipment Records:

ST JOHN VILLA ACADEMY (Continued) **U004064412**

G00 - Tank Secondary Containment - None
A00 - Tank Internal Protection - None
L09 - Piping Leak Detection - Exempt Suction Piping
J02 - Dispenser - Suction Dispenser
K00 - Spill Prevention - None
E00 - Piping Secondary Containment - None
I04 - Overfill - Product Level Gauge (A/G)
C00 - Pipe Location - No Piping
D02 - Pipe Type - Galvanized Steel
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number: 002
Tank ID: 4196
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 2000
Install Date: 07/01/1965
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: 21
Date Test: 02/27/2012
Next Test Date: 10/11/2016
Pipe Model: Not reported
Modified By: BKFALVEY
Last Modified: 05/31/2012

Equipment Records:

G00 - Tank Secondary Containment - None
I00 - Overfill - None
L09 - Piping Leak Detection - Exempt Suction Piping
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
K00 - Spill Prevention - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
E00 - Piping Secondary Containment - None
C00 - Pipe Location - No Piping
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number: 003
Tank ID: 4197
Tank Status: In Service
Material Name: In Service
Capacity Gallons: 2000
Install Date: 06/30/1980
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

ST JOHN VILLA ACADEMY (Continued) **U004064412**

Tank Type:	Steel/carbon steel
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)
Tightness Test Method:	21
Date Test:	02/27/2012
Next Test Date:	10/11/2016
Pipe Model:	Not reported
Modified By:	BKFALVEY
Last Modified:	05/31/2012

Equipment Records:

L09 - Piping Leak Detection - Exempt Suction Piping
G00 - Tank Secondary Containment - None
I00 - Overfill - None
A00 - Tank Internal Protection - None
J02 - Dispenser - Suction Dispenser
K00 - Spill Prevention - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
E00 - Piping Secondary Containment - None
C00 - Pipe Location - No Piping
H00 - Tank Leak Detection - None
F00 - Pipe External Protection - None
B00 - Tank External Protection - None

A4 Target Property **ST. JOHNS VILLA ACADEMY** **NY LTANKS** **S106703461**
57 CLEVELAND PLACE **N/A**
STATEN ISLAND, NY

Site 4 of 4 in cluster A

Actual: 137 ft.

LTANKS:

Site ID:	211259
Spill Number/Closed Date:	9005671 / 1992-09-30
Spill Date:	1990-05-22
Spill Cause:	Tank Overfill
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release that creates potential for fire or hazard. (Highly Improbable)
Cleanup Ceased:	1992-09-30
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	BATTISTA
Referred To:	Not reported
Reported to Dept:	1990-08-22
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1990-08-28
Spill Record Last Update:	2003-11-12
Spiller Name:	Not reported
Spiller Company:	EMPIRE FUEL OIL
Spiller Address:	Not reported
Spiller City,St,Zip:	NY

ST. JOHNS VILLA ACADEMY (Continued) **S106703461**

Spiller County:	999
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	175111
DEC Memo:	""
Remarks:	"NYCFD RESPONDED & WASHED DOWN, NYCDOS SANDED SPILL."

Material:

Site ID:	211259
Operable Unit ID:	946166
Operable Unit:	01
Material ID:	433159
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Site ID:	211259
Spill Tank Test:	1537462
Tank Number:	Not reported
Tank Size:	0
Test Method:	00
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified:	Not reported
Test Method:	Unknown

Site ID:	377584
Spill Number/Closed Date:	0612683 / 2008-04-03
Spill Date:	2007-02-22
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	bkfalvey
Referred To:	Not reported
Reported to Dept:	2007-02-22
CID:	406
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	Not reported

ST. JOHNS VILLA ACADEMY (Continued) **S106703461**

Remediation Phase:	0
Date Entered In Computer:	2007-02-22
Spill Record Last Update:	2008-04-03
Spiller Name:	CHRIS GORGA
Spiller Company:	ST. JOHNS VILLA ACADEMY
Spiller Address:	57 CLEVELAND PLACE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller County:	001
Spiller Contact:	CHRIS GORGA
Spiller Phone:	(718) 624-4842
Spiller Extention:	103
DEC Region:	2
DER Facility ID:	175111
DEC Memo:	" 2/23/07 called Nicholas F. Mazza (718)447-4150, Administrator of St. John Villa Academy. Left message to call me back. sent ttf letter to: Mr. Nicholas F. Mazza SRS St. John the Baptist 57 Cleveland Place Staten Island, NY 10305 PBS#2-092401 bf 3/26/07 On 3/9/07, received a letter from Joseph Ostrowski of Petroleum Tank Cleaners. Dry leak. Tank will be exposed, lines will be tested, and repairs to be made on 4/9/07. Location is a school. bf 6/18/07 Received tank test reults by email from CO. Sent tt return letter to Nicholas Mazza which included requirement for a response to the ttf letter. bf 8/23/07 called N. Mazza and left message regarding report. He called back and told me that he sent the info to 625 broadway in Albany. The documentation is approx. 20 pages. He will mail it to me on Tuesday 8/28/07. bf 8/31/07 Received tank test results from N. Mazza. Tank # E failed with a dry portion leak. Passing results submitted for Tanks C and E. bf 4/1/08 Sent fax to M. Salamack requesting letter responding to ttf letter. bf 4/2/08 Received fax from M. Salamack. Tank was emptied and the lines and tank were isolated. Vent line was broken. Passing tank test results attached. Snet fax to M. Salamack requesting petroleum release determination. bf 4/3/08 Received fax from M. Salamack stating no contamination was found. NFA. bf"
Remarks:	"PBS No: 2-092401 System test failure. Above liquid leak. (dry portion leak) Recommend the tank be pumped out and the lines be retested as well as the tank."

Material:

Site ID:	377584
Operable Unit ID:	1135111
Operable Unit:	01
Material ID:	2125005
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Site ID:	377584
Spill Tank Test:	1550650
Tank Number:	3

ST. JOHNS VILLA ACADEMY (Continued) **S106703461**

Tank Size:	2000
Test Method:	03
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Watchdog
Last Modified:	Not reported
Test Method:	Horner EZ Check I or II

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5 **NARROWS RD** **NY Spills** **S102238528**
East **SOUTH AND HASTINGS ST** **N/A**
< 1/8 **NYC, NY**
0.005 mi.
26 ft.

Relative:
Lower

Actual:
99 ft.

SPILLS:

Facility ID:	9511889
Facility Type:	ER
DER Facility ID:	109292
Site ID:	126423
DEC Region:	2
Spill Date:	1995-12-19
Spill Number/Closed Date:	9511889 / 1996-01-02
Spill Cause:	Traffic Accident
Spill Class:	Not reported
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1995-12-19
CID:	196
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Affected Persons
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-12-19
Spill Record Last Update:	1998-02-17
Spiller Name:	RICHARD ROACH
Spiller Company:	NARROWS RD
Spiller Address:	SOUTH AND HASTINGS ST
Spiller City,St,Zip:	NYC, NY
Spiller Company:	001
Contact Name:	RICHARD ROACH
Contact Phone:	(212) 580-6764
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE CLEANED BY CON ED. "
Remarks:	"a pole at above location was hit by an ambulance. pole broke and transformer did leak about 60 gal. con ed at scene in process of cleaning up same. del ambulance is the company who owns same. "

Material:

Site ID:	126423
Operable Unit ID:	1026110
Operable Unit:	01

NARROWS RD (Continued) **S102238528**

Material ID: 359215
Material Code: 0020A
Material Name: transformer oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 60.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

B6 **GELLER HOUSE** **NY UST** **U001838598**
West **77 CHICAGO AVENUE** **N/A**
< 1/8 **STATEN ISLAND, NY 10305**
0.031 mi.
164 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
128 ft.

UST:
Id/Status: 2-360856 / Active
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 10/23/2017
UTM X: 578721.68996
UTM Y: 4494924.84946
Site Type: School

Affiliation Records:
Site Id: 18194
Affiliation Type: Mail Contact
Company Name: JEWISH BOARD OF F & C SERVICES
Contact Type: Not reported
Contact Name: Not reported
Address1: 135 WEST 50TH STREET
Address2: 6TH FLOOR
City: NEW YORK
State: NY
Zip Code: 10020
Country Code: 001
Phone: (212) 582-9100
EMail: Not reported
Fax Number: Not reported
Modified By: DMMOLOUG
Date Last Modified: 2013-04-01

Site Id: 18194
Affiliation Type: On-Site Operator
Company Name: GELLER HOUSE
Contact Type: Not reported
Contact Name: JEWISH BOARD OF F & C SERVICES
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported

GELLER HOUSE (Continued) **U001838598**

Country Code:	001
Phone:	(718) 442-7828
EMail:	Not reported
Fax Number:	Not reported
Modified By:	DMMOLOUG
Date Last Modified:	2013-04-01

Site Id:	18194
Affiliation Type:	Emergency Contact
Company Name:	JEWISH BOARD OF F & C SERVICES
Contact Type:	Not reported
Contact Name:	LAWRENCE RUTAELO
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	999
Phone:	(917) 709-6545
EMail:	Not reported
Fax Number:	Not reported
Modified By:	DMMOLOUG
Date Last Modified:	2013-04-01

Site Id:	18194
Affiliation Type:	Facility Owner
Company Name:	JEWISH BOARD OF F & C SERVICES
Contact Type:	CHIEF OPERATING OFFICER
Contact Name:	TODD SCHENK
Address1:	135 WEST 50TH STREET, 6TH FLOOR
Address2:	Not reported
City:	NEW YORK
State:	NY
Zip Code:	10020
Country Code:	001
Phone:	(212) 582-9100
EMail:	Not reported
Fax Number:	Not reported
Modified By:	DMMOLOUG
Date Last Modified:	2013-04-01

Tank Info:

Tank Number:	001
Tank ID:	25824
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	2000
Install Date:	01/01/1910
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	Fiberglass reinforced plastic [FRP]
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)

Tightness Test Method:	21

GELLER HOUSE (Continued) **U001838598**

Date Test: 05/08/2007
Next Test Date: 10/11/2016
Pipe Model: Not reported
Modified By: DMMOLOUG
Last Modified: 04/01/2013

Equipment Records:

C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
I00 - Overfill - None
A00 - Tank Internal Protection - None
H00 - Tank Leak Detection - None
D02 - Pipe Type - Galvanized Steel
F00 - Pipe External Protection - None
B00 - Tank External Protection - None

B7 **340 HILLBROOK DR.** **NY Spills** **S102147762**
WNW **340 HILLBROOK DR** **N/A**
< 1/8 **STATEN ISLAND, NY**
0.071 mi.
376 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
133 ft.

SPILLS:

Facility ID: 9313503
Facility Type: ER
DER Facility ID: 153579
Site ID: 183330
DEC Region: 2
Spill Date: 1994-02-17
Spill Number/Closed Date: 9313503 / 1994-02-18
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: CAMMISA
Referred To: Not reported
Reported to Dept: 1994-02-17
CID: Not reported
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Local Agency
Cleanup Ceased: 1994-02-18
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1994-02-22
Spill Record Last Update: 2004-09-30
Spiller Name: Not reported
Spiller Company: UNK
Spiller Address: Not reported
Spiller City,St,Zip: ***UPDATE***, ZZ
Spiller Company: 999
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: ""
Remarks: ""

340 HILLBROOK DR. (Continued) **S102147762**

Material:

Site ID:	183330
Operable Unit ID:	995540
Operable Unit:	01
Material ID:	388882
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-20.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

C8 **FORT WADSWORTH (NAVAL STATION)** **NY HSWDS** **S108146262**
NNE **N/A**
< 1/8 **STATEN ISLAND, NY 10305**
0.077 mi.
409 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
76 ft.

HSWDS:

Facility ID:	HS2027
Region:	2
Facility Status:	None
Owner Type:	F
Owner:	US Navy
Owner Address:	10 Industrial Hwy, MSC 82
Owner Phone:	(610)595-0567
Operator Type:	F
Operator:	Unknown
Operator:	Unknown
Operator Phone:	Not reported
EPA ID:	NY2170084485
Registry:	Is or was on NYS Registry of Inactive Haz Waste Disposal Sites
Registry Site ID:	243015
RCRA Permitted:	No
Site Code:	Leaking tanks, drums, lagoons, other containers
Owner City State:	Lester, PA 19113-2090
Operator City State:	Not reported
Quadrange:	The Narrows
Latitude:	40 36 13 N
Longitude:	74 04 00 W
Acres:	226.00
Operator Date:	1600's
Close Date:	1994
Completed:	Unknown
Active:	Yes
PCB's Disposed:	Yes
Pesticides Disposed:	No
Metals Disposed:	Yes
Asbestos Disposed:	No
Volatile Organic Compounds Disposed:	No
Semi Volatile Organic Compounds Disposed:	No

FORT WADSWORTH (NAVAL STATION) (Continued) **S108146262**

Analytical Info Exists for Air:	Not reported
Analytical Info Exists for Ground:	Not reported
Analytical Info Exists for Surface:	Not reported
Analytical Info Exists for Sediments:	Not reported
Analytical Info Exists for Surface:	Surface Soil
Analytical Info Exists for Substance:	Subsurface Soil
Analytical Info Exists for Waste:	Not reported
Analytical Info Exists for Leachate:	Not reported
Analytical Info Exists for EP Toxicity:	Not reported
Analytical Info Exists for TCLP:	Not reported
Threat to Environment/Public Health:	Environmental
Surface Water Contamination:	Unknown
Surface Water Body Class:	SC
Groundwater Contamination:	Unknown
Groundwater Classification:	Unknown
Drinking Water Contamination:	No
Drinking Water Supply is Active:	Unknown
Any Known Fish or Wildlife:	No
Hazardous Exposure:	Yes
Site Has Controlled Acess:	Yes
Ambient Air Contamination:	No
Direct Contact:	Yes
EPA Hazardous Ranking System Score:	14
Inventory:	F
Nefrap:	T
Mailing:	Not reported
Tax Map No:	Not reported
Qualify:	0
Next Action:	Not reported
Agencies:	Not reported
Air:	Not reported
Building:	Not reported
Site Desc:	Not reported
Drink:	Not reported
Eptox:	Not reported
Fish:	Not reported
Ground:	Not reported
Ground Desc:	Not reported
Hazardous Threat:	Not reported
Haz Threat Desc:	Not reported
Leachate:	Not reported
Preparer:	Not reported
Sediment:	Not reported
Soil:	Not reported
Surface:	Not reported
Status:	Not reported
Surface Soil:	Not reported
Surface:	Not reported
TCLP:	Not reported
Waste:	Not reported

C9
NNE
< 1/8
0.090 mi.
475 ft.

NYSDOT BIN 1067850
FINGERBOARD RD OVER STATEN
STATEN ISLAND, NY 10305

Site 2 of 2 in cluster C

RCRA-LQG **1000552883**
NJ MANIFEST **NYD986952885**
NY MANIFEST

Relative:
Lower

Actual:
78 ft.

RCRA-LQG:

Date form received by agency:	05/14/2010
Facility name:	NYSDOT BIN 1067850
Facility address:	FINGERBOARD RD OVER STATEN ISLAND EXPWY I-278 STATEN ISLAND, NY 10305
EPA ID:	NYD986952885
Mailing address:	21ST ST DOT REGION 11 CONSTR OFFICE LONG ISLAND CITY, NY 11101
Contact:	CARL R KOCHERSBERGER
Contact address:	WOLF RD - ENV ANALYSIS NYSDOT HAZ WASTE SEC POD 4-1 ALBANY, NY 12232
Contact country:	US
Contact telephone:	(518) 485-9161
Contact email:	CKOCHERSBERGER@DOT.STATE.NY.US
EPA Region:	02
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	OFFICE OF CONSTRUCTION NYSDOT REGION 11
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	05/14/2010
Owner/Op end date:	Not reported
Owner/operator name:	NYSDOT
Owner/operator address:	Not reported NY
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	01/15/2004
Owner/Op end date:	Not reported
Owner/operator name:	NYSDOT

NYSDOT BIN 1067850 (Continued) **1000552883**

Owner/operator address: Not reported
NY
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 01/15/2004
Owner/Op end date: Not reported

Owner/operator name: STATE OF NY C/O NYSDOT COMMISSIONER
Owner/operator address: WOLF RD
ALBANY, NY 12232
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 05/14/2010
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 01/01/2007
Site name: NYSDOT BRIDGE BIN 1067850
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/11/2006
Site name: NYSDOT BRIDGE BIN 1067850
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

NYSDOT BIN 1067850 (Continued) **1000552883**

. Waste code: D008
. Waste name: LEAD

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F008
. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: P058
. Waste name: ACETIC ACID, FLUORO-, SODIUM SALT (OR) FLUOROACETIC ACID, SODIUM SALT

. Waste code: P106
. Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U031
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U117
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

Date form received by agency: 07/10/2006
Site name: NYSDOT BRIDGE BIN 1067850
Classification: Small Quantity Generator

Date form received by agency: 04/05/2004
Site name: NYSDOT BRIDGE BIN 1067850
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

NYSDOT BIN 1067850 (Continued) **1000552883**

. Waste code: D008
. Waste name: LEAD

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F008
. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: P058
. Waste name: ACETIC ACID, FLUORO-, SODIUM SALT (OR) FLUOROACETIC ACID, SODIUM SALT

. Waste code: P106
. Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U031
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U117
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

Date form received by agency: 05/23/1991
Site name: NYSDOT CONTRACT D253757
Classification: Not a generator, verified

. Waste code: D000
. Waste name: Not Defined

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

NJ MANIFEST:
EPA Id: NYD986952885
Mail Address: 24-35 VICTORY BLVD
Mail City/State/Zip: STATEN ISLAND 10314
Facility Phone: 7183703280
Emergency Phone: Not reported

NYSDOT BIN 1067850 (Continued) **1000552883**

Contact:	RAMASESHAN SETH
Comments:	Not reported
SIC Code:	Not reported
County:	00
Municipal:	00
Previous EPA Id:	Not reported
Gen Flag:	X
Trans Flag:	Not reported
TSDF Flag:	Not reported
Name Change:	Not reported
Date Change:	Not reported

Manifest:

Manifest Number:	NJA5222884
EPA ID:	NYD986952885
Date Shipped:	12/15/2004
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	12/15/2004
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	12/15/2004
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	03150595
Was Load Rejected:	STATEN ISLAND 10314
Reason Load Was Rejected:	Not reported

Manifest Number:	NJA5222932
EPA ID:	NYD986952885
Date Shipped:	12/28/2004
TSDF EPA ID:	NJD991291105

NYSDOT BIN 1067850 (Continued) **1000552883**

Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	12/28/2004
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	12/28/2004
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	03070595
Was Load Rejected:	STATEN ISLAND 10314
Reason Load Was Rejected:	Not reported

NY MANIFEST:

Country:	USA
EPA ID:	NYD986952885
Facility Status:	Not reported
Location Address 1:	FINGERBOARD RD/ S I EXPY
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	STATEN ISLAND
Location State:	NY
Location Zip:	Not reported
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYD986952885
Mailing Name:	NYSDOT D259509 FIELD OFFICE
Mailing Contact:	N/S
Mailing Address 1:	24-35 VICTORY BLVD 2ND FL

NYSDOT BIN 1067850 (Continued) **1000552883**

Mailing Address 2:	Not reported
Mailing City:	STATEN ISLAND
Mailing State:	NY
Mailing Zip:	10314
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	7183703280

NY MANIFEST:

Document ID:	NJA5222884
Manifest Status:	Not reported
seq:	Not reported
Year:	2004
Trans1 State ID:	S8424
Trans2 State ID:	Not reported
Generator Ship Date:	12/15/2004
Trans1 Recv Date:	12/15/2004
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	12/15/2004
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD986952885
Trans1 EPA ID:	NYD046765574
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD991291
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D008 - LEAD 5.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	04800
Units:	P - Pounds
Number of Containers:	006
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	01.00

Document ID:	NJA5222932
Manifest Status:	Not reported
seq:	Not reported
Year:	2004
Trans1 State ID:	S8424
Trans2 State ID:	Not reported

NYSDOT BIN 1067850 (Continued) **1000552883**

Generator Ship Date:	12/28/2004
Trans1 Recv Date:	12/28/2004
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	12/28/2004
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD986952885
Trans1 EPA ID:	NYD046765574
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD991291
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D008 - LEAD 5.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	04900
Units:	P - Pounds
Number of Containers:	007
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	01.00

D10 **VERRAZANO NARROWS BRIDGE TRIBOROUGH BRIDGE & TUNNEL** **PA MANIFEST** **S111771610**
NE **LILY POND AVE & STATEN ISLAND** **N/A**
< 1/8 **STATEN ISLAND, NY 10305**
0.101 mi.
533 ft. **Site 1 of 3 in cluster D**

Relative:
Lower

Actual:
69 ft.

Manifest Details:

Year:	2005
Manifest Number:	PAH189861
Manifest Type:	TSD Copy
Generator EPA Id:	NYD982796443
Generator Date:	04/19/2005
Mailing Address:	MTA BRIDGES & TUNNELS
Mailing City,St,Zip:	NEW YORK, NY 10035
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	04/19/2005
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS
TSD Facility Address:	2869 SANDSTONE DR
TSD Facility City:	HATFIELD

VERRAZANO NARROWS BRIDGE TRIBOROUGH BRIDGE & TUNNEL (Continued) **S111771610**

TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D008
Container Number:	1
Container Type:	Metal boxes, cartons, cases (including roll-offs)
Waste Quantity:	20
Unit:	Cubic Yards
Handling Code:	Not reported
TSP EPA Id:	PAD982661381
Date TSP Sig:	04/19/2005
Year:	2005
Manifest Number:	PAH189862
Manifest Type:	TSD Copy
Generator EPA Id:	NYD982796443
Generator Date:	04/25/2005
Mailing Address:	MTA BRIDGES & TUNNELS
Mailing City,St,Zip:	NEW YORK, NY 10035
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	04/28/2005
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS
TSD Facility Address:	2869 SANDSTONE DR
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D008
Container Number:	1
Container Type:	Metal boxes, cartons, cases (including roll-offs)
Waste Quantity:	16
Unit:	Tons (2000 Pounds)
Handling Code:	Not reported
TSP EPA Id:	PAD982661381
Date TSP Sig:	04/25/2005

D11 **S.I. EXPWY/LILY POND AVE** **NY Spills** **S102144867**
NE **S.I. EXPWY/LILY POND AVE** **N/A**
< 1/8 **NEW YORK CITY, NY**
0.106 mi.
559 ft. **Site 2 of 3 in cluster D**

Relative:
Lower

Actual:
81 ft.

SPILLS:

Facility ID:	8708389
Facility Type:	ER
DER Facility ID:	142965
Site ID:	169907
DEC Region:	2
Spill Date:	1987-12-30
Spill Number/Closed Date:	8708389 / 1987-12-30
Spill Cause:	Unknown
Spill Class:	Not reported
SWIS:	4301
Investigator:	RWAUSTIN

S.I. EXPWY/LILY POND AVE (Continued) **S102144867**

Referred To:	Not reported
Reported to Dept:	1987-12-30
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Police Department
Cleanup Ceased:	1987-12-30
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1988-01-13
Spill Record Last Update:	1989-03-13
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN "
Remarks:	"3 SEALED BAGS UNMARKED WERE FOUND ON STATEN ISLAND EXPRESSWAY, NO ACTION REQUIRED BY DEC."

Material:

Site ID:	169907
Operable Unit ID:	913028
Operable Unit:	01
Material ID:	463783
Material Code:	0026A
Material Name:	asbestos
Case No.:	01332214
Material FA:	Hazardous Material
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

D12 **STATEN ISLAND EXPRESSWAY** **NY Spills** **S103938947**
NE **OFF LILY POND EXIT** **N/A**
< 1/8 **STATEN ISLAND, NY**
0.106 mi.
559 ft. **Site 3 of 3 in cluster D**

Relative:
Lower

Actual:
81 ft.

SPILLS:

Facility ID:	9903586
Facility Type:	ER
DER Facility ID:	254443
Site ID:	315597
DEC Region:	2
Spill Date:	1999-06-29
Spill Number/Closed Date:	9903586 / 2004-02-09

STATEN ISLAND EXPRESSWAY (Continued) **S103938947**

Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	CAENGELH
Referred To:	Not reported
Reported to Dept:	1999-06-29
CID:	390
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1999-06-29
Spill Record Last Update:	2004-02-09
Spiller Name:	UNKNOWN
Spiller Company:	Unknown
Spiller Address:	UNKNOWN
Spiller City,St,Zip:	UNKNOWN, NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ENGELHARDT 2/9/04 TJD Spill originally assigned to Engelhardt. Due to nature of event, 5yr old street spill, no further action required. Spill administratively closed."
Remarks:	"spill was from an unknown diesel truck - unknown when it is going to be cleaned up"

Material:

Site ID:	315597
Operable Unit ID:	1082524
Operable Unit:	01
Material ID:	303500
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	25.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

13
North
< 1/8
0.119 mi.
628 ft.

CON EDISON - MANHOLE 454
LINCOLN PL. & GARFIELD AVE.
STATEN ISLAND, NY 10301

RCRA NonGen / NLR **1010325939**
NY MANIFEST **NYP004135919**

Relative:
Lower

Actual:
78 ft.

RCRA NonGen / NLR:

Date form received by agency:	02/23/2006
Facility name:	CON EDISON - MANHOLE 454
Facility address:	LINCOLN PL. & GARFIELD AVE. STATEN ISLAND, NY 10301
EPA ID:	NYP004135919
Mailing address:	4 IRVING PLACE NEW YORK, NY 10003
Contact:	FRANKLIN MURRAY
Contact address:	4 IRVING PLACE NEW YORK, NY 10003
Contact country:	US
Contact telephone:	(212) 460-2808
Contact email:	MURRAYFR@CONED.COM
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CONSOLIDATED EDISON COMPANY OF NY, INC.
Owner/operator address:	4 IRVING PLACE NEW YORK, NY 10003
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	09/25/2005
Owner/Op end date:	Not reported

Owner/operator name:	CONSOLIDATED EDISON COMPANY OF NY, INC.
Owner/operator address:	4 IRVING PLACE NEW YORK, NY 10003
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	09/25/2005
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

CON EDISON - MANHOLE 454 (Continued) **1010325939**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/22/2006
Site name: CON EDISON - MANHOLE 454
Classification: Not a generator, verified

Date form received by agency: 02/21/2006
Site name: CON EDISON - MANHOLE 454
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

. Waste code: B002
. Waste name: B002

Violation Status: No violations found

NY MANIFEST:
Country: USA
EPA ID: NYP004135919
Facility Status: Not reported
Location Address 1: LINCOLN & GARFIELD AVES V113
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: STATEN ISLAND
Location State: NY
Location Zip: 10301
Location Zip 4: Not reported

NY MANIFEST:
EPAID: NYP004135919
Mailing Name: CONSOLIDATED EDISON
Mailing Contact: FRANKLIN MURRAY
Mailing Address 1: 4 IRVING PLACE RM 828
Mailing Address 2: Not reported
Mailing City: NEW YORK
Mailing State: NY
Mailing Zip: 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124602808

NY MANIFEST:
Document ID: NJA5082025
Manifest Status: Not reported
seq: Not reported
Year: 2005
Trans1 State ID: NJ0000027193
Trans2 State ID: Not reported
Generator Ship Date: 09/25/2005
Trans1 Recv Date: 09/25/2005
Trans2 Recv Date: Not reported

CON EDISON - MANHOLE 454 (Continued) **1010325939**

TSD Site Recv Date:	10/04/2005
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004135919
Trans1 EPA ID:	S5811
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD002200046
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	B002 - PETROLEUM OIL WITH 50 BUT < 500 PPM PCB
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	05000
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	01.00

E14
ESE
1/8-1/4
0.128 mi.
675 ft.

Relative:
Lower

Actual:
84 ft.

MAJOR AV & LILY PD AV **NY Spills** **S102145781**
MAJOR AVE & LILY PD AVE **N/A**
STATEN ISLAND, NY

Site 1 of 3 in cluster E

SPILLS:

Facility ID:	9001267
Facility Type:	ER
DER Facility ID:	68548
Site ID:	72671
DEC Region:	2
Spill Date:	1990-05-03
Spill Number/Closed Date:	9001267 / 1990-12-17
Spill Cause:	Unknown
Spill Class:	Not reported
SWIS:	4301
Investigator:	JAMES
Referred To:	Not reported
Reported to Dept:	1990-05-03
CID:	Not reported
Water Affected:	NEW YORK BAY
Spill Source:	Unknown
Spill Notifier:	Police Department

MAJOR AV & LILY PD AV (Continued) **S102145781**

Cleanup Ceased:	1990-12-17
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1990-12-20
Spill Record Last Update:	2002-06-26
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"(2) INJURIES AT SCENE, NYCFD, NYCDEP & OEM ON SCENE, 55GAL DRUM OF DICHLOROBENZENE SPILLED, PEOPLE OVERCOME BY FUMES BRIDGE SHUT DOWN."

Material:

Site ID:	72671
Operable Unit ID:	939590
Operable Unit:	01
Material ID:	439620
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

15
South
1/8-1/4
0.129 mi.
682 ft.

Relative:
Lower

Actual:
73 ft.

160 MAJOR AVENUE
160 MAJOR AVENUE
STATEN ISLAND, NY

NY Spills **S102150226**
N/A

SPILLS:

Facility ID:	9502626
Facility Type:	ER
DER Facility ID:	160449
Site ID:	192448
DEC Region:	2
Spill Date:	1995-06-01
Spill Number/Closed Date:	9502626 / 1995-06-02
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	O'DOWD
Referred To:	Not reported
Reported to Dept:	1995-06-01

160 MAJOR AVENUE (Continued) **S102150226**

CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Responsible Party
Cleanup Ceased:	1995-06-02
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-06-16
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	SIPCO
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"LEAKING OIL LINE UNDER FLOOR - UNK AMOUNT - SIPCO PUT IN A TEMPORARY LINE."

Material:

Site ID:	192448
Operable Unit ID:	1013853
Operable Unit:	01
Material ID:	367679
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

E16 **VERRAZANO NARROWS BRIDGE** **NY UST U004065046**
ESE **1 VERRAZANO NARROWS PLAZA** **NY AST N/A**
1/8-1/4 **STATEN ISLAND, NY 10305**
0.138 mi.
731 ft. **Site 2 of 3 in cluster E**

Relative:
Lower

Actual:
86 ft.

UST:

Id/Status:	2-481653 / Active
Program Type:	PBS
Region:	STATE
DEC Region:	2
Expiration Date:	09/07/2020
UTM X:	579100.43750
UTM Y:	4494858.00000
Site Type:	Other

Affiliation Records:

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Site Id:	21548
Affiliation Type:	Mail Contact
Company Name:	MTA BRIDGES AND TUNNELS (TBTA)
Contact Type:	Not reported
Contact Name:	PASHKO R. CAMAJ MGR. S&H COMPLIANCE
Address1:	SAFETY & HEALTH DEPT.
Address2:	ROBERT MOSES BLDG. ROOM 115
City:	RANDALLS ISLAND
State:	NY
Zip Code:	10035
Country Code:	001
Phone:	(646) 252-7062
EMail:	PCAMAJ@MTABT.ORG
Fax Number:	Not reported
Modified By:	NTFREEMA
Date Last Modified:	2015-09-02

Site Id:	21548
Affiliation Type:	On-Site Operator
Company Name:	VERRAZANO NARROWS BRIDGE
Contact Type:	Not reported
Contact Name:	BENNY JOHNSON
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	001
Phone:	(718) 390-8601
EMail:	Not reported
Fax Number:	Not reported
Modified By:	MXLAY
Date Last Modified:	2016-12-12

Site Id:	21548
Affiliation Type:	Emergency Contact
Company Name:	MTA BRIDGES & TUNNELS (TBTA)
Contact Type:	Not reported
Contact Name:	PASHKO R. CAMAJ
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	999
Phone:	(212) 360-3073
EMail:	Not reported
Fax Number:	Not reported
Modified By:	NTFREEMA
Date Last Modified:	2015-09-01

Site Id:	21548
Affiliation Type:	Facility Owner
Company Name:	MTA BRIDGES & TUNNELS (TBTA)
Contact Type:	Not reported
Contact Name:	Not reported
Address1:	2 BROADWAY

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Address2:	Not reported
City:	NEW YORK
State:	NY
Zip Code:	10004
Country Code:	001
Phone:	(646) 252-7902
EMail:	Not reported
Fax Number:	Not reported
Modified By:	MXLAY
Date Last Modified:	2016-12-12

Tank Info:

Tank Number:	1
Tank ID:	65686
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	550
Install Date:	12/01/1963
Date Tank Closed:	01/01/1996
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0009
Common Name of Substance:	Gasoline
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	TRANSLAT
Last Modified:	03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
H00 - Tank Leak Detection - None
J02 - Dispenser - Suction Dispenser
D01 - Pipe Type - Steel/Carbon Steel/Iron
I04 - Overfill - Product Level Gauge (A/G)
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number:	10
Tank ID:	65695
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	8000
Install Date:	02/01/1995
Date Tank Closed:	10/30/2009
Registered:	True
Tank Location:	Underground
Tank Type:	Equivalent technology
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 11/19/2009

Equipment Records:

I02 - Overfill - High Level Alarm
L09 - Piping Leak Detection - Exempt Suction Piping
C02 - Pipe Location - Underground/On-ground
B04 - Tank External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
J02 - Dispenser - Suction Dispenser
K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
G04 - Tank Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
F04 - Pipe External Protection - Fiberglass
H05 - Tank Leak Detection - In-Tank System (ATG)

Tank Number: 11
Tank ID: 65696
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 2500
Install Date: 12/01/1994
Date Tank Closed: 08/10/2016
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: -
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: MXLAY
Last Modified: 12/12/2016

Equipment Records:

L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
L09 - Piping Leak Detection - Exempt Suction Piping
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B04 - Tank External Protection - Fiberglass
J02 - Dispenser - Suction Dispenser
K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
E04 - Piping Secondary Containment - Double walled UG
G04 - Tank Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
C02 - Pipe Location - Underground/On-ground
I02 - Overfill - High Level Alarm
H05 - Tank Leak Detection - In-Tank System (ATG)

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Tank Number:	12
Tank ID:	65697
Tank Status:	Tank Converted to Non-Regulated Use
Material Name:	Tank Converted to Non-Regulated Use
Capacity Gallons:	1000
Install Date:	04/01/1994
Date Tank Closed:	04/01/1994
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	9999
Common Name of Substance:	Other
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	TRANSLAT
Last Modified:	03/04/2004

Equipment Records:

C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
H00 - Tank Leak Detection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
I04 - Overfill - Product Level Gauge (A/G)
B02 - Tank External Protection - Original Sacrificial Anode
F00 - Pipe External Protection - None
A99 - Tank Internal Protection - Other

Tank Number:	13
Tank ID:	65698
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	600
Install Date:	10/01/1997
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	Equivalent technology
Material Code:	0022
Common Name of Substance:	Waste Oil/Used Oil
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	MXLAY
Last Modified:	12/12/2016

Equipment Records:

I02 - Overfill - High Level Alarm
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
F04 - Pipe External Protection - Fiberglass
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B04 - Tank External Protection - Fiberglass

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
E04 - Piping Secondary Containment - Double walled UG
G04 - Tank Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
H05 - Tank Leak Detection - In-Tank System (ATG)

Tank Number:	16
Tank ID:	236117
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	4000
Install Date:	08/20/2010
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	0
Material Code:	2712
Common Name of Substance:	Gasoline/Ethanol
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	MXLAY
Last Modified:	12/12/2016

Equipment Records:

L07 - Piping Leak Detection - Pressurized Piping Leak Detector
I02 - Overfill - High Level Alarm
I03 - Overfill - Automatic Shut-Off
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
K00 - Spill Prevention - None
B09 - Tank External Protection - Urethane
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
L02 - Piping Leak Detection - Interstitial - Manual Monitoring
G04 - Tank Secondary Containment - Double-Walled (Underground)
E04 - Piping Secondary Containment - Double walled UG
J01 - Dispenser - Pressurized Dispenser
H05 - Tank Leak Detection - In-Tank System (ATG)

Tank Number:	2
Tank ID:	65687
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	550
Install Date:	12/01/1963
Date Tank Closed:	01/01/1996
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0009
Common Name of Substance:	Gasoline

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H00 - Tank Leak Detection - None
J02 - Dispenser - Suction Dispenser
D01 - Pipe Type - Steel/Carbon Steel/Iron
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number: 3
Tank ID: 65688
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 12000
Install Date: 12/01/1985
Date Tank Closed: 01/01/1996
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I02 - Overfill - High Level Alarm
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B04 - Tank External Protection - Fiberglass
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
J01 - Dispenser - Pressurized Dispenser

Tank Number: 4
Tank ID: 65689
Tank Status: Closed - Removed
Material Name: Closed - Removed
Capacity Gallons: 1000
Install Date: 12/01/1985
Date Tank Closed: 01/01/1981

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0008
Common Name of Substance: Diesel

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H00 - Tank Leak Detection - None
J02 - Dispenser - Suction Dispenser
D01 - Pipe Type - Steel/Carbon Steel/Iron
I04 - Overfill - Product Level Gauge (A/G)
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number: 5
Tank ID: 65690
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 3000
Install Date: 12/01/1963
Date Tank Closed: 09/01/1993
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H00 - Tank Leak Detection - None
J02 - Dispenser - Suction Dispenser
D01 - Pipe Type - Steel/Carbon Steel/Iron
I04 - Overfill - Product Level Gauge (A/G)
G00 - Tank Secondary Containment - None
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
B00 - Tank External Protection - None

Tank Number: 6

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Tank ID:	65691
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	800
Install Date:	12/01/1985
Date Tank Closed:	04/01/1996
Registered:	True
Tank Location:	Underground
Tank Type:	Equivalent technology
Material Code:	0022
Common Name of Substance:	Waste Oil/Used Oil
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	TRANSLAT
Last Modified:	03/04/2004

Equipment Records:

C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
H00 - Tank Leak Detection - None
B04 - Tank External Protection - Fiberglass
J02 - Dispenser - Suction Dispenser
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
I04 - Overfill - Product Level Gauge (A/G)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)

Tank Number:	7
Tank ID:	65692
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	300
Install Date:	12/01/1963
Date Tank Closed:	04/01/1996
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0022
Common Name of Substance:	Waste Oil/Used Oil
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	TRANSLAT
Last Modified:	03/04/2004

Equipment Records:

G00 - Tank Secondary Containment - None
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
H00 - Tank Leak Detection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

I04 - Overfill - Product Level Gauge (A/G)
F00 - Pipe External Protection - None
B00 - Tank External Protection - None

Tank Number:	8
Tank ID:	65693
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	2500
Install Date:	12/01/1995
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	Equivalent technology
Material Code:	0009
Common Name of Substance:	Gasoline
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	MXLAY
Last Modified:	12/12/2016

Equipment Records:

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B04 - Tank External Protection - Fiberglass
J02 - Dispenser - Suction Dispenser
K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
G04 - Tank Secondary Containment - Double-Walled (Underground)
E04 - Piping Secondary Containment - Double walled UG
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
I02 - Overfill - High Level Alarm
C02 - Pipe Location - Underground/On-ground
F04 - Pipe External Protection - Fiberglass
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
L09 - Piping Leak Detection - Exempt Suction Piping
H05 - Tank Leak Detection - In-Tank System (ATG)

Tank Number:	9
Tank ID:	65694
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	2500
Install Date:	12/01/1995
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	Fiberglass coated steel
Material Code:	0008
Common Name of Substance:	Diesel
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Pipe Model: Not reported
Modified By: MXLAY
Last Modified: 12/12/2016

Equipment Records:

I02 - Overfill - High Level Alarm
L01 - Piping Leak Detection - Interstitial - Electronic Monitoring
L09 - Piping Leak Detection - Exempt Suction Piping
F04 - Pipe External Protection - Fiberglass
C02 - Pipe Location - Underground/On-ground
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B04 - Tank External Protection - Fiberglass
J02 - Dispenser - Suction Dispenser
K01 - Spill Prevention - Catch Basin
D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)
E04 - Piping Secondary Containment - Double walled UG
G04 - Tank Secondary Containment - Double-Walled (Underground)
A03 - Tank Internal Protection - Fiberglass Liner (FRP)
H05 - Tank Leak Detection - In-Tank System (ATG)

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-481653
Program Type: PBS
UTM X: 579100.43750
UTM Y: 4494858.00000
Expiration Date: 09/07/2020
Site Type: Other

Affiliation Records:

Site Id: 21548
Affiliation Type: Mail Contact
Company Name: MTA BRIDGES AND TUNNELS (TBTA)
Contact Type: Not reported
Contact Name: PASHKO R. CAMAJ MGR. S&H COMPLIANCE
Address1: SAFETY & HEALTH DEPT.
Address2: ROBERT MOSES BLDG. ROOM 115
City: RANDALLS ISLAND
State: NY
Zip Code: 10035
Country Code: 001
Phone: (646) 252-7062
EMail: PCAMAJ@MTABT.ORG
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2015-09-02

Site Id: 21548
Affiliation Type: On-Site Operator
Company Name: VERRAZANO NARROWS BRIDGE
Contact Type: Not reported
Contact Name: BENNY JOHNSON
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Zip Code:	Not reported
Country Code:	001
Phone:	(718) 390-8601
EMail:	Not reported
Fax Number:	Not reported
Modified By:	MXLAY
Date Last Modified:	2016-12-12

Site Id:	21548
Affiliation Type:	Emergency Contact
Company Name:	MTA BRIDGES & TUNNELS (TBTA)
Contact Type:	Not reported
Contact Name:	PASHKO R. CAMAJ
Address1:	Not reported
Address2:	Not reported
City:	Not reported
State:	NN
Zip Code:	Not reported
Country Code:	999
Phone:	(212) 360-3073
EMail:	Not reported
Fax Number:	Not reported
Modified By:	NTFREEMA
Date Last Modified:	2015-09-01

Site Id:	21548
Affiliation Type:	Facility Owner
Company Name:	MTA BRIDGES & TUNNELS (TBTA)
Contact Type:	Not reported
Contact Name:	Not reported
Address1:	2 BROADWAY
Address2:	Not reported
City:	NEW YORK
State:	NY
Zip Code:	10004
Country Code:	001
Phone:	(646) 252-7902
EMail:	Not reported
Fax Number:	Not reported
Modified By:	MXLAY
Date Last Modified:	2016-12-12

Tank Info:

Tank Number:	14
Tank Id:	65699
Material Code:	9999
Common Name of Substance:	Other

Equipment Records:

G10 - Tank Secondary Containment - Impervious Underlayment
B01 - Tank External Protection - Painted/Asphalt Coating
J02 - Dispenser - Suction Dispenser
K01 - Spill Prevention - Catch Basin
D01 - Pipe Type - Steel/Carbon Steel/Iron
F05 - Pipe External Protection - Jacketed

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

G04 - Tank Secondary Containment - Double-Walled (Underground)
H99 - Tank Leak Detection - Other
C03 - Pipe Location - Aboveground/Underground Combination
A00 - Tank Internal Protection - None
I03 - Overfill - Automatic Shut-Off
L00 - Piping Leak Detection - None
E01 - Piping Secondary Containment - Diking (AG only)

Tank Location:	3
Tank Type:	Steel/Carbon Steel/Iron
Tank Status:	Closed - Removed
Pipe Model:	Not reported
Install Date:	12/01/1994
Capacity Gallons:	100
Tightness Test Method:	-
Date Test:	Not reported
Next Test Date:	Not reported
Date Tank Closed:	07/21/2016
Register:	True
Modified By:	MXLAY
Last Modified:	12/12/2016
Material Name:	Not reported

Tank Number:	15
Tank Id:	208165
Material Code:	9999
Common Name of Substance:	Other

Equipment Records:

B01 - Tank External Protection - Painted/Asphalt Coating
G10 - Tank Secondary Containment - Impervious Underlayment
H00 - Tank Leak Detection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
F01 - Pipe External Protection - Painted/Asphalt Coating
K01 - Spill Prevention - Catch Basin
G04 - Tank Secondary Containment - Double-Walled (Underground)
I04 - Overfill - Product Level Gauge (A/G)
J00 - Dispenser - None
C01 - Pipe Location - Aboveground
A00 - Tank Internal Protection - None
L00 - Piping Leak Detection - None
E01 - Piping Secondary Containment - Diking (AG only)

Tank Location:	3
Tank Type:	Steel/Carbon Steel/Iron
Tank Status:	In Service
Pipe Model:	Not reported
Install Date:	05/01/2005
Capacity Gallons:	585
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Date Tank Closed:	Not reported
Register:	True
Modified By:	MXLAY
Last Modified:	12/12/2016
Material Name:	Not reported

VERRAZANO NARROWS BRIDGE (Continued) **U004065046**

Tank Number: 17
Tank Id: 266141

Equipment Records:

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B01 - Tank External Protection - Painted/Asphalt Coating
K00 - Spill Prevention - None
H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)
D01 - Pipe Type - Steel/Carbon Steel/Iron
E00 - Piping Secondary Containment - None
F01 - Pipe External Protection - Painted/Asphalt Coating
J00 - Dispenser - None
C01 - Pipe Location - Aboveground
L00 - Piping Leak Detection - None
G12 - Tank Secondary Containment - Double-Walled (AG only)
I02 - Overfill - High Level Alarm
I03 - Overfill - Automatic Shut-Off
A00 - Tank Internal Protection - None

Tank Location: 2
Tank Type: Steel Tank in Concrete
Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/13/2016
Capacity Gallons: 6000
Tightness Test Method: -
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: MXLAY
Last Modified: 12/12/2016
Material Name: Not reported

E17 **MTA - VERRAZANO NARROWS BRIDGE FACILITY** **NY LTANKS** **S100146924**
ESE **1 VERRAZANO BRIDGE PLAZA** **NY Spills** **N/A**
1/8-1/4 **STATEN ISLAND, NY 10305** **NY MANIFEST**
0.141 mi.
747 ft. **Site 3 of 3 in cluster E**

Relative:
Lower

Actual:
86 ft.

LTANKS:

Site ID: 285922
Spill Number/Closed Date: 9100368 / 2003-11-07
Spill Date: 1991-04-09
Spill Cause: Tank Test Failure
Spill Source: Non Major Facility > 1,100 gal
Spill Class: Known release that creates a file or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4301
Investigator: SIGONA
Referred To: Not reported
Reported to Dept: 1991-04-09
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1991-04-17
Spill Record Last Update:	2004-06-23
Spiller Name:	GEORGE BASIL
Spiller Company:	MTA BRIDGES & TUNNELS
Spiller Address:	RANDALLS ISLAND
Spiller City,St,Zip:	NEW YORK, NY 10035-
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	231780
DEC Memo:	""
Remarks:	"(2) 550GAL TANKS MANIFOLDED,SYSTEMS TEST,FAILED PETRO TITE WITH A GROSS LEAK,WILL EXCAVATE,ISOLATE & RETEST."

Material:

Site ID:	285922
Operable Unit ID:	951214
Operable Unit:	01
Material ID:	426575
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Site ID:	285922
Spill Tank Test:	1538435
Tank Number:	Not reported
Tank Size:	0
Test Method:	00
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified:	Not reported
Test Method:	Unknown

Site ID:	285924
Spill Number/Closed Date:	9403549 / 2005-10-19
Spill Date:	1994-06-13
Spill Cause:	Tank Test Failure
Spill Source:	Non Major Facility > 1,100 gal
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1994-06-13
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1994-07-25
Spill Record Last Update:	2005-10-19
Spiller Name:	GEORGE BASIL
Spiller Company:	MTA BRIDGES & TUNNEL
Spiller Address:	RANDALLS ISLAND
Spiller City,St,Zip:	NEW YORK, NY 10035-
Spiller County:	001
Spiller Contact:	GEORGE BASIL
Spiller Phone:	(212) 360-4165
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	231780
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ROMMEL This spill case was reassigned from DEC (Sigona) to Rommel on 01/07/2004. This spill site cleanup has been consolidated under Spill No. 9403549. A site investigation work plan was submitted to DEC for review and approval on November 7, 2003. DEC's Sigona sent comments regarding a proposed Work Plan for Site Investigation by BEM Systems, Inc., dated November 5, 2003. Based on the results of our site visit and PBS inspection on June 20, 2003, and evaluation of the proposal by BEM, the DEC accepts MTA Bridges and Tunnel's Work Plan to perform further investigatory actions to address any of the DEC's concerns related to the prior spill investigations at this site. 03/29/05: Transfer from Rommel to Tibbe. 10/18/05: An investigation was performed by MTA B&T into this tank failure. This spill pertains to two 550 gallon gasoline tanks that were subsequently removed in 1996. During repair operations after this failure, contaminated soil was encountered and excavated (see Spill # 94-07908). An investigation was performed in 2004 following a work plan approved by Anthony Sigona. The work plan required only 2 broings with soil and groundwater sampling, which was performed utilizing a geoprobe. The boring logs for these two samples geoprobes did not identify any contamination. Even though the boring logs not moist soil, groundwater was not encountered down to51 feet. A temporary well was installed but remained dry. Therefore, no water sample was collected. No PID readings were encountered above background which is confirmedbythe soil samples which were ND for all VOCs and SVOCs except two very low SVOCs. Since no soil contamination was encountered, groundwater is beyond 50 feet and the tanks have been removed, it has been determined that no further action is required. "
Remarks:	"Excavate- ISOLATE- RETEST"

Material:

Site ID:	285924
Operable Unit ID:	997293
Operable Unit:	01
Material ID:	383723

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Site ID:	285924
Spill Tank Test:	1542854
Tank Number:	Not reported
Tank Size:	0
Test Method:	00
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified:	Not reported
Test Method:	Unknown

Site ID:	285925
Spill Number/Closed Date:	9407908 / 2003-11-07
Spill Date:	1994-09-13
Spill Cause:	Tank Failure
Spill Source:	Non Major Facility > 1,100 gal
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	JMROMMEL
Referred To:	Not reported
Reported to Dept:	1994-09-13
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1994-10-27
Spill Record Last Update:	2004-06-23
Spiller Name:	GEORGE BASIL
Spiller Company:	MTA BRIDGE & TUNNELS
Spiller Address:	RANDALLS ISLAND
Spiller City,St,Zip:	NEW YORK, NY 10035-
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	231780
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ROMMEL This spill site cleanup has been consolidated under Spill No.

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

9403549. This site was reassigned from Sigona to Rommel on 1/7/2004. DEC Sigona Issued a No Further Action Letter on June 23, 2004, Based on the submitted documentation provided to date, along with our site visit and PBS inspection on June 20, 2003, no further investigation or response will be required concerning this site, with regard to spill numbers 9100368, 9201984, 9407908, 9412719, 9415350 & 9500836. "
Not reported
Remarks: "STOCK PILING SOIL ON PLASTIC & COVERING."

Material:
Site ID: 285925
Operable Unit ID: 1005620
Operable Unit: 01
Material ID: 377366
Material Code: 0009
Material Name: gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

SPILLS:
Facility ID: 9500836
Facility Type: ER
DER Facility ID: 231780
Site ID: 285929
DEC Region: 2
Spill Date: 1995-04-17
Spill Number/Closed Date: 9500836 / 2003-11-07
Spill Cause: Equipment Failure
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: SIGONA
Referred To: Not reported
Reported to Dept: 1995-04-20
CID: Not reported
Water Affected: Not reported
Spill Source: Non Major Facility > 1,100 gal
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1995-05-12
Spill Record Last Update: 2004-06-23
Spiller Name: GEORGE BASIL
Spiller Company: MTA BRIDGES & TUNNELS

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Spiller Address:	RANDALLS ISLAND
Spiller City,St,Zip:	NEW YORK, NY 10035-
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"SOIL CONTAMINATION FOUND ASSOCIATED WITH AN UNDERGROUND TANK WHICH WAS REMOVED IN 1981."

Material:

Site ID:	285929
Operable Unit ID:	1011736
Operable Unit:	01
Material ID:	369450
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9415918
Facility Type:	ER
DER Facility ID:	231780
Site ID:	285928
DEC Region:	2
Spill Date:	1995-03-09
Spill Number/Closed Date:	9415918 / 1995-03-09
Spill Cause:	Traffic Accident
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1995-03-09
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Tank Truck
Spill Notifier:	Responsible Party
Cleanup Ceased:	1995-03-09
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-04-13
Spill Record Last Update:	2003-11-07
Spiller Name:	Not reported
Spiller Company:	WATCH TOWER
Spiller Address:	25 COLUMBIA HEIGHTS
Spiller City,St,Zip:	BROOKLYN, NY 11201

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"FUEL LEAKED FROM CROSSOVER ON TRUCK."

Material:

Site ID:	285928
Operable Unit ID:	1013179
Operable Unit:	01
Material ID:	371090
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9415350
Facility Type:	ER
DER Facility ID:	231780
Site ID:	285927
DEC Region:	2
Spill Date:	1995-02-23
Spill Number/Closed Date:	9415350 / 2003-11-07
Spill Cause:	Equipment Failure
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1995-02-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Non Major Facility > 1,100 gal
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-03-23
Spill Record Last Update:	2004-06-23
Spiller Name:	GEORGE BASIL
Spiller Company:	MTA BRIDGES & TUNNELS
Spiller Address:	RANDALLS ISLAND
Spiller City,St,Zip:	NEW YORK, NY 10035-
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

DEC Memo: ""
Remarks: "LINE BROKE FROM UNDERGROUND STORAGE TANK TO THE BOILERS. LINE LEAKING UNDERGROUND."

Material:
Site ID: 285927
Operable Unit ID: 1008790
Operable Unit: 01
Material ID: 370527
Material Code: 0008
Material Name: diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 200.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

Facility ID: 9412719
Facility Type: ER
DER Facility ID: 231780
Site ID: 285926
DEC Region: 2
Spill Date: 1994-12-22
Spill Number/Closed Date: 9412719 / 2003-11-07
Spill Cause: Equipment Failure
Spill Class: Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: SIGONA
Referred To: Not reported
Reported to Dept: 1994-12-22
CID: Not reported
Water Affected: Not reported
Spill Source: Non Major Facility > 1,100 gal
Spill Notifier: Responsible Party
Cleanup Ceased: 1994-12-22
Cleanup Meets Std: False
Last Inspection: 1994-12-22
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1995-01-26
Spill Record Last Update: 2004-06-23
Spiller Name: GEORGE BASIL
Spiller Company: MTA BRIDGES & TUNNLES
Spiller Address: RANDALLS ISLAND
Spiller City,St,Zip: NEW YORK, NY 10035-
Spiller Company: 001
Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: ""
Remarks: "BACK-HOE BACKED INTO PIPE FEEDING # 2 FUEL TO Boilers."

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Material:

Site ID:	285926
Operable Unit ID:	1006353
Operable Unit:	01
Material ID:	375012
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9201984
Facility Type:	ER
DER Facility ID:	231780
Site ID:	285923
DEC Region:	2
Spill Date:	1991-04-18
Spill Number/Closed Date:	9201984 / 2014-01-10
Spill Cause:	Unknown
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	AAOBLIGA
Referred To:	Not reported
Reported to Dept:	1992-01-13
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Non Major Facility > 1,100 gal
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-05-20
Spill Record Last Update:	2014-01-10
Spiller Name:	GEORGE BASIL
Spiller Company:	MTA BRIDGES & TUNNELS
Spiller Address:	RANDALLS ISLAND
Spiller City,St,Zip:	NEW YORK, NY 10035-
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"10/19/05: This spill was originally closed and consolidated by Anthony Sigona in an effort to reduce the amount of open spill numbers. This spill needs further investigation, so it is being reopened. MCT. 11/12/10 - spill re-assigned from Tibbe to Joe O'Connell 1/10/14- Obligado - I reviewed the 2004 Investigation

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Report by LIRO. Low level gw impacts were found around UST #5. The soil sample from the soil boring closest to the abandoned tank was below CP51 soil cleanup levels. Maximum total SVOCs was 304 ug/L in groundwater. Maximum total VOCs detected was 79 ug/L. This spill no longer apperas to be a threat to human health and the environmental. This spill is closed."

Remarks: "3K TANK (# 5)"

Material:

Site ID:	285923
Operable Unit ID:	969334
Operable Unit:	01
Material ID:	413264
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	8804077
Facility Type:	ER
DER Facility ID:	231780
Site ID:	285921
DEC Region:	2
Spill Date:	1988-08-09
Spill Number/Closed Date:	8804077 / 1989-02-27
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1988-08-09
CID:	Not reported
Water Affected:	NARROWS
Spill Source:	Unknown
Spill Notifier:	Federal Government
Cleanup Ceased:	1989-02-27
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1988-08-23
Spill Record Last Update:	2003-11-07
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Contact Name: Not reported
Contact Phone: Not reported
DEC Memo: ""
Remarks: "HELICOPTER ON TRAINING FLIGHT WILL CHECK SHEEN./NO FOLLOW-UP ON THIS REPORT EVER GIVEN TO DEC, AND NOTHING FOUND."

Material:
Site ID: 285921
Operable Unit ID: 921241
Operable Unit: 01
Material ID: 459598
Material Code: 0066A
Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

NY MANIFEST:
Country: USA
EPA ID: NYR000154252
Facility Status: Not reported
Location Address 1: 1 LILLY POND AVE - VNB
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: STATEN ISLAND
Location State: NY
Location Zip: 10305
Location Zip 4: Not reported

NY MANIFEST:
EPAID: NYR000154252
Mailing Name: MTA - VERRAZANO NARROWS BRIDGE FACILITY
Mailing Contact: MTA - VERRAZANO NARROWS BRIDGE FACILITY
Mailing Address 1: 2 BROADWAY
Mailing Address 2: Not reported
Mailing City: NEW YORK
Mailing State: NY
Mailing Zip: 10004
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7183908156

NY MANIFEST:
Document ID: Not reported
Manifest Status: Not reported
seq: Not reported
Year: 2010
Trans1 State ID: NYD986938645
Trans2 State ID: PAD146714878

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

Generator Ship Date:	06/23/2010
Trans1 Recv Date:	06/23/2010
Trans2 Recv Date:	07/30/2010
TSD Site Recv Date:	08/02/2010
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYR000154252
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD049836679
TSDF ID 2:	Not reported
Manifest Tracking Number:	007062035JJK
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	N
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H132
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	100.0
Units:	P - Pounds
Number of Containers:	2.0
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	1.0
Waste Code:	D008
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2010
Trans1 State ID:	NYD986938645
Trans2 State ID:	PAD146714878
Generator Ship Date:	06/23/2010
Trans1 Recv Date:	06/23/2010
Trans2 Recv Date:	07/30/2010
TSD Site Recv Date:	08/02/2010
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYR000154252
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported

MTA - VERRAZANO NARROWS BRIDGE FACILITY (Continued) **S100146924**

TSDF ID 1:	NYD049836679
TSDF ID 2:	Not reported
Manifest Tracking Number:	007062035JJK
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	N
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H132
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	150.0
Units:	P - Pounds
Number of Containers:	2.0
Container Type:	DM - Metal drums, barrels
Handling Method:	L Landfill.
Specific Gravity:	1.0
Waste Code:	D008
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported

18
NE
1/8-1/4
0.150 mi.
792 ft.

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217
STATEN ISLAND EXPY BIN 5521217
STATEN ISLAND, NY 10305

RCRA-LQG **1000141529**
NJ MANIFEST **NYD982796443**
PA MANIFEST

Relative:
Lower

Actual:
71 ft.

RCRA-LQG:

Date form received by agency:	02/23/2016
Facility name:	NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217
Facility address:	STATEN ISLAND EXPY BIN 5521217 STATEN ISLAND, NY 10305
EPA ID:	NYD982796443
Mailing address:	HENRY HUDSON PKWY H & S DEPT NEW YORK, NY 10034
Contact:	PASHKO R CAMAJ
Contact address:	HENRY HUDSON PKWY H & S DEPT NEW YORK, NY 10034
Contact country:	US
Contact telephone:	(212) 304-6822
Contact email:	PCAMAJ@MTABT.ORG
EPA Region:	02
Land type:	State
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	MTA BRIDGES AND TUNNELS
Owner/operator address:	ROBERT MOSES BUILDING RANDALL'S ISLAND, ATTN: H&S
	NEW YORK, NY 10035
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	11/21/1964
Owner/Op end date:	Not reported

Owner/operator name:	MTA BRIDGES AND TUNNELS
Owner/operator address:	BROADWAY
	NEW YORK, NY 10004
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	05/25/1950
Owner/Op end date:	Not reported

Owner/operator name:	MTA BRIDGES AND TUNNELS
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	11/21/1964
Owner/Op end date:	Not reported

Owner/operator name:	MTA BRIDGES AND TUNNELS
Owner/operator address:	BROADWAY 21ST FLOOR, H & S DEPT
	NEW YORK, NY 10004
Owner/operator country:	US
Owner/operator telephone:	(212) 360-3073
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	05/25/1950
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 03/04/2014
Site name: NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN#5521217
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/05/2012
Site name: NYSDOT VERRAZANO NARROWS BRIDGE DOT BIN# 5521217
Classification: Large Quantity Generator

. Waste code: D008

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

. Waste name: LEAD

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 11/09/2010
Site name: VERRAZANO NARROWS BRIDGE NYSDOT BIN 5521217
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 03/09/2010
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 02/28/2008
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 12/11/2007
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 12/10/2007
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Date form received by agency: 02/27/2006
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 02/26/2006
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

Date form received by agency: 02/26/2004
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/14/2002
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

Date form received by agency: 01/01/2001
Site name: VERRAZANO NARROWS BRIDGE
Classification: Large Quantity Generator

Date form received by agency: 07/29/1999

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Site name: TBTA - VERRAZANO BRIDGE
Classification: Large Quantity Generator

. Waste code: NONE
. Waste name: None

Date form received by agency: 03/02/1998
Site name: TRIBOROUGH BRIDGE AND TUNNEL AUTH
Classification: Large Quantity Generator

Date form received by agency: 03/27/1996
Site name: VERRAZANO-NARROWS BRIDGE
Classification: Large Quantity Generator

Date form received by agency: 02/20/1992
Site name: VERRAZANO
Classification: Large Quantity Generator

Date form received by agency: 10/04/1989
Site name: TBTA - VERRAZANO BRIDGE
Classification: Large Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: X001
. Waste name: WASTE OILS

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:
Waste code: D008
Waste name: LEAD
Amount (Lbs): 280000

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 280000

Facility Has Received Notices of Violations:
Regulation violated: FR - 40 cfr 264.52 (c)
Area of violation: Generators - General
Date violation determined: 11/21/1995
Date achieved compliance: 04/02/1996
Violation lead agency: EPA

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/16/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 cfr 262.34 (c)(2)
Area of violation: Generators - General
Date violation determined: 11/21/1995
Date achieved compliance: 04/02/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/16/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/21/1995
Date achieved compliance: 04/02/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/16/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 cfr 262.34 (a)(3)
Area of violation: Generators - General
Date violation determined: 11/21/1995
Date achieved compliance: 04/02/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/16/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 cfr 262.34 (a)(2)
Area of violation: Generators - General
Date violation determined: 11/21/1995
Date achieved compliance: 04/02/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Enforcement action date: 02/16/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 03/04/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/21/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/02/1996
Evaluation lead agency: EPA

NJ MANIFEST:
EPA Id: NYD982796443
Mail Address: RANDALLS ISLAND
Mail City/State/Zip: RANDALLS ISLAND 10035
Facility Phone: 2124688451
Emergency Phone: Not reported
Contact: Not reported
Comments: Not reported
SIC Code: Not reported
County: 00
Municipal: 00
Previous EPA Id: Not reported
Gen Flag: X
Trans Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported
Date Change: 000000

Manifest:
Manifest Number: 000457815WAS
EPA ID: NYD982796443
Date Shipped: 10/8/2012
TSDF EPA ID: NJD991291105
Transporter EPA ID: NJR986628162
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: Not reported
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	Not reported
Quantity:	46,960.00 Pounds

Manifest Number:	000457213WAS
EPA ID:	NYD982796443
Date Shipped:	1/30/2012
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	Not reported
Quantity:	17,220.00 Pounds

Manifest Number:	014007641JJK
EPA ID:	NYD982796443
Date Shipped:	6/2/2015
TSDF EPA ID:	NJD002200046
Transporter EPA ID:	NYD980762843
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Generator EPA Facility Name:	TBTA-VERRANZANO NARROWS BRIDGE
Transporter-1 EPA Facility Name:	WASTE OIL SOLUTIONS INC
TSDF EPA Facility Name:	CYCLE CHEM INC
QTY Units:	Pounds
Transporter SEQ ID:	Not reported
Transporter-1 Date:	6/2/2015
Waste SEQ ID:	1
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	6/2/2015

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported
Manifest Number:	NJA5243213
EPA ID:	NYD982796443
Date Shipped:	09/21/2005
TSDF EPA ID:	NJD002200046
Transporter EPA ID:	NJ0000027193
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	09/21/2005
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	09/21/2005
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	10310521
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported
Manifest Number:	008273751FLE
EPA ID:	NYD982796443
Date Shipped:	11/25/2015
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NJR986628162
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Generator EPA Facility Name:	TBTA-VERRANZANO NARROWS BRIDGE
Transporter-1 EPA Facility Name:	IWT TRANSPORT INC
TSDF EPA Facility Name:	CLEAN EARTH OF NORTH JERSEY
QTY Units:	Pounds
Transporter SEQ ID:	Not reported
Transporter-1 Date:	11/25/2015
Waste SEQ ID:	1
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	11/25/2015
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Manifest Number:	006736294FLE
EPA ID:	NYD982796443
Date Shipped:	10/7/2013
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NJR986628162
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003 F005 D001 D035
Hand Code:	Not reported
Quantity:	165.00 gallons

Manifest Number:	013244514JJK
EPA ID:	NYD982796443
Date Shipped:	5/5/2015
TSDF EPA ID:	NJD002200046
Transporter EPA ID:	NJ0000027193
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Generator EPA Facility Name:	TBTA-VERRANZANO NARROWS BRIDGE
Transporter-1 EPA Facility Name:	CLEAN VENTURE INC
TSDF EPA Facility Name:	CYCLE CHEM INC
QTY Units:	gallons
Transporter SEQ ID:	Not reported
Transporter-1 Date:	5/5/2015
Waste SEQ ID:	2
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	5/5/2015
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported
Manifest Number:	NJA5025245
EPA ID:	NYD982796443
Date Shipped:	07/23/2004
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	07/23/2004
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	07/23/2004
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	08170422
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported
Manifest Number:	NJA5025330
EPA ID:	NYD982796443
Date Shipped:	08/12/2004
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	08/12/2004
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	08/12/2004
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	09130425
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Manifest Number:	NJA5006948
EPA ID:	NYD982796443
Date Shipped:	03/10/2004
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/10/2004
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Date TSDF Received Waste:	03/10/2004
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	04020422
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Manifest Number:	000198509WAS
EPA ID:	NYD982796443
Date Shipped:	07/22/2009
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	07/22/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	07/22/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	200 P

Manifest Number:	008275108FLE
EPA ID:	NYD982796443
Date Shipped:	5/26/2015
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NJR986628162
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Generator EPA Facility Name:	TBTA-VERRANZANO NARROWS BRIDGE
Transporter-1 EPA Facility Name:	IWT TRANSPORT INC
TSDF EPA Facility Name:	CLEAN EARTH OF NORTH JERSEY
QTY Units:	Pounds
Transporter SEQ ID:	Not reported
Transporter-1 Date:	5/26/2015
Waste SEQ ID:	1
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	5/26/2015
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Manifest Number:	000457602WAS
EPA ID:	NYD982796443
Date Shipped:	7/26/2012
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	Not reported
Quantity:	39,220.00 Pounds

Manifest Number:	000457368WAS
EPA ID:	NYD982796443
Date Shipped:	4/24/2012
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D006
Hand Code:	Not reported
Quantity:	33,280.00 Pounds

Manifest Number:	001057632GBF
EPA ID:	NYD982796443
Date Shipped:	12/06/2010
TSDF EPA ID:	NJD002200046
Transporter EPA ID:	NJ0000027193
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	12/06/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	12/06/2010
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H061
Quantity:	55 G

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	110 G

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	55 G

Manifest Number:	000422432WAS
EPA ID:	NYD982796443
Date Shipped:	8/18/2011
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	165.00 Pounds

Manifest Number:	000959536GBF
EPA ID:	NYD982796443
Date Shipped:	03/25/2010
TSDF EPA ID:	NJD002200046
Transporter EPA ID:	NJ0000027193
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/25/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/25/2010
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	165 G

Manifest Number:	000457424WAS
EPA ID:	NYD982796443
Date Shipped:	6/8/2012
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	Not reported
Quantity:	38,180.00 Pounds

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Manifest Number:	000069738WAS
EPA ID:	NYD982796443
Date Shipped:	11/07/2007
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	11/07/2007
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	11/08/2007
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Manifest Number:	000069736WAS
EPA ID:	NYD982796443
Date Shipped:	11/07/2007
TSDF EPA ID:	NJD991291105
Transporter EPA ID:	NYD046765574
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	11/07/2007
Date Trans2 Transported Waste:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	11/07/2007
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	RANDALLS ISLAND 10035
Reason Load Was Rejected:	Not reported

Manifest Details:

Year:	2008
Manifest Number:	003816869JJK
Manifest Type:	TSD Copy
Generator EPA Id:	NYD982796443
Generator Date:	01/07/2008
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D001
Container Number:	13
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	715
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2008
Manifest Number:	003222106JJK
Manifest Type:	TSD Copy

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Generator EPA Id:	NYD982796443
Generator Date:	01/15/2008
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D008
Container Number:	1
Container Type:	Metal boxes, cartons, cases (including roll-offs)
Waste Quantity:	10
Unit:	Tons (2000 Pounds)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported
Year:	2008
Manifest Number:	003816869JJK
Manifest Type:	TSD Copy
Generator EPA Id:	NYD982796443
Generator Date:	01/07/2008
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	F005
Container Number:	13
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	715
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported
Year:	2008
Manifest Number:	003816869JJK
Manifest Type:	TSD Copy
Generator EPA Id:	NYD982796443
Generator Date:	01/07/2008
Mailing Address:	Not reported

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D035
Container Number:	13
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	715
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2008
Manifest Number:	003816869JJK
Manifest Type:	TSD Copy
Generator EPA Id:	NYD982796443
Generator Date:	01/07/2008
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	F003
Container Number:	13
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	715
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	002447881JJK
Manifest Type:	Not reported
Generator EPA Id:	NYD982796443
Generator Date:	05/09/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	F003
Container Number:	11
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	615
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	002447881JJK
Manifest Type:	Not reported
Generator EPA Id:	NYD982796443
Generator Date:	05/09/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D035
Container Number:	11
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	615
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	002131868JJK
Manifest Type:	Not reported
Generator EPA Id:	NYD982796443
Generator Date:	01/11/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D035
Container Number:	12
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	660
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	002131868JJK
Manifest Type:	Not reported
Generator EPA Id:	NYD982796443
Generator Date:	01/11/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	F003
Container Number:	12
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	660
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	002451447JJK
Manifest Type:	Not reported
Generator EPA Id:	NYD982796443
Generator Date:	09/13/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	ROBERT GITELMAN
Contact Phone:	212-360-4169
TSD EPA Id:	PAD085690592
TSD Date:	Not reported
TSD Facility Name:	REPUBLIC ENVIRONMENTAL SYSTEMS OF PA INC
TSD Facility Address:	2869 SANDSTONE DRIVE
TSD Facility City:	HATFIELD
TSD Facility State:	PA

NYSDOT-VERRAZANO NARROWS BRIDGE-DOT BIN #5521217 (Continued) **1000141529**

Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D008
Container Number:	2
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	400
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Click this hyperlink while viewing on your computer to access
11 additional PA_MANIFEST: record(s) in the EDR Site Report.

F19 **124 HASTINGS STREET (HURRICANE SANDY)** **NY Spills** **S112807635**
SSE **124 HASTINGS STREET** **N/A**
1/8-1/4 **MANHATTAN BEACH, NY**
0.153 mi.
806 ft. **Site 1 of 7 in cluster F**

Relative:
Lower

Actual:
61 ft.

SPILLS:

Facility ID:	1212419
Facility Type:	ER
DER Facility ID:	430856
Site ID:	475567
DEC Region:	2
Spill Date:	2012-10-29
Spill Number/Closed Date:	1212419 / 2012-11-15
Spill Cause:	Storm
Spill Class:	Not reported
SWIS:	4101
Investigator:	Hurricane Sandy R2
Referred To:	Not reported
Reported to Dept:	2012-11-16
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	DEC
Cleanup Ceased:	Not reported
Cleanup Meets Std:	Not reported
Last Inspection:	Not reported
Recommended Penalty:	Not reported
UST Trust:	Not reported
Remediation Phase:	Not reported
Date Entered In Computer:	2012-11-23
Spill Record Last Update:	2012-11-23
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	Not reported
Spiller Company:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"This spill report was created for tracking purposes related to the Department's Hurricane Sandy emergency response efforts. DEC contractor Op-Tech pumped out 75 gallons of fuel oil on 11/15/2012"
Remarks:	""

124 HASTINGS STREET (HURRICANE SANDY) (Continued) **S112807635**

Material:

Site ID:	475567
Operable Unit ID:	1225400
Operable Unit:	01
Material ID:	2228916
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Not reported
Recovered:	75.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

20
NW
1/8-1/4
0.157 mi.
829 ft.

HILLS OF GRASMERE HOA **NY CBS AST** **S103825517**
49 CLARADON LANE **N/A**
STATEN ISLAND, NY 10305

Relative:
Lower

Actual:
130 ft.

CBS AST:

CBS Number:	2-000199
ICS Number:	2-700890
PBS Number:	Not reported
MOSF Number:	Not reported
SPDES Number:	Not reported
Facility Status:	IN SERVICE
Facility Type:	I
Telephone:	(718) 356-5748
Facility Town:	NEW YORK CITY
Region:	STATE
Expiration Date:	06/08/2002
Total Capacity of All Active Tanks(gal):	500
Operator:	AQUA MGT INC
Emergency Contact:	EILEEN MEOLI
Emergency Phone:	(718) 981-7099
Owner Name:	HILLS OF GRASMERE HOA
Owner Address:	49 CLARADON LANE
Owner City,St,Zip:	STATEN ISLAND, NY 10305
Owner Telephone:	(718) 981-7099
Owner Type:	Corporate/Commercial
Owner Sub Type:	Not reported
Mail Name:	HILLS OF GRASMERE HOA
Mail Contact Addr:	49 CLARADON LANE
Mail Contact Addr2:	Not reported
Mail Contact Contact:	MIKE GUIDO
Mail Contact City,St,Zip:	STATEN ISLAND, NY 10305
Mail Phone:	(718) 981-7099
Tank Id:	001
CAS Number:	7681529
Federal ID:	Not reported
Tank Status:	In Service

HILLS OF GRASMERE HOA (Continued) **S103825517**

Install Date:	06/90
Tank Closed:	Not reported
Capacity (Gal):	500
Chemical:	Sodium hypochlorite
Tank Location:	Indoors, Aboveground
Tank Type:	Other
Total Tanks:	1
Tank Secret:	False
Tank Secondary Containment:	None
Tank Error Status:	No Missing Data
Date Entered:	06/08/1990
Certified Date:	06/28/2000
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Other
External Protection:	Other
Pipe Location:	None
Pipe Type:	Unknown
Pipe Internal:	Other
Pipe External:	Other
Pipe Flag:	Other
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	8
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	Not reported
Is Updated:	False
Renew Date:	03/04/92
Is It There:	False
Delinquent:	False
Date Expired:	06/08/94
Owner Mark:	1
Certificate Needs to be Printed:	False
Fiscal Amt for Registration Fee Correct:	True
Renewal Has Been Printed for Facility:	True
Pre-Printed Renewal App Last Printed:	03/01/2000

21
WSW
1/8-1/4
0.162 mi.
858 ft.

POLE #18904
806 HYLAN BLVD
STATEN ISLAND, NY

NY Spills **S106697923**
N/A

Relative:
Lower

Actual:
82 ft.

SPILLS:

Facility ID:	0404807
Facility Type:	ER
DER Facility ID:	224396
Site ID:	276009
DEC Region:	2
Spill Date:	2004-08-02
Spill Number/Closed Date:	0404807 / 2004-10-22
Spill Cause:	Equipment Failure
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	GDBREEN

POLE #18904 (Continued) **S106697923**

Referred To:	Not reported
Reported to Dept:	2004-08-02
CID:	403
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-08-02
Spill Record Last Update:	2004-10-22
Spiller Name:	ERT DESK
Spiller Company:	POLE #18904
Spiller Address:	806 HYLAN BLVD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"e2mis no. 154647: 2 gal of cable oil spilled from aerial joint on pole 18904 at 1806 Hylan Blvd on to concrete and grass covering a 15' x 15' area, 1/2 concrete and 1/2 grass. No sewers or waterways affected, no smoke or fire. Cleanup pending crews. 8/3/04 @ 0010 hrs, Clean Ventures reports cleanup complete at 0010 hrs. 2 - 55 gallon drums of solid waste generated. A 17' x 17' area was cleaned by digging and power washing. Cleanup was treated as 50-499 ppm. Waste consists of grass and soil, speedy dry, diapers, socks. As per Ann Ip (EH&S Representative) who visited the spill site on 8/3/04, the total area cleaned was 10'x12' - this included a 5'x7'x3 of grass area which was removed and the remaining concrete area power washed with Seawash and water. Speedy dry, diapers and socks were used as the absorbents as stated above. In addition, the affected area should be no bigger than 10'x12' because area beyond this appeared very clean and there was no sign of oil stain. As per Construction Underground the joint and cable were removed and replaced with new cable and two joints on 8/3/04."
Remarks:	"faulty cable joint caused the 2 gallon spill.clean up pending crew.reference number 154647"

Material:

Site ID:	276009
Operable Unit ID:	887787
Operable Unit:	01
Material ID:	488785
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

G22 **THOMPKINS AND** **NY Spills** **S103273979**
NNE **LILY POND AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.172 mi.
909 ft. **Site 1 of 3 in cluster G**

Relative:
Lower

Actual:
68 ft.

SPILLS:

Facility ID:	9801317
Facility Type:	ER
DER Facility ID:	258227
Site ID:	320518
DEC Region:	2
Spill Date:	1998-04-30
Spill Number/Closed Date:	9801317 / 1998-05-01
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1998-04-30
CID:	270
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Fire Department
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1998-04-30
Spill Record Last Update:	1998-05-22
Spiller Name:	10013
Spiller Company:	SUPREME TRUCKING
Spiller Address:	70 BOWERY STREET
Spiller City,St,Zip:	NY, NY
Spiller Company:	001
Contact Name:	FUCHS DISPT 120
Contact Phone:	(718) 494-4261
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE CLEANED BY FD (RESCUE 5). DRUMS OF WASTE PICK UP BY CHEMICAL WASTE MANAGEMENT FOR RP. "
Remarks:	"UNKNOWN SPECIFICS OF SPILL FIRE DEPT REQ CALL BACK ASAP"

Material:

Site ID:	320518
Operable Unit ID:	1061953
Operable Unit:	01
Material ID:	323251
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	50.00
Units:	Gallons
Recovered:	50.00
Resource Affected:	Not reported
Oxygenate:	Not reported

THOMPKINS AND (Continued) **S103273979**

Tank Test:

H23
SE
1/8-1/4
0.174 mi.
917 ft.

Relative:
Lower

Actual:
75 ft.

POLE #27643 **NY Spills** **S105141384**
81-83 MCLEAN AVE **N/A**
STATEN ISLAND, NY

Site 1 of 2 in cluster H

SPILLS:

Facility ID:	0105058
Facility Type:	ER
DER Facility ID:	242768
Site ID:	300108
DEC Region:	2
Spill Date:	2001-08-09
Spill Number/Closed Date:	0105058 / 2003-07-23
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2001-08-09
CID:	389
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2001-08-09
Spill Record Last Update:	2003-07-24
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	NEW YORK, NY 10003
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL E2MIS 138835 8/9/01...1725 hrs...Employee K.Carl notified the Control Center that at 1715 hrs. he discovered a dielectric fluid leak from 33KV aerial cable on pole 27643 at 81 - 83 McClean Ave. approx. 3 pts of fluid leaked onto the ground beneath pole 27643. There were also 4 automobiles impacted, all with a few droplets each on the surface of the cars. 1. An Audi, NY plate # N11-8PB owned by Corrine Beshner of 830 Howard Ave., Apt. # 4B, 10301. 2. A 1998 Saturn, NY plate # K15-OXX, owned by Kathleen Cogan of 83 Mcclean Ave.. 3. A 1989 Plymouth also owned by Ms. Cogan NY plate # CR8-70K. 4. An Oldsmobile, NY plate # AEC- 6340,owner unknown at this time. Mr. Carl and Supervisor R.Moloughney Double-washed the vehicles with citrus clean and told the owners to bring them to car washes and submit bills to Con Ed for reimbursement. CDUG Supervisor G.Conroy

POLE #27643 (Continued) **S105141384**

and a UG crew are on site and will perform cleanup of the impacted ground beneath the pole. Spill will be treated as 50-499 ppm pcbs. There were no sewers or waterways involved. Also there was no smoke or fire condition...CIG notified..(Pete Maguire) at 1833 hrs.....T.Bergendale..# 23178. 8/9/01...1915 hrs..UPDATE...1920 hrs. CDUG Supervisor G.Conroy notified the Control Center that he and his crews completed cleanup activities at this location. Employees R.Mazza, D.Laroy, and R.Pizzo cleaned up impacted soil beneath pole 27643. They double washed the adjacent roadway area with citrus cleaner and speedy dry , dug up and removed an area of soil approx. 1' x 2' x 4'' deep, and filled one barrel that was brought to VBSC to be disposed of as hazardous waste. The field Foreman stated he could not obtain a sample of the spilled material. T/S installed plastic bag around leaking joint until feeder can be deenergized to make permanent repair. S.I. ES & H Rep. L.Lukshides notified at 1930 hrs.....T.Bergendale..# 23178. UPDATE 8/14/01 As per G. Conroy the roadway area which was double washed and rinsed was 2'x3' and the cable (not a joint) was wrapped with an absorbent pad and then bagged.....G. Triolo, #01868. UPDATE 1/3/02 1120 Hrs. As per Construction Underground cable was repaired on 12/20/01...G. Triolo, #01868."

Remarks: "caller reporting a spill of material from a leaking arial cable which leaked 3 onces of mateial onto 3 cars. "

Material:

Site ID:	300108
Operable Unit ID:	843532
Operable Unit:	01
Material ID:	533537
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	3.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

I24 **GATX TERMINAL** **NY Spills** **S104652169**
SSE **4TH AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.184 mi.
971 ft. **Site 1 of 5 in cluster I**

Relative:
Lower

Actual:
50 ft.

SPILLS:

Facility ID:	0001041
Facility Type:	ER
DER Facility ID:	231426
Site ID:	285402
DEC Region:	2
Spill Date:	2000-04-26
Spill Number/Closed Date:	0001041 / 2002-10-29
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response.

GATX TERMINAL (Continued) **S104652169**

	Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	GDBREEN
Referred To:	Not reported
Reported to Dept:	2000-04-26
CID:	270
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Affected Persons
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-04-26
Spill Record Last Update:	2002-10-29
Spiller Name:	CALLER
Spiller Company:	GATX TERMINAL
Spiller Address:	500 WESTERN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was BREEN Closed on 10-29-02 by George Breen on the basis of completed remediation of the area encompassed by Parcel A."
Remarks:	"caller states that it looks like old oil that came up from the ground. possibly due to rain. vac truck on the way"

Material:

Site ID:	285402
Operable Unit ID:	822715
Operable Unit:	01
Material ID:	289270
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	3.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

G25 **903 TOMPKINS AVENUE** **NY Spills** **S102150632**
NNE **903 TOMPKINS AVENUE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.185 mi.
979 ft. **Site 2 of 3 in cluster G**

Relative:
Lower

Actual:
69 ft.

SPILLS:

Facility ID:	9506154
Facility Type:	ER
DER Facility ID:	182852
Site ID:	221091
DEC Region:	2
Spill Date:	1995-08-18
Spill Number/Closed Date:	9506154 / 1995-08-18
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SMMARTIN
Referred To:	Not reported
Reported to Dept:	1995-08-18
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Responsible Party
Cleanup Ceased:	1995-08-18
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-09-27
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MARTINKAT "
Remarks:	"BROKEN LINE IN CELLAR AREA - BEING CLEANED UP NOW"

Material:

Site ID:	221091
Operable Unit ID:	1017039
Operable Unit:	01
Material ID:	364132
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

903 TOMPKINS AVENUE (Continued) **S102150632**

Tank Test:

26
WNW
1/8-1/4
0.187 mi.
985 ft.

78 CLARADON LN
STATEN ISLAND, NY 10305

EDR Hist Cleaner **1015095212**
N/A

Relative:
Lower

Actual:
112 ft.

EDR Historical Cleaners:

Name:	KNICKERBOCKER LAUNDROMAT LLC
Year:	2004
Address:	78 CLARADON LN
Name:	KNICKERBOCKERS LAUNDROMAT LLC
Year:	2005
Address:	78 CLARADON LN
Name:	KNICKERBOCKERS LAUNDROMAT LLC
Year:	2006
Address:	78 CLARADON LN

G27
NNE
1/8-1/4
0.187 mi.
985 ft.

VERRAZANO NARROWS BRIDGE FACILITY
1 LILLY POND AVE - VNB PLZ
STATEN ISLAND, NY 10305

Site 3 of 3 in cluster G

RCRA-SQG **1010566778**
NYR000154252

Relative:
Lower

Actual:
67 ft.

RCRA-SQG:

Date form received by agency:	06/09/2010
Facility name:	VERRAZANO NARROWS BRIDGE FACILITY
Facility address:	1 LILLY POND AVE - VNB PLZ STATEN ISLAND, NY 10305
EPA ID:	NYR000154252
Mailing address:	BROADWAY - 21ST FLOOR MTA BRIDGES & TUNNELS - TBTA NEW YORK, NY 10004
Contact:	GEORGE BASSIL
Contact address:	BROADWAY - 21ST FLOOR MTA BRIDGES & TUNNELS - TBTA NEW YORK, NY 10004
Contact country:	US
Contact telephone:	(646) 252-7010
Contact email:	GBASSIL@MTABT.ORG
EPA Region:	02
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TRIBOROUGH BRIDGE & TUNNEL AUTH
Owner/operator address:	BROADWAY 21ST FLOOR NEW YORK, NY 10004

VERRAZANO NARROWS BRIDGE FACILITY (Continued) **1010566778**

Owner/operator country: US
Owner/operator telephone: (646) 252-7020
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 05/25/1950
Owner/Op end date: Not reported

Owner/operator name: MTA BRIDGES AND TUNNELS - TBTA
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 05/25/1950
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

Historical Generators:
Date form received by agency: 12/11/2007
Site name: VERRAZANO NARROWS BRIDGE FACILITY
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

VERRAZANO NARROWS BRIDGE FACILITY (Continued) **1010566778**

Date form received by agency: 12/10/2007
Site name: VERRAZANO NARROWS BRIDGE FACILITY
Classification: Small Quantity Generator

Violation Status: No violations found

F28 **ON ROADWAY** **NY Spills** **S106737366**
SSE **MCLEAN /CONGER ROAD** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.189 mi.
997 ft. **Site 2 of 7 in cluster F**

Relative:
Lower

Actual:
45 ft.

SPILLS:

Facility ID:	0411957
Facility Type:	ER
DER Facility ID:	272622
Site ID:	337282
DEC Region:	2
Spill Date:	2005-02-09
Spill Number/Closed Date:	0411957 / 2005-02-22
Spill Cause:	Equipment Failure
Spill Class:	Not reported
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	2005-02-09
CID:	444
Water Affected:	Not reported
Spill Source:	Passenger Vehicle
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2005-02-09
Spill Record Last Update:	2005-02-22
Spiller Name:	RACHEL KRON
Spiller Company:	ON ROADWAY
Spiller Address:	MCLEAN /CONGER ROAD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	RACHEL KRON
Contact Phone:	(718) 243-4581
DEC Memo:	"02-22-05: 2 buses hit a road plates causing damage to oil pan. Approximately 5 gallons was lost from each bus. The road plates were over a Keyspan excavation. Keyspan contained and clean the spills."
Remarks:	"A N EXCAVATION ON THE ROAD WAS UNPROPERLY COVERED AND THE BUS HIT IT AND IT POKED A HOLE IN THE PAN ON THE BUS: 1/2 GALLON SPILLED AND WENT INTO THE EXCAVATION :"

Material:

Site ID:	337282
Operable Unit ID:	1099260
Operable Unit:	01
Material ID:	579578
Material Code:	0015
Material Name:	motor oil

ON ROADWAY (Continued) **S106737366**

Case No.:	Not reported
Material FA:	Petroleum
Quantity:	10.00
Units:	Gallons
Recovered:	10.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

J29 **STATEN ISLAND PCB** **NY Spills** **S102671102**
North **171 GARFIELD AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.193 mi.
1020 ft. **Site 1 of 7 in cluster J**

Relative:
Lower

Actual:
63 ft.

SPILLS:

Facility ID:	8602292
Facility Type:	ER
DER Facility ID:	160752
Site ID:	192786
DEC Region:	2
Spill Date:	1986-07-07
Spill Number/Closed Date:	8602292 / 1986-07-08
Spill Cause:	Other
Spill Class:	Not reported
SWIS:	4301
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1986-07-08
CID:	Not reported
Water Affected:	NONE
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	1986-07-08
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1986-07-09
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	CON ED
Spiller Address:	171 GARFIELD AVE
Spiller City,St,Zip:	STATEN ISLAND, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was "
Remarks:	"PCB>30PPM CON ED CLEANUP"

Material:

Site ID:	192786
Operable Unit ID:	899702
Operable Unit:	01
Material ID:	478744

STATEN ISLAND PCB (Continued) **S102671102**

Material Code:	0017A
Material Name:	PCB oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	200.00
Units:	Gallons
Recovered:	200.00
Resource Affected:	Not reported
Oxygenate:	Not reported
Site ID:	192786
Operable Unit ID:	899702
Operable Unit:	01
Material ID:	478745
Material Code:	0630A
Material Name:	nonene
Case No.:	Not reported
Material FA:	Other
Quantity:	.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

F30 **J O TAILOR INC** **RCRA NonGen / NLR** **1000140837**
SSE **134 MCCLEAN AVE** **FINDS** **NYD981486376**
1/8-1/4 **STATEN ISLAND, NY 10305** **ECHO**
0.196 mi.
1035 ft. **Site 3 of 7 in cluster F**

Relative:
Lower

Actual:
51 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/01/2007
Facility name:	J O TAILOR INC
Facility address:	134 MCCLEAN AVE STATEN ISLAND, NY 10305
EPA ID:	NYD981486376
Mailing address:	MCCLEAN AVE STATEN ISLAND, NY 10305
Contact:	Not reported
Contact address:	MCCLEAN AVE STATEN ISLAND, NY 10305
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	JOE BUONVIAGGIO
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	(212) 555-1212
Legal status:	Private

J O TAILOR INC (Continued) **1000140837**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: JOE BUONVIAGGIO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, WY 99999
Owner/operator country: US
Owner/operator telephone: (212) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/01/2006
Site name: J O TAILOR INC
Classification: Not a generator, verified

Date form received by agency: 12/31/1979
Site name: J O TAILOR INC
Classification: Not a generator, verified

. Waste code: NONE
. Waste name: None

Violation Status: No violations found

FINDS:

Registry ID: 110009472784

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

J O TAILOR INC (Continued) **1000140837**

Registry ID: 110004397992

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

AIR MINOR

ECHO:

Envid:	1000140837
Registry ID:	110004397992
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110004397992
Envid:	1000140837
Registry ID:	110009472784
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110009472784

F31 **MCCLEAN CLEANERS** **RCRA NonGen / NLR** **1000133701**
SSE **134 MCCLEAN AVE** **ICIS** **NYD981087687**
1/8-1/4 **STATEN ISLAND, NY 10305** **US AIRS**
0.196 mi. **NY MANIFEST**
1035 ft. **Site 4 of 7 in cluster F**

Relative:
Lower

Actual:
51 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/01/2007
Facility name:	MCCLEAN CLEANERS
Facility address:	134 MCCLEAN AVE STATEN ISLAND, NY 10305
EPA ID:	NYD981087687
Mailing address:	MCCLEAN AVE STATEN ISLAND, NY 10305
Contact:	SUNG KEUN KIM
Contact address:	MCCLEAN AVE STATEN ISLAND, NY 10305
Contact country:	US
Contact telephone:	(718) 447-1482

MCCLEAN CLEANERS (Continued) **1000133701**

Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: SUNG KEUN KIM
Owner/operator address: 134 MCCLEAN AVE
STATEN ISLAND, NY 10305
Owner/operator country: US
Owner/operator telephone: (718) 447-1482
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SUNG KEUN KIM
Owner/operator address: 134 MCCLEAN AVE
STATEN ISLAND, NY 10305
Owner/operator country: US
Owner/operator telephone: (718) 447-1482
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/01/2006
Site name: MCCLEAN CLEANERS
Classification: Not a generator, verified

Date form received by agency: 01/23/1997
Site name: MCCLEAN CLEANERS
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: F002

MCCLEAN CLEANERS (Continued) **1000133701**

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

ICIS:

Enforcement Action ID: NY000A0000264040061000314
FRS ID: 110004397992
Action Name: MCCLEAN CLEANERS 36085R096900314
Facility Name: MCCLEAN CLEANERS
Facility Address: 134 MCCLEAN AVE
STATEN ISLAND (SUBDIVISION), NY 103054651
Enforcement Action Type: Notice of Violation
Facility County: RICHMOND
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.598042
Longitude in Decimal Degrees: -74.066426
Permit Type Desc: Not reported
Program System Acronym: NY0000002640400610
Facility NAICS Code: 812320
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000264040061000301
FRS ID: 110004397992
Action Name: MCCLEAN CLEANERS 36085R096900301
Facility Name: MCCLEAN CLEANERS
Facility Address: 134 MCCLEAN AVE
STATEN ISLAND (SUBDIVISION), NY 103054651
Enforcement Action Type: Notice of Violation
Facility County: RICHMOND
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.598042
Longitude in Decimal Degrees: -74.066426
Permit Type Desc: Not reported
Program System Acronym: NY0000002640400610
Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:

Envid: 1000133701
Region Code: 02

MCCLEAN CLEANERS (Continued) **1000133701**

Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2000-01-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2001-01-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2002-01-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2000-11-06 00:00:00
Activity Status Date: 2000-11-06 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

MCCLEAN CLEANERS (Continued) **1000133701**

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2007-09-04 00:00:00
Activity Status Date: 2007-09-04 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-01-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2001-01-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000002640400610
Facility Registry ID: 110004397992
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2002-01-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

NY MANIFEST:
Country: USA
EPA ID: NYD981087687
Facility Status: Not reported
Location Address 1: 134 MCCLEAN AVE
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported

MCCLEAN CLEANERS (Continued) **1000133701**

Location City: STATEN ISLAND
Location State: NY
Location Zip: 10305
Location Zip 4: Not reported

NY MANIFEST:
EPAID: NYD981087687
Mailing Name: MCCLEAN CLEANERS
Mailing Contact: SUNG KEUN KIM
Mailing Address 1: 134 MCCLEAN AVE
Mailing Address 2: Not reported
Mailing City: STATEN ISLAND
Mailing State: NY
Mailing Zip: 10305
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7184471482

NY MANIFEST:
Document ID: NYB8526798
Manifest Status: C
seq: Not reported
Year: 1997
Trans1 State ID: XZ90GR501
Trans2 State ID: Not reported
Generator Ship Date: 02/18/1997
Trans1 Recv Date: 02/18/1997
Trans2 Recv Date: / /
TSD Site Recv Date: 02/21/1997
Part A Recv Date: 03/17/1997
Part B Recv Date: 03/04/1997
Generator EPA ID: NYD981087687
Trans1 EPA ID: NJD000564906
Trans2 EPA ID: Not reported
TSDF ID 1: NYD082785429
TSDF ID 2: Not reported
Manifest Tracking Number: Not reported
Import Indicator: Not reported
Export Indicator: Not reported
Discr Quantity Indicator: Not reported
Discr Type Indicator: Not reported
Discr Residue Indicator: Not reported
Discr Partial Reject Indicator: Not reported
Discr Full Reject Indicator: Not reported
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: Not reported
Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code: Not reported
Waste Code: Not reported
Waste Code: Not reported
Waste Code: Not reported
Waste Code: Not reported
Quantity: 00135
Units: P - Pounds
Number of Containers: 001

MCCLEAN CLEANERS (Continued) **1000133701**

Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Document ID:	NYG0158589
Manifest Status:	C
seq:	Not reported
Year:	1997
Trans1 State ID:	XZ90GR501
Trans2 State ID:	Not reported
Generator Ship Date:	04/28/1997
Trans1 Recv Date:	04/28/1997
Trans2 Recv Date:	/ /
TSD Site Recv Date:	04/30/1997
Part A Recv Date:	05/15/1997
Part B Recv Date:	05/15/1997
Generator EPA ID:	NYD981087687
Trans1 EPA ID:	NJD000564906
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD082785429
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00050
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

F32 **MCCLEAN CLEANERS** **NY DRYCLEANERS** **S110247259**
SSE **134 MC CLEAN AVE.** **N/A**
1/8-1/4 **STN. ISLAND, NY 10305**
0.196 mi.
1035 ft. **Site 5 of 7 in cluster F**

Relative:
Lower

Actual:
51 ft.

DRYCLEANERS:

Facility ID:	2-6404-00610
Phone Number:	718-447-1482
Region:	Not reported
Registration Effective Date:	2/7/2005

MCCLEAN CLEANERS (Continued) **S110247259**

Inspection Date:	07MAY29
Install Date:	95/03
Drop Shop:	Not reported
Shutdown:	Not reported
Alternate Solvent:	Not reported
Current Business:	Not reported

F33 **JOE THE TAILOR** **RCRA NonGen / NLR** **1010415689**
SSE **134 MCLEAN AVE** **FINDS** **NYD981482276**
1/8-1/4 **STATEN ISLAND, NY 10305** **NY MANIFEST**
0.196 mi. **ECHO**
1035 ft. **Site 6 of 7 in cluster F**

Relative:
Lower

Actual:
51 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/01/2007
Facility name:	JOE THE TAILOR
Facility address:	134 MCLEAN AVE STATEN ISLAND, NY 103054651
EPA ID:	NYD981482276
Mailing address:	MCLEAN AVE STATEN ISLAND, NY 10305
Contact:	Not reported
Contact address:	MCLEAN AVE STATEN ISLAND, NY 10305
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	FELDMAN BRUCE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	(212) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	FELDMAN BRUCE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	(212) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

JOE THE TAILOR (Continued) **1010415689**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/01/2006
Site name: JOE THE TAILOR
Classification: Not a generator, verified

Date form received by agency: 07/08/1999
Site name: JOE THE TAILOR
Classification: Not a generator, verified

Date form received by agency: 05/21/1986
Site name: JOE THE TAILOR
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004403850

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:
Country: USA
EPA ID: NYD981482276

JOE THE TAILOR (Continued) **1010415689**

Facility Status:	Not reported
Location Address 1:	134 MC CLEAN AVENUE
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	STATEN ISLAND
Location State:	NY
Location Zip:	10305
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYD981482276
Mailing Name:	JOE THE TAILOR
Mailing Contact:	JOE THE TAILOR
Mailing Address 1:	134 MC CLEAN AVENUE
Mailing Address 2:	Not reported
Mailing City:	STATEN ISLAND
Mailing State:	NY
Mailing Zip:	10305
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	0000000000

NY MANIFEST:

Document ID:	NJA0805688
Manifest Status:	C
seq:	Not reported
Year:	1990
Trans1 State ID:	000000000
Trans2 State ID:	000000000
Generator Ship Date:	03/08/1990
Trans1 Recv Date:	03/08/1990
Trans2 Recv Date:	/ /
TSD Site Recv Date:	03/08/1990
Part A Recv Date:	03/26/1990
Part B Recv Date:	03/20/1990
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported

JOE THE TAILOR (Continued) **1010415689**

Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00060
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

Document ID:	NYA8728402
Manifest Status:	C
seq:	Not reported
Year:	1988
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	03/09/1988
Trans1 Recv Date:	03/09/1988
Trans2 Recv Date:	/ /
TSD Site Recv Date:	03/09/1988
Part A Recv Date:	03/21/1988
Part B Recv Date:	03/22/1988
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	NJD000768093
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00080
Units:	P - Pounds
Number of Containers:	001
Container Type:	CF - Fiber or plastic boxes, cartons
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	100

Document ID:	NJA0443642
Manifest Status:	C
seq:	Not reported
Year:	1988
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported

JOE THE TAILOR (Continued) **1010415689**

Generator Ship Date:	06/27/1988
Trans1 Recv Date:	06/27/1988
Trans2 Recv Date:	/ /
TSD Site Recv Date:	06/27/1988
Part A Recv Date:	06/30/1988
Part B Recv Date:	07/08/1988
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00080
Units:	P - Pounds
Number of Containers:	001
Container Type:	CF - Fiber or plastic boxes, cartons
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	100
Document ID:	NJA0438676
Manifest Status:	C
seq:	Not reported
Year:	1988
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	07/22/1988
Trans1 Recv Date:	07/22/1988
Trans2 Recv Date:	/ /
TSD Site Recv Date:	07/22/1988
Part A Recv Date:	07/27/1988
Part B Recv Date:	08/09/1988
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported

JOE THE TAILOR (Continued) **1010415689**

Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00080
Units:	P - Pounds
Number of Containers:	001
Container Type:	CF - Fiber or plastic boxes, cartons
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	100

Document ID:	NJA9629014
Manifest Status:	C
seq:	Not reported
Year:	1989
Trans1 State ID:	000000000
Trans2 State ID:	000000000
Generator Ship Date:	08/24/1989
Trans1 Recv Date:	08/24/1989
Trans2 Recv Date:	/ /
TSD Site Recv Date:	08/24/1989
Part A Recv Date:	08/30/1989
Part B Recv Date:	09/01/1989
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00080

JOE THE TAILOR (Continued) **1010415689**

Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	100
Document ID:	NJA0498773
Manifest Status:	C
seq:	Not reported
Year:	1988
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	09/16/1988
Trans1 Recv Date:	09/16/1988
Trans2 Recv Date:	/ /
TSD Site Recv Date:	09/16/1988
Part A Recv Date:	09/22/1988
Part B Recv Date:	09/26/1988
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00020
Units:	P - Pounds
Number of Containers:	001
Container Type:	CF - Fiber or plastic boxes, cartons
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	100
Document ID:	NJA1362655
Manifest Status:	C
seq:	Not reported
Year:	1992
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	01/06/1992
Trans1 Recv Date:	01/06/1992
Trans2 Recv Date:	/ /

JOE THE TAILOR (Continued) **1010415689**

TSD Site Recv Date:	01/06/1992
Part A Recv Date:	01/14/1992
Part B Recv Date:	01/17/1992
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00060
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

Document ID:	NJA1434029
Manifest Status:	K
seq:	Not reported
Year:	1992
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	04/28/1992
Trans1 Recv Date:	04/28/1992
Trans2 Recv Date:	/ /
TSD Site Recv Date:	04/28/1992
Part A Recv Date:	/ /
Part B Recv Date:	06/08/1992
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported

JOE THE TAILOR (Continued) **1010415689**

Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00060
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

Document ID:	NJA1376709
Manifest Status:	C
seq:	Not reported
Year:	1992
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	02/06/1992
Trans1 Recv Date:	02/06/1992
Trans2 Recv Date:	/ /
TSD Site Recv Date:	02/06/1992
Part A Recv Date:	02/19/1992
Part B Recv Date:	02/20/1992
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00060
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels

JOE THE TAILOR (Continued) **1010415689**

Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Document ID:	NJA1439542
Manifest Status:	C
seq:	Not reported
Year:	1992
Trans1 State ID:	NJDEPS869
Trans2 State ID:	Not reported
Generator Ship Date:	03/30/1992
Trans1 Recv Date:	03/30/1992
Trans2 Recv Date:	/ /
TSD Site Recv Date:	03/30/1992
Part A Recv Date:	04/07/1992
Part B Recv Date:	04/09/1992
Generator EPA ID:	NYD981482276
Trans1 EPA ID:	ILD051060408
Trans2 EPA ID:	Not reported
TSDF ID 1:	NJD000768093
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00060
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

Click this hyperlink while viewing on your computer to access
43 additional NY_MANIFEST: record(s) in the EDR Site Report.

ECHO:

Envid:	1010415689
Registry ID:	110004403850
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110004403850

F34
SSE
1/8-1/4
0.196 mi.
1035 ft.

134 MCCLEAN AVE
STATEN ISLAND, NY 10305

Site 7 of 7 in cluster F

EDR Hist Cleaner **1014989228**
N/A

Relative:
Lower

Actual:
51 ft.

EDR Historical Cleaners:

Name:	DO MA CLEANERS INC
Year:	2002
Address:	134 MCCLEAN AVE
Name:	MCCLEAN CLEANERS INC
Year:	2003
Address:	134 MCCLEAN AVE
Name:	MC CLEAN CLEANERS INC
Year:	2005
Address:	134 MCCLEAN AVE
Name:	MC CLEAN CLEANERS INC
Year:	2006
Address:	134 MCCLEAN AVE
Name:	MCCLEAN CLEANERS INC
Year:	2007
Address:	134 MCCLEAN AVE
Name:	MCCLEAN CLEANERS INC
Year:	2008
Address:	134 MCCLEAN AVE
Name:	MC CLEAN CLEANERS INC
Year:	2010
Address:	134 MCCLEAN AVE
Name:	MC CLEAN CLEANERS INC
Year:	2011
Address:	134 MCCLEAN AVE
Name:	MC CLEAN CLEANERS INC
Year:	2012
Address:	134 MCCLEAN AVE

J35
NNE
1/8-1/4
0.201 mi.
1060 ft.

CON EDISON TRENCH 1
164 GARFIELD AVE
STATEN ISLAND, NY 10305

Site 2 of 7 in cluster J

RCRA NonGen / NLR **1014926440**
NY MANIFEST **NYP004242087**

Relative:
Lower

Actual:
63 ft.

RCRA NonGen / NLR:

Date form received by agency:	03/06/2012
Facility name:	CON EDISON TRENCH 1
Site name:	CON EDISON - TRENCH 1
Facility address:	164 GARFIELD AVE STATEN ISLAND, NY 10305
EPA ID:	NYP004242087
Mailing address:	IRVING PLACE NEW YORK, NY 10003
Contact:	DENNIS HUACON
Contact address:	Not reported

CON EDISON TRENCH 1 (Continued) **1014926440**

Not reported
Contact country: US
Contact telephone: (212) 460-2757
Contact email: Not reported
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: CONSOLIDATED EDISON COMPANY OF NY, INC.
Owner/operator address: IRVING PLACE, 15TH FL
NEW YORK, NY 10003
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/12/2011
Owner/Op end date: Not reported

Owner/operator name: CONSOLIDATED EDISON COMPANY OF NY, INC.
Owner/operator address: IRVING PLACE, 15TH FL
NEW YORK, NY 10003
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/12/2011
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: B002
. Waste name: B002

. Waste code: B007
. Waste name: B007

Historical Generators:
Date form received by agency: 10/16/2011
Site name: CON EDISON TRENCH 1
Classification: Not a generator, verified

CON EDISON TRENCH 1 (Continued) **1014926440**

Date form received by agency: 09/16/2011
Site name: CON EDISON TRENCH 1
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

NY MANIFEST:
Country: USA
EPA ID: NYP004242087
Facility Status: Not reported
Location Address 1: 164 GARFIELD AVE
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: STATEN ISLAND
Location State: NY
Location Zip: 10305
Location Zip 4: Not reported

NY MANIFEST:
EPAID: NYP004242087
Mailing Name: CONSOLIDATED EDISON
Mailing Contact: TOM TEELING
Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City: NEW YORK
Mailing State: NY
Mailing Zip: 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

NY MANIFEST:
Document ID: Not reported
Manifest Status: Not reported
seq: Not reported
Year: 2011
Trans1 State ID: MAD039322250
Trans2 State ID: MAD039322250
Generator Ship Date: 09/19/2011
Trans1 Recv Date: 09/19/2011
Trans2 Recv Date: 09/20/2011
TSD Site Recv Date: 09/24/2011
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004242087
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: MAD053452637
TSDF ID 2: Not reported
Manifest Tracking Number: 003949364FLE
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: Y
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N

CON EDISON TRENCH 1 (Continued) **1014926440**

Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H141
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	3152.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	L Landfill.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2011
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	09/17/2011
Trans1 Recv Date:	09/17/2011
Trans2 Recv Date:	09/20/2011
TSD Site Recv Date:	09/21/2011
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004242087
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	MAD053452637
TSDF ID 2:	Not reported
Manifest Tracking Number:	003949368FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	Y
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H141
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported

CON EDISON TRENCH 1 (Continued) **1014926440**

Waste Code:	Not reported
Quantity:	3420.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	L Landfill.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2011
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	09/20/2011
Trans1 Recv Date:	09/20/2011
Trans2 Recv Date:	09/21/2011
TSD Site Recv Date:	09/24/2011
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004242087
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	MAD053452637
TSDF ID 2:	Not reported
Manifest Tracking Number:	004753061FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	Y
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H141
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	3152.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	L Landfill.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported

CON EDISON TRENCH 1 (Continued) **1014926440**

Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2011
Trans1 State ID:	MAD039322250
Trans2 State ID:	NJD071629976
Generator Ship Date:	09/29/2011
Trans1 Recv Date:	09/29/2011
Trans2 Recv Date:	10/05/2011
TSD Site Recv Date:	10/15/2011
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004242087
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	TXD055141378
TSDF ID 2:	Not reported
Manifest Tracking Number:	003949409FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	N
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H040
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	5682.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	CM - Metal boxes, cases, roll-offs
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2011

CON EDISON TRENCH 1 (Continued) **1014926440**

Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	09/29/2011
Trans1 Recv Date:	09/29/2011
Trans2 Recv Date:	10/04/2011
TSD Site Recv Date:	10/14/2011
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004242087
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	TXD055141378
TSDF ID 2:	Not reported
Manifest Tracking Number:	003949410FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	N
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H040
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	13991.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	CM - Metal boxes, cases, roll-offs
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2011
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	10/06/2011
Trans1 Recv Date:	10/06/2011
Trans2 Recv Date:	10/11/2011
TSD Site Recv Date:	10/20/2011
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004242087

CON EDISON TRENCH 1 (Continued) **1014926440**

Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	TXD055141378
TSDF ID 2:	Not reported
Manifest Tracking Number:	003949426FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	N
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H040
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	14184.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	CM - Metal boxes, cases, roll-offs
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2011
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	10/06/2011
Trans1 Recv Date:	10/06/2011
Trans2 Recv Date:	10/11/2011
TSD Site Recv Date:	10/18/2011
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004242087
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	TXD055141378
TSDF ID 2:	Not reported
Manifest Tracking Number:	003949427FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	N
Discr Type Indicator:	N

CON EDISON TRENCH 1 (Continued) **1014926440**

Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H040
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	12425.0
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1.0
Container Type:	CM - Metal boxes, cases, roll-offs
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1.0
Waste Code:	B007
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported

J36 **WADSWORTH SUBSTATION** **NY Spills** **S104953119**
NNE **164 GARFIELD AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.201 mi.
1060 ft. **Site 3 of 7 in cluster J**

Relative:
Lower

Actual:
63 ft.

SPILLS:

Facility ID:	1107604
Facility Type:	ER
DER Facility ID:	187281
Site ID:	455309
DEC Region:	2
Spill Date:	2011-09-12
Spill Number/Closed Date:	1107604 / 2011-09-15
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	HRPATEL
Referred To:	Not reported
Reported to Dept:	2011-09-15
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0

WADSWORTH SUBSTATION (Continued) **S104953119**

Date Entered In Computer:	2011-09-15
Spill Record Last Update:	2011-09-16
Spiller Name:	Not reported
Spiller Company:	CON ED
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	SHAY MCATANNEY
Contact Phone:	(718) 595-4618
DEC Memo:	"09/15/11-Hiralkumar Patel. 3:37 PM:- visited site. found excavation in middle of street in front of 164 Garfield Ave. saw contractor on-site who were pumping out water/sewer from south end of excavation into main sewer line north of the excavation area. he mentioned that DEP contractor, who were repairing leaking sewer line, found contaminated soil/groundwater in north end of the excavation. sewer line is about 2 ft below street. ConEd has collected samples this morning. on-site contractor was pumping water from south end of the excavation into main sewer line. as per DEP, water/sewer in south end of excavation was not contaminated. duplicate spill. refer to spill #: 1107390. case closed."
Remarks:	"NYC DEP encountered while fixing broken sewer main - cleanup status unknown"

Material:

Site ID:	455309
Operable Unit ID:	1205460
Operable Unit:	01
Material ID:	2202312
Material Code:	0017A
Material Name:	PCB oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	0408392
Facility Type:	ER
DER Facility ID:	187281
Site ID:	333115
DEC Region:	2
Spill Date:	2004-10-29
Spill Number/Closed Date:	0408392 / 2008-05-20
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2004-10-29
CID:	408
Water Affected:	Not reported

WADSWORTH SUBSTATION (Continued) **S104953119**

Spill Source:	Unknown
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-10-29
Spill Record Last Update:	2008-05-20
Spiller Name:	ERT DESK
Spiller Company:	CON EDISON
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"e2mis no. 156034: 10/29/04 Construction Management Supervisor Ken Toomey reports that he received a report from the Chem lab stating that a sample of water that he took from standing water at Wadsworth S/S came back and contained 1500 ppm of PCBs. The area that was affected was approx. 20 ft. by 20 ft. of bluestone. Currently waiting response from E.R.T. on how to proceed with cleanup."
Remarks:	"MATERIAL IS IN WATER. GROUNDWATER IS INFILTRATED, A MOAT THAT SURROUNDS A TRANSFORMER. THAT MOAT IS UNLINED. INITAL LAB RESULTS ARE IN SHOWING 1500 PPM PCBS."

Material:

Site ID:	333115
Operable Unit ID:	1095294
Operable Unit:	01
Material ID:	575434
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	0211938
Facility Type:	ER
DER Facility ID:	187281
Site ID:	226905
DEC Region:	2
Spill Date:	2003-03-04
Spill Number/Closed Date:	0211938 / 2003-05-05
Spill Cause:	Equipment Failure
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301

WADSWORTH SUBSTATION (Continued) **S104953119**

Investigator:	KMFOLEY
Referred To:	Not reported
Reported to Dept:	2003-03-04
CID:	205
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2003-03-04
Spill Record Last Update:	2003-05-05
Spiller Name:	CALLER
Spiller Company:	CON ED
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	MANHATTAN, NY 10003
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was FOLEY Con Ed e2mis #147383: 3/4/03 @ 1030 hrs, OS Cliff Stock reports 2 gallons of Transformer oil spilled on bluestone at Wadsworth S/S. While pumping new oil into the tap changer compartment, the hose ruptured and sprayed oil onto an 8' X 3' area of bluestone. Some oil sprayed onto a PST employee Ajmal Niaz 88304. Oil got on his coat and dungarees, none on his skin no medical attention required. Oil also got on vehicle #22180. Cleanup is in progress and will be treated as non PCB because it is new oil. 3/4/03 @ 1400 hrs, Cliff Stock reports cleanup completed at 1400 hrs. 2 of bluestone removed 3' X 10' area. Vehicle 22180 thoroughly cleaned with Simple green and Pads. 2- 55 Gallon drums of debri generated and disposed of at 4400 Victory Blvd. UPDATE 3/20/03 1225 Hrs. This report is being updated to provide the following information: 1) Responsible Operation was changed from Control Center to I&A/Substation Maintenance, 2) information was added to Event Cause Screen, 3) information was added to Event Involved Person , 4) the finder was Cliff Stock, employee #19457, Operating Supervisor, Apparatus, 5) cleanup persons were Joseph Cardone and Thomas Santora, 6) cleanup supervisor was Cliff Stock and 7) the clothes (coat and dungarees) were sent out to be cleaned.....G. Triolo, #01868. 4/7/03 1250 hrs.....The ruptured hose was removed and replaced on the same day in order to complete pumping of new oil into the tap changer compartment. The ruptured hose was disposed as part of cleanup waste. This report is ready to be submitted to the DEC for closure approval....."
Remarks:	"hose rupture. cleanup in progress. spill on stone. con ed # 147383 "

Material:

Site ID:	226905
Operable Unit ID:	862951
Operable Unit:	01
Material ID:	511718
Material Code:	0020A
Material Name:	transformer oil
Case No.:	Not reported
Material FA:	Petroleum

WADSWORTH SUBSTATION (Continued) **S104953119**

Quantity:	2.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	0012695
Facility Type:	ER
DER Facility ID:	187281
Site ID:	226904
DEC Region:	2
Spill Date:	2001-02-28
Spill Number/Closed Date:	0012695 / 2003-06-24
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KMFOLEY
Referred To:	Not reported
Reported to Dept:	2001-02-28
CID:	257
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2001-02-28
Spill Record Last Update:	2003-06-24
Spiller Name:	CALLER
Spiller Company:	CON ED
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	001
Contact Name:	SEAN MCKEEVER
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was FOLEY Con Ed e2mis #135737: 2/28/2001 1320 Hours. Vincent Caccavo #41143 reported discovering a transformer oil leak from the throat compartment of transformer #1 at Wadsworth #1 Substation. The oil spilled onto leaves and pine needles on top of a cement pad in which the transformer is placed. Absorbant pads were placed to absorb the spill, and an investigation to see if any soil lay beneath the pine needles and leaves. The spill was discovered at 1315 hours and reported to #9 at 1320 hours. The amount of the spill is approximately 2 gallons of transformer oil. A liner of a bucket truck was placed underneath the throat of the transformer due to a previous spill which was full, but the actual release over the bucket was about 2 gallons. The working group reports a 12 x 12 amount of soil was affected and will be removed during clean up. As of 7/5/2000, lab sequence #00-06371 indicates the oil PCB concentration to be 17 PPM.

WADSWORTH SUBSTATION (Continued) **S104953119**

The working group were directed to take a sample and to treat the spill as 50-499 PPM. 2/28/2001 As per EHS supervisor Ann Ip the spill can be treated as non-pcb due to prior readings in 1992 and 2000. One of the two readings has to be after 9/98 to eliminate a sample and to perform clean up as non-pcb. 2/28/2001 1720 Hours. Company employee Vincent Caccavo reports clean up completed. Speedy-dri, absorbant pads and citrus cleaner utilizied in the clean up. A 12 x 12 x 4 deep section of soil removed from station. Disposal of debris to be performed in conjunction with all company rules, regulations and procedures. 3/26/01 As per Joe Castaldi Transformer scheduled to be replaced. Two drums of debris (1 solid and 1 liquid) was taken to VBSC for disposal. Employees were there for maintenance and inspection. UPDATE 12/13/01 0900 Hrs. As per I&A supervisor (Joe Castaldi), transformer was replaced on 12/6/01. After the unit was removed, it allowed the crew to perform better cleaning of the old stains (caused by previous spill) on the concrete surface. The stained area was double washed and rinsed with citri-clean and water on 12/7. Prior to the completion of this additional cleanup job, it began to rain heavily. As a result, the concrete trough (3' x 3' x 4') located next to the stained area was half-filled with water with a sheen on the top. This water (approx. 150 gal.) was pumped on 12/12/01 and it was transported to Astoria for disposal as non-PCB waste. In addition, one drum of solid waste (PPE, absorbent pads, etc.) was also generated and it will be brought back to VBSC for disposal as non-PCB waste. Since the additional cleaning was associated with the previous spill, the cleanup completion date and time is changed from 2/28/01 1720 hrs to 12/12/01 0940 hrs. 12/19/01 0850 hrs....One drum of solid waste (e.g., PPE, absorbent pads) generated from this cleanup was brought back to VBSC on 12/18 for disposal as nonhazardous waste."

Remarks: "tranform #1 leaking cleanup is in progress ref #135738"

Material:

Site ID:	226904
Operable Unit ID:	834231
Operable Unit:	01
Material ID:	542958
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	Gallons
Recovered:	2.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

J37 **CON EDISON** **NY MANIFEST** **S118090849**
NNE **164 GARFIELD AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY 10306**
0.201 mi.
1060 ft. **Site 4 of 7 in cluster J**

Relative:
Lower

Actual:
63 ft.

NY MANIFEST:

Country:	USA
EPA ID:	NYP004784914
Facility Status:	Not reported
Location Address 1:	164 GARFIELD AVE
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	STATEN ISLAND
Location State:	NY
Location Zip:	10306
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYP004784914
Mailing Name:	CON EDISON
Mailing Contact:	TOM TELLING
Mailing Address 1:	4 IRVING PLACE-15TH FLOOR
Mailing Address 2:	Not reported
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10003
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	2124603770

NY MANIFEST:

Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2015
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	05/20/2015
Trans1 Recv Date:	05/20/2015
Trans2 Recv Date:	05/22/2015
TSD Site Recv Date:	05/22/2015
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004784914
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	MAD053452637
TSDF ID 2:	Not reported
Manifest Tracking Number:	007748445FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	Y
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported

CON EDISON (Continued) **S118090849**

Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H141
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	2422
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1
Waste Code:	B002
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2015
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	05/20/2015
Trans1 Recv Date:	05/20/2015
Trans2 Recv Date:	05/22/2015
TSD Site Recv Date:	05/22/2015
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004784914
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	MAD053452637
TSDF ID 2:	Not reported
Manifest Tracking Number:	007748445FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	Y
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H141
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported

CON EDISON (Continued) **S118090849**

Quantity:	2422
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1
Waste Code:	B002
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported
Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2015
Trans1 State ID:	MAD039322250
Trans2 State ID:	MAD039322250
Generator Ship Date:	05/20/2015
Trans1 Recv Date:	05/20/2015
Trans2 Recv Date:	05/22/2015
TSD Site Recv Date:	05/22/2015
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004784914
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	MAD053452637
TSDF ID 2:	Not reported
Manifest Tracking Number:	007748445FLE
Import Indicator:	N
Export Indicator:	N
Discr Quantity Indicator:	Y
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H141
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	2422
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	1
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	1
Waste Code:	B002
Waste Code 1_2:	Not reported
Waste Code 1_3:	Not reported

CON EDISON (Continued) **S118090849**

Waste Code 1_4: Not reported
Waste Code 1_5: Not reported
Waste Code 1_6: Not reported

J38 **WADSWORTH #1 SUBSTATION** **NY Spills** **S117852445**
NNE **164 GARFIELD AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.201 mi.
1060 ft. **Site 5 of 7 in cluster J**

Relative:
Lower

Actual:
63 ft.

SPILLS:

Facility ID:	1500807
Facility Type:	ER
DER Facility ID:	187281
Site ID:	506978
DEC Region:	2
Spill Date:	2015-04-23
Spill Number/Closed Date:	1500807 / Not Reported
Spill Cause:	Unknown
Spill Class:	Not reported
SWIS:	4301
Investigator:	Con Ed Unassigned
Referred To:	Not reported
Reported to Dept:	2015-04-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	1
Date Entered In Computer:	2015-04-23
Spill Record Last Update:	2015-04-23
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 5808383
DEC Memo:	""
Remarks:	"2 oz onto 200 gallons of water - cleanup pending"

Material:

Site ID:	506978
Operable Unit ID:	1256316
Operable Unit:	01
Material ID:	2259185
Material Code:	0064A
Material Name:	unknown material
Case No.:	Not reported
Material FA:	Other
Quantity:	2.00
Units:	Not reported

WADSWORTH #1 SUBSTATION (Continued) **S117852445**

Recovered: Not reported
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

J39 **CON EDISON** **RCRA NonGen / NLR** **1019324989**
NNE **164 GARFIELD AVE** **NYP004784914**
1/8-1/4 **STATEN ISLAND, NY 10306**
0.201 mi.
1060 ft. **Site 6 of 7 in cluster J**

Relative:
Lower

Actual:
63 ft.

RCRA NonGen / NLR:
Date form received by agency: 02/05/2016
Facility name: CON EDISON
Site name: CON EDISON - OTHER - SPECIFY WADSWORTHS
Facility address: 164 GARFIELD AVE
STATEN ISLAND, NY 10306
EPA ID: NYP004784914
Mailing address: IRVING PL 15TH FL NE
NEW YORK, NY 10003
Contact: THERESA BURKARD
Contact address: IRVING PL 15TH FL NE
NEW YORK, NY 10003
Contact country: US
Contact telephone: (212) 460-2262
Contact email: BURKARDT@CONED.COM
EPA Region: 02
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: CONSOLIDATED EDISON CO OF NY INC
Owner/operator address: IRVING PL
NEW YORK, NY 10003
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 04/23/2015
Owner/Op end date: Not reported

Owner/operator name: CONSOLIDATED EDISON CO OF NY INC
Owner/operator address: IRVING PL
NEW YORK, NY 10003
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 04/23/2015
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No

CON EDISON (Continued) **1019324989**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: B002
. Waste name: B002

Historical Generators:
Date form received by agency: 05/20/2015
Site name: CON EDISON
Classification: Not a generator, verified

Date form received by agency: 05/20/2015
Site name: CON EDISON
Classification: Large Quantity Generator

Violation Status: No violations found

I40 **PRIVATE HOME** **NY LTANKS** **S108467833**
SSE **138 MCCLEAN AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.203 mi.
1070 ft. **Site 2 of 5 in cluster I**

Relative:
Lower

Actual:
55 ft.

LTANKS:

Site ID:	378084
Spill Number/Closed Date:	0613115 / 2007-03-07
Spill Date:	2007-03-06
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	hrpatel
Referred To:	Not reported
Reported to Dept:	2007-03-06
CID:	408
Water Affected:	Not reported
Spill Notifier:	DEC
Last Inspection:	Not reported
Recommended Penalty:	Not reported
UST Involvement:	Not reported
Remediation Phase:	0
Date Entered In Computer:	2007-03-06
Spill Record Last Update:	2007-03-08
Spiller Name:	MR. FARANCISCO LOPEZ

PRIVATE HOME (Continued) **S108467833**

Spiller Company:	PRIVATE HOME
Spiller Address:	138 MCCLEAN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY 10305
Spiller County:	001
Spiller Contact:	MR. FARANCISCO LOPEZ
Spiller Phone:	(917) 981-0871
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	327629
DEC Memo:	"Patel responded to the site 03/07/07-Hiralkumar Patel. visited site. met Vladimir Nabueovsky (718-986-6872), property owner. as per Mr. Nabueovsky, during construction they puched hole in return line for 275 gal # 2 UST. spilled little around tank location. removed contaminated soil. no vapors in area at time of site visit. broken return line was cut and capped. may have spilled less than 10 gal, but not 100 gal. spoke with Ms. Lopez, tenant living at 136 McClean Ave, whose tank was damaged in construction activities. owner of this building is Blaca Hernandez. as per Ms. Lopez, they contacted their oil company Petro, who will come and replace return line. all cleaned up. no odor complaints. case closed."
Remarks:	"NOT YET CLEANED; IS CONTAINED;"

Material:

Site ID:	378084
Operable Unit ID:	1135597
Operable Unit:	01
Material ID:	2125516
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	100.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

I41 **NORTH QUEENS S/S - A-PHASE POTHEAD** **NY Spills** **S108637897**
SSE **31-01 20 AVENUE - SUBSTATION** **N/A**
1/8-1/4 **QUEENS, NY**
0.213 mi.
1123 ft. **Site 3 of 5 in cluster I**

Relative:
Lower

Actual:
47 ft.

SPILLS:

Facility ID:	0702787
Facility Type:	ER
DER Facility ID:	337271
Site ID:	382579
DEC Region:	2
Spill Date:	2007-06-06
Spill Number/Closed Date:	0702787 / 2007-08-20
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

NORTH QUEENS S/S - A-PHASE POTHEAD (Continued) **S108637897**

SWIS:	4101
Investigator:	gdbreen
Referred To:	Not reported
Reported to Dept:	2007-06-06
CID:	73
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2007-06-07
Spill Record Last Update:	2007-09-28
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ -
Spiller Company:	999
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"08/20/07 - See eDocs for Con Ed report detailing cleanup and closure. 206301. see eDocs"
Remarks:	"1 pint onto soil. No to 5 questions. Clean up pending. Con Ed #206301"

Material:

Site ID:	382579
Operable Unit ID:	1139971
Operable Unit:	01
Material ID:	2130021
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

H42 **68 MCCLEAN AVE.** **NY Spills** **S102143385**
SE **68 MCCLEAN AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.214 mi.
1131 ft. **Site 2 of 2 in cluster H**

Relative:
Lower

Actual:
76 ft.

SPILLS:

Facility ID:	9208674
Facility Type:	ER
DER Facility ID:	88447
Site ID:	99554
DEC Region:	2

68 MCCLEAN AVE. (Continued) **S102143385**

Spill Date:	1992-10-27
Spill Number/Closed Date:	9208674 / 1992-11-02
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	O'DOWD
Referred To:	Not reported
Reported to Dept:	1992-10-27
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Affected Persons
Cleanup Ceased:	1992-11-02
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-10-28
Spill Record Last Update:	1992-11-02
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"OIL CO. CONTRACT CANCELLED OF 2YRS AGO-DELIVERY MADE ANYWAY-OIL ON FLOOR-NO CLEAN-UP YET-SUSPECT OIL-TO-GAS CONVERSION WITH NO TANK EXISTINGCALL BACK REQUESTED"

Material:

Site ID:	99554
Operable Unit ID:	972208
Operable Unit:	01
Material ID:	405759
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	25.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

J43 **ROADWAY WADSWORTH SUB STATION** **NY Spills** **S111238688**
NNE **164 GARFIELD AVE** **N/A**
1/8-1/4 **RICHMOND, NY**
0.216 mi.
1138 ft. **Site 7 of 7 in cluster J**

Relative:
Lower

Actual:
63 ft.

SPILLS:

Facility ID:	1107390
Facility Type:	ER
DER Facility ID:	409671
Site ID:	455087
DEC Region:	2
Spill Date:	2011-09-12
Spill Number/Closed Date:	1107390 / 2012-05-10
Spill Cause:	Unknown
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RMPIPER
Referred To:	Not reported
Reported to Dept:	2011-09-12
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2011-09-12
Spill Record Last Update:	2012-05-10
Spiller Name:	Not reported
Spiller Company:	CON ED
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-8383
DEC Memo:	"EH&S Siegel reports that Terfetto Const. Co. working for City of N.Y. repairing sanitary sewer found approx. 2 gals of unknown oil mixed in w/ 100 gals. of water in 4' x 50' open trench outside of Wadsworth S/S EMIS# 227380. 09/15/11-Hiralkumar Patel. refer to spill #: 1107604 (pics on e-docs) also. DECPiper met Con Ed Vito Mariani onsite to discuss work plan. 6 wells will be intstalled in streey , 3 on each side of sewr main to determine migration of PCBs from Wadsworth Substation from historic spill. Additionally, five onsite wells will be redeveloped and sampled for VOCS, SVOCs and PCBs. work will be conducted shortly. 5/10/12- DEC Piper received SIR. Based oon work, 1.5 ppm of pcb was detected in soil on con ed side of sewer. VOCs related to abandoned vehicles on NYC property was detected in soil and gw. Based on work to date, no further action granted. See edocs if warranted."
Remarks:	"1341 THE CALLER STATED THE SUBSTANCE IS BEING TESTED AND WILL CONTACT DISPATCH WITH UPDATE."

Material:

Site ID:	455087

ROADWAY WADSWORTH SUB STATION (Continued) **S111238688**

Operable Unit ID:	1205235
Operable Unit:	01
Material ID:	2202081
Material Code:	0063A
Material Name:	unknown hazardous material
Case No.:	Not reported
Material FA:	Hazardous Material
Quantity:	2.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

I44 **MERCURY REFINING COMPANY, INC.** **NY RGA HWS** **S114964428**
SSE **26 RAILROAD AVENUE** **N/A**
1/8-1/4 **COLONIE/GUILDERLAND, NY**
0.223 mi.
1179 ft. **Site 4 of 5 in cluster I**

Relative:
Lower

Actual:
44 ft.

RGA HWS:

2012	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2011	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2010	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2009	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2008	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2007	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2006	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2005	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
2000	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE
1997	MERCURY REFINING COMPANY, INC.	26 RAILROAD AVENUE

K45 **191 MCCLEAN AVE.** **NY Spills** **S102149702**
South **191 MCCLEAN AVENUE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.228 mi.
1204 ft. **Site 1 of 4 in cluster K**

Relative:
Lower

Actual:
75 ft.

SPILLS:

Facility ID:	9415718
Facility Type:	ER
DER Facility ID:	160101
Site ID:	191980
DEC Region:	2
Spill Date:	1995-03-04
Spill Number/Closed Date:	9415718 / 1995-03-04
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1995-03-04
CID:	Not reported

191 MCCLEAN AVE. (Continued) **S102149702**

Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	1995-03-04
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-04-17
Spill Record Last Update:	1995-04-21
Spiller Name:	Not reported
Spiller Company:	SAME
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"DRIPPING OUT OF BURNER WHICH WAS CAUSED BY A PLUGGED NOZZLE IN AN OIL FURNACE."

Material:

Site ID:	191980
Operable Unit ID:	1012899
Operable Unit:	01
Material ID:	370891
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

I46 **MANHOLE 5841** **NY Spills** **S105058203**
SSE **31ST AVE** **N/A**
1/8-1/4 **QUEENS, NY**
0.232 mi.
1227 ft. **Site 5 of 5 in cluster I**

Relative:
Lower

Actual:
41 ft.

SPILLS:

Facility ID:	0102948
Facility Type:	ER
DER Facility ID:	284904
Site ID:	234143
DEC Region:	2
Spill Date:	2001-06-16
Spill Number/Closed Date:	0102948 / 2001-06-22
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4101

MANHOLE 5841 (Continued) **S105058203**

Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2001-06-16
CID:	282
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2001-06-16
Spill Record Last Update:	2001-08-27
Spiller Name:	SAME
Spiller Company:	CON ED
Spiller Address:	4 IRVING PL
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	001
Contact Name:	CHARLIE MCCARTHY
Contact Phone:	(212) 580-6765
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL CON ED 2EMIS REPORT 6-16-01 While enroute do fault on trouble FDR in TM 5841 saw fire shooting out of transformer. When the cover was pulled the crew found there was oil shooting from the top of the transformer. There was no fire or smoke once they pulled the cover. The fire was occuring when the Hi-Voltage was pulsating. It would push the oil out and ignite it. The transformer itself was not on fire or any fire on the floor of the structure. Approx. 25gals. of transformer oil was in the structure, also 1/2pt. of transformer oil sprayed onto the sidewalk area and roadway covering a 2'x2' area. Historical records of transformer show it to be 10ppm, date 1985 (last sample) Took a liquid sample from the source. Will start cleanup as 50-499ppm. 1833hrs. Double washed sidewalk/street with slix and the grating covers with Bio Gen 760. Washed liquids were pushed from street into structure. This job will be closed. @1830 to start over 50 cleanup in line MH #829. 2025hrs. DEP Acting Director Kim Hanna and DEP Inspector Wai Man Wong were shown the spill situation and told of cleanup plans. They requested that we put a right to know PCB tag on the transformer vault. At 1930hrs. DEC Rep. Timothy Demeo arrived on location and was shown the spill ara and informed of cleanup plans. The transformer was made safe to work on at 2010hrs. LSN 01-06614-001 Clenaup proceeding at this time. 6-17-01 0115hrs. Partial cleanup was completed by double washing and using Bio Gen 760 as of this 0100hr. >50 tanker drained unit and removed all liquids from structure. Found earthen sump. Tag left in place pending removal and replacement of transformer. Samples of earthen sump will be taken at that time. 6-20-01 1050hrs. Quantity of oildrained frm transformer is 252 gals 8 gals. of oil removed from structure. Transformer is scheduled for replacement 6-21-01. 6-21-01 1420hrs. Env. Ops reports triple washed structure using Bio Gen 760 found sump cemented. Transformer crew on location to replace unit. Transformer in vault ha sbeen replaced on 6-21-01u "
Remarks:	"thier was a fire in the transformer.oil coming out of the transformer was on fire.thier was a arching in the hole. "

MANHOLE 5841 (Continued) **S105058203**

Material:

Site ID:	234143
Operable Unit ID:	839539
Operable Unit:	01
Material ID:	535049
Material Code:	0020A
Material Name:	transformer oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	25.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

L47 **CAMILLE DOGERY HOME** **NY LTANKS S105055225**
South **15 JACKSON AVE** **NY Spills N/A**
1/8-1/4 **STATEN ISLAND, NY 10305**
0.233 mi.
1229 ft. **Site 1 of 2 in cluster L**

Relative:
Lower

Actual:
56 ft.

LTANKS:

Site ID:	305928
Spill Number/Closed Date:	0103611 / 2006-03-30
Spill Date:	2001-07-03
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	SMSANGES
Referred To:	Not reported
Reported to Dept:	2001-07-03
CID:	404
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2001-07-03
Spill Record Last Update:	2006-03-30
Spiller Name:	Not reported
Spiller Company:	CAMIL DOGERY
Spiller Address:	15 JACKSON AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller County:	001
Spiller Contact:	CAMIL DOGERY
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	247105

CAMILLE DOGERY HOME (Continued) **S105055225**

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was SANGESLAND Homeowner: Camil Dogery (718-981-1150) 7/3/2001 Sangesland received a call of a leak from a tank Sangesland spoke with NYC Fire Chief Posovitz who was on site. Approved Oil (718-238-1050) made a delivery on 7/3 early AM. Later in the day there was oil running down the driveway. The oil burner / tank room is on a cement slab at grade level. There was a hole in the tank which let oil drop to the boiler room floor. The oil then poured out through a crack in the wall onto the side driveway. NYC FD was on site and did initial clean up (laid speedie dry)and drained part of the fuel oil tank. Approved Oil had a service rep on site who installed a temporary magnet patch to the tank. Later in the day Petroleum Tank Cleaners came and swept up the FD speedie dry (2 drums?) and removed the drum (3rd drum) of heating oil. PTC then laid down additional drysol (speedie dry). Sweet Claims was called by Approved Oil. Sweet Claims says the tank failed and that is the responsibility of the homeowner. 7/5/2001 Sangesland spoke with the homeowner again. She said NYC DEP was on site (checking for impacts to drains & sewers). This DEP rep indicated that the fault was with the oil company. Sangesland repeated that if the oil company made a typical delivery and did not force the tank in any way, and nothing came out of the vent line, and the tank just failed , then it is the responsibility of the homeowner. The homeowner was directed to repair or replace the tank, clean the area and then apply epoxy paint to the boiler room floor. 7/6-2001 Allstate- Carl Dujmich - 718 370-6860 (homeowner's insurance) called DEC to ask what happened at the site. Sangesland read the above information to Mr. Dujmich. Mr. Dujmich specifically wanted a statement of what work would be needed to close out this spill number. 8/7/2001 Sweet Claims Submitted a FOIL request on behalf of Highlands Insurance Company (insurance company of Approved Oil) This spill number has been closed and consolidated with Spill #0103616 which remains open."

Remarks: "tank leak caused unknown amount of fuel oil to spill onto ground."

Material:

Site ID:	305928
Operable Unit ID:	842150
Operable Unit:	01
Material ID:	535684
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

SPILLS:

Facility ID:	0103616
Facility Type:	ER
DER Facility ID:	369999

CAMILLE DOGERY HOME (Continued) **S105055225**

Site ID:	305929
DEC Region:	2
Spill Date:	2001-07-03
Spill Number/Closed Date:	0103616 / 2009-11-04
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RVKETANI
Referred To:	Not reported
Reported to Dept:	2001-07-03
CID:	404
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Fire Department
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2001-07-03
Spill Record Last Update:	2009-11-05
Spiller Name:	CAMILLE DOGERY
Spiller Company:	CAMILLE DOGERY
Spiller Address:	15 JACKSON AVENUE
Spiller City,St,Zip:	STATEN ISLAND, NY 10305
Spiller Company:	999
Contact Name:	CAMILLE DOGERY
Contact Phone:	(718) 981-1150
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was M TIBBE APPROVED OIL (674 5TH AVE, BK 718-238-1050) MADE A FUEL DELIVERY EARLIER THIS DAY. TANK RUPTURED, UNKNOWN TO DELIVERY COMPANY AND HOMEOWNER. APPROVED CALLED INSURANCE CO (COUNTRY WIDE 516-357-8200). THET WERE SENDING OVER SWEETS CLEANUP. Homeowner: Camil Dogery (718-981-1150) 7/3/2001 Sangesland received a call of a leak from a tank Sangesland spoke with NYC Fire Chief Posovitz who was on site. Approved Oil (718-238-1050) made a delivery on 7/3 early AM. Later in the day there was oil running down the driveway. The oil burner / tank room is on a cement slab at grade level. There was a hole in the tank which let oil drop to the boiler room floor. The oil then poured out through a crack in the wall onto the side driveway. NYC FD was on site and did initial clean up (laid speedie dry)and drained part of the fuel oil tank. Approved Oil had a service rep on site who installed a temporary magnet patch to the tank. Later in the day Petroleum Tank Cleaners came and swept up the FD speedie dry (2 drums?) and removed the drum (3rd drum) of heating oil. PTC then laid down additional drysol (speedie dry). Sweet Claims was called by Approved Oil. Sweet Claims says the tank failed and that is the responsibility of the homeowner. 7/5/2001 Sangesland spoke with the homeowner again. She said NYC DEP was on site (checking for impacts to drains & sewers). This DEP rep indicated that the fault was with the oil company. Sangesland repeated that if the oil company made a typical delivery and did not force the tank in any way, and nothing came out of the vent line, and the tank just failed , then it is the responsibility of the homeowner. The homeowner was directed to repair or replace the tank, clean the area and then apply epoxy paint to the

CAMILLE DOGERY HOME (Continued) **S105055225**

boiler room floor. 7/6-2001 Allstate- Carl Dujmich - 718 370-6860 (FAX number for homeowner's insurance) called DEC to ask what happened at the site. Sangesland read the above information to Mr. Dujmich. Mr. Dujmich specifically wanted a statement of what work would be needed to close out this spill number. 8/7/2001 Sweet Claims Submitted a FOIL request on behalf of Highlands Insurance Company (insurance company of Approved Oil) Cross Ref to Spill #0103611 10/2/09 - Austin - Spill transferred from Albany staff (DA Tromp) to Ketani, for further investigation - end 10/23/01 - Raphael Ketani. The spill took place on 7/3/01. It involved the release of #2 oil due to the failure of a 275 gal. AST in the basement of the home. The leak was noticed when the oil seeped through the wall of the house and was seen running on the driveway. The site is a private home at 15 Jackson Avenue, S.I., 10305. It is still owned by Camille Dogery (718) 981-1150. There is a listing in the phone book for a Frank Dogery at (718) 818-0472. There is no case file, nor any E-docs. 10/26/09 - Raphael Ketani. I tried calling Ms. Dogery, but no one picked up the phone and there was no answering machine. I then called Frank Dogery's number, but it was not in service. 11/4/09 - Raphael Ketani. I attempted a site visit today. No one was home when I reached the site. The home is very long (maybe 70 feet) and looks like two home joined end to end. At the back end of the home, there is a vent pipe and a fill port which are protruding through a wall. The vent and fill are under a second floor overhang. I saw no signs of an oil spill. At about 3:30PM, Ms. Dogery called me. She said that she had arrived home to find oil flowing like a river from under a first floor door. The oil was flowing down her driveway. She added that the tank is against this door and the floor is pitched. The whole tank room was filled with oil from a small hole at the bottom of the tank. Ms. Dogery said that Approved Oil had made a delivery that day and the tank gave way. The Fire Department came quickly and sucked out the tank and put down absorbent sand. Then a cleanup crew arrived (she wasn't sure of the name) and put down more sand and drummed up the oil. She said that she had a lot of belongings in the tank room in boxes. The cleanup crew threw them out. The insurance company didn't reimburse her for the damaged belongings. Ms. Dogery said that the cleanup crew gave her a lot of absorbent sand and she put it down as she needed. The odors were very bad upstairs, but it was August 2001 and she had the windows open. The living room is at the back of the house, and the dog smelled the vapors and threw up. However, she said, the dog was fine, otherwise. Allstate had the cleanup crew power wash the tank room floor. I asked her how the floor was at that time. She said that it was in good condition. I asked her whether there were any cracks. She said no and that she painted the floor after it was dry and clean. She said that the vapors were bad for two days, but the absorbent sand helped. Ms. Dogery said that there haven't been any odors in the home for a very long time and she hasn't seen any signs of the oil. Once things were over with, she had the tank patched. There haven't been any leaks since. I advised her to get a new tank as it is pretty old and may leak again. I called up Approved Oil and spoke to Robert Thora (718) 238-1050. I asked him whether he had any documents describing the cleanup activities. He said that he didn't have any records and so he will contact the company he used to have insurance with. He will see whether they have any records. As there were no signs of the oil spill on the driveway or next to the tank room door, and as Ms. Dogery told me that the home has been odor free for years and that

CAMILLE DOGERY HOME (Continued) **S105055225**

the tank hasn't leaked again, I am closing the spill case. "
Remarks: "oil tank leaking 50-75 gallons of fuel oil. fire department on scene cleaning up spill."

Material:
Site ID: 305929
Operable Unit ID: 840230
Operable Unit: 01
Material ID: 535690
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 50.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

K48 **SPILL NUMBER 0102690** **NY Spills** **S105055914**
SSW **251 MCCLEAN AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.235 mi.
1239 ft. **Site 2 of 4 in cluster K**

Relative:
Lower

Actual:
78 ft.

SPILLS:
Facility ID: 0102690
Facility Type: ER
DER Facility ID: 159831
Site ID: 191627
DEC Region: 2
Spill Date: 2001-06-11
Spill Number/Closed Date: 0102690 / 2003-07-17
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: JHOCONNE
Referred To: Not reported
Reported to Dept: 2001-06-11
CID: 382
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2001-06-11
Spill Record Last Update: 2003-07-17
Spiller Name: SAME
Spiller Company: CON ED
Spiller Address: 4 IRVING PL

SPILL NUMBER 0102690 (Continued) **S105055914**

Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	001
Contact Name:	PETER MCQUIRE
Contact Phone:	(212) 580-6765
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL Con Ed e2mis #137593: 06/11/01 11:40 M. Maluk Emp# 36103 (SSO) responding to a B Ticket (down wire) reports leaking aerial joint front of 251 McClean ave. Approx 1 oz in drops on concrete walkway and on grass. 06/11/01 1330 Troubleshooter John Lindstrom bagged joint. 06/11/01 14:04 supv Neville reports spill cleaned up witn speedy dry and double washed with slix and rinsed with citrus cleaner. removed 3 in wide 2in. deep and 4 feet long section of land on both sides along side of concrete walkway between sidewalk and curb by R Pizzo and M Burhart. Half drum of debris was delivered to victory blvd serv center as hazardous waste cleanup complete 14:04. Update 6/12/01 1705 hrs Walter Kissel reported that more soil was removed from the area in two sections along side of concrete walkway between sidewalk and curb in f/o 251 McClean Ave. (area for each section removed was 4' x 1' x 2) the debris was placed into a barrel and delivered to Victory Blvd Service Center as hazardous waste (50 -499 PPM PCB) for disposal. This was done in order to comply with requirements specified in the EPA PCB Spill Clean Up policy (a one foot buffer is required). "
Remarks:	"drops of oil leaking from ariel joint onto sidewalk at grass. awaiting samples. clean up pending. con ed 137-593"

Material:

Site ID:	191627
Operable Unit ID:	839350
Operable Unit:	01
Material ID:	534802
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

M49 **ROADWAY POLE #56035** **NY Spills** **S110752283**
SSE **200-11 34TH AVE** **N/A**
1/8-1/4 **QUEENS, NY**
0.237 mi.
1254 ft. **Site 1 of 7 in cluster M**

Relative:
Lower

Actual:
38 ft.

SPILLS:

Facility ID:	1011590
Facility Type:	ER
DER Facility ID:	400311
Site ID:	445475
DEC Region:	2
Spill Date:	2011-02-19
Spill Number/Closed Date:	1011590 / 2011-03-22

ROADWAY POLE #56035 (Continued) **S110752283**

Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4101
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2011-02-19
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2011-02-19
Spill Record Last Update:	2011-03-22
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-8383
DEC Memo:	"emis report in edocs. 3/22/11 - Austin - C50 gal. pole transformer spill due to weather, impacted pavement - on Ed contained and cleaned up the spill - See eDocs for further info - Spill closed - end"
Remarks:	"1639 THE CALLER ADVISED DISPATCH THE SPILL WAS DUE TO SEVERE WINDS. NO WATER OR SOIL HAS BEEN IMPACTED. CLEAN UP IS PENDING."

Material:

Site ID:	445475
Operable Unit ID:	1195860
Operable Unit:	01
Material ID:	2191945
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	50.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

50
WNW
1/8-1/4
0.239 mi.
1262 ft.

26 RODERICK AVE
STATEN ISLAND, NY 10305

EDR Hist Cleaner **1015029833**
N/A

Relative:
Lower

Actual:
110 ft.

EDR Historical Cleaners:

Name:	GRACE CLEANER
Year:	2006
Address:	26 RODERICK AVE

M51
SSE
1/8-1/4
0.241 mi.
1273 ft.

CONSOLIDATED EDISON
36 AVE 50' W OF 22 ST
QUEENS, NY

Site 2 of 7 in cluster M

NY MANIFEST **1009242186**
N/A

Relative:
Lower

Actual:
37 ft.

NY MANIFEST:

Country:	USA
EPA ID:	NYP004109419
Facility Status:	Not reported
Location Address 1:	36 AVE 50' W OF 22 ST
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	QUEENS
Location State:	NY
Location Zip:	Not reported
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYP004109419
Mailing Name:	CONSOLIDATED EDISON
Mailing Contact:	FRANKLIN MURRAY
Mailing Address 1:	4 IRVING PLACE RM 828
Mailing Address 2:	Not reported
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10003
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	2124602808

NY MANIFEST:

Document ID:	NYE0676152
Manifest Status:	Not reported
seq:	01
Year:	2003
Trans1 State ID:	46690JM
Trans2 State ID:	Not reported
Generator Ship Date:	04/03/2003
Trans1 Recv Date:	04/03/2003
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	04/04/2003
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP004109419
Trans1 EPA ID:	NYD006982359
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD077444263

CONSOLIDATED EDISON (Continued) **1009242186**

TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	B007 - OTHER MISCELLANEOUS PCB WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00063
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	L Landfill.
Specific Gravity:	01.00

M52 **SMELL OF FUEL** **NY Spills** **S117268041**
SSE **37TH AVE AND 78TH STREET** **N/A**
1/8-1/4 **QUEENS, NY**
0.243 mi.
1282 ft. **Site 3 of 7 in cluster M**

Relative:
Lower

Actual:
39 ft.

SPILLS:

Facility ID:	1403379
Facility Type:	ER
DER Facility ID:	451733
Site ID:	496734
DEC Region:	2
Spill Date:	2014-06-28
Spill Number/Closed Date:	1403379 / 2014-07-02
Spill Cause:	Unknown
Spill Class:	Not reported
SWIS:	4101
Investigator:	HRPATEL
Referred To:	Not reported
Reported to Dept:	2014-06-28
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2014-06-28

SMELL OF FUEL (Continued) **S117268041**

Spill Record Last Update: 2014-07-02
Spiller Name: Not reported
Spiller Company: UNKNWON
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: NANCY LAMBERT
Contact Phone: 6467345462
DEC Memo: "06/30/14-Hiralkumar Patel. 12:16 PM:- spoke with Ms. Lambert. she lives at 35-50 78th Street. she smelled heating oil for about a week, but not continuously. she has already checked boiler in her own building, but found no issues. she did not smelled any odors after 06/28/14. provided duty desk number to Ms. Lambert and asked her to call back if odors noted again. after discussing with DEC Austin, case closed based on available information. 7/1/14 - Obligado - Voice mail from Nancy Lambert. whole block wreeks of oil . The address is 78th st and 37th Ave. 646-734-5462 07/01/14-Hiralkumar Patel. based on odor complaint from Ms. Lambert, case re-opened. 9:55 AM:- left message for Ms. Lambert.
-

-*-*-*-*-*-*-*-*-*-* alternate address for 35-50 78th Street: 35-50 to 35-56 78th Street no spill record found for 35-50 78th St. PBS #: 2-292230 for 35-50 78th Street. as per PBS record, site has one 3,000 gal #6 oil AST in contact with soil. the tank was installed in Jan. 1937. as per NYC DOB record, a permit was approved on 08/02/2000 for building 35-50 78th Street for change in fuel grade from #6 to #2 oil. Jackson 78 Condominum **owner of 35-50 78th St** c/o SLJ Property Management Attn.: Ruben Ramirez **property manager** PH. (718) 539-2022 Ext. 103 as per PBS record, the site has #6 oil tank; but as per NYC DOB permit dated 08/02/2000, application was filed to change fuel grade from #6 to #2 oil.
-

-*-*-*-*-*-*-*-*-*-* 10:14 AM:- left message for Mr. Ramirez. 12:13 PM:- received call from Ms. Lambert. she lives on 6th floor (top floor) of multi-unit residential building. her unit is in southern end of the building, close to 37th Ave. last night, when she came out of subway, she noticed petroleum odors in neighbourhood with strongest level at the intersection of 37th Ave and 78th St. she confirmed that there were no odors this morning. she also confirmed that there are no odors within her building. she mentioned that there was a boiler issue in adjancent building (77-01 to 77-19 37th Ave) during winter. she also mentioned about a vent from a restaurant at the adjacent property.
-

-*-*-*-*-*-*-*-*-*-* alternate addresses for 77-01 37th Ave: 77-01 to 77-19 37th Ave, 35-57 to 35-59 77th Street, 35-58 to 35-60 78th St PBS #: 2-097888. as per PBS record, building 77-01 37th Ave has one 1,500 gal #2 oil AST in cotact with soil. the tank was installed in Jul. 1975. S & F CO., LLC. **owner of 77-01 37th Ave** 105 Court Street, 5th Floor Brooklyn, NY 11201 Attn.: John Donofrio Ph. (718) 852-4001 email: jwchinaia@gmail.com
-

-*-*-*-*-*-*-*-*-*-* 4:15 PM:- went to site for inspection. no petroleum odors noted in area and in main lobby in building 35-50 78th St. spoke with operator of laundromat at 35-58A 78th Street (adjacent to 35-50 78th St). he did not noticed any petroleum odors in neighbourhood last week. 07/02/14-Hiralkumar Patel. 12:15 PM:-

SMELL OF FUEL (Continued) **S117268041**

spoke with Ms. Lambert. she noticed faint odor yesterday evening around 7-8 PM, but not as strong as before. suggested her to call FDNY also, next time when she notice strong odors. after discussing with DEC DeMeo, case closed as no petroleum spill noted."

Remarks: "Smell of oil in the air on 37th Ave between 77 and 78 Streets. Unknown Source. Has been ongoing but intermittent issue for several days now. Smell is currently strong per the caller. Caller stated there are several storefronts in the area and a few are being renovated."

Material:

Site ID:	496734
Operable Unit ID:	1246215
Operable Unit:	01
Material ID:	2247345
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

N53 **MINOR GARDEN SPILL** **NY Spills** **S111317537**
WSW **12 POUCH TERRACE** **N/A**
1/8-1/4 **STATEN ISLAND, NY 10305**
0.244 mi.
1286 ft. **Site 1 of 3 in cluster N**

Relative: **Lower**

Actual: **119 ft.**

SPILLS:

Facility ID:	1108547
Facility Type:	ER
DER Facility ID:	410841
Site ID:	456287
DEC Region:	2
Spill Date:	2011-10-06
Spill Number/Closed Date:	1108547 / 2011-11-03
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	smsanges
Referred To:	Not reported
Reported to Dept:	2011-10-06
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False

MINOR GARDEN SPILL (Continued) **S111317537**

Remediation Phase:	0
Date Entered In Computer:	2011-10-06
Spill Record Last Update:	2011-11-03
Spiller Name:	Not reported
Spiller Company:	OIL COMPANY
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	MRS PASSARO
Contact Phone:	(718) 447-5863
DEC Memo:	"Spilled from vent line to front garden. Bush dug out and some soil dug out. Soil and bush will be replaced. 11/3/2011 Andrew Rucci Confirmed that the work was done. Voicemail left at homeowners house, no response. "
Remarks:	"2-3 gal spill to soil. cleanup in progress"

Material:

Site ID:	456287
Operable Unit ID:	1206424
Operable Unit:	01
Material ID:	2203529
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	3.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

M54 **HUNTER GARDENS APARTMENT COMPLEX** **NY Spills** **S109063001**
SSE **147-31 38TH AVE** **N/A**
1/8-1/4 **QUEENS, NY**
0.245 mi.
1292 ft. **Site 4 of 7 in cluster M**

Relative:
Lower

Actual:
37 ft.

SPILLS:

Facility ID:	0801932
Facility Type:	ER
DER Facility ID:	347365
Site ID:	397982
DEC Region:	2
Spill Date:	2008-05-19
Spill Number/Closed Date:	0801932 / 2011-09-26
Spill Cause:	Equipment Failure
Spill Class:	Not reported
SWIS:	4101
Investigator:	hrpatel
Referred To:	Not reported
Reported to Dept:	2008-05-19
CID:	408
Water Affected:	DRAINS
Spill Source:	Private Dwelling
Spill Notifier:	Local Agency

HUNTER GARDENS APARTMENT COMPLEX (Continued) **S109063001**

Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	Not reported
Remediation Phase:	0
Date Entered In Computer:	2008-05-19
Spill Record Last Update:	2011-09-26
Spiller Name:	Not reported
Spiller Company:	PRIVATE HOME
Spiller Address:	147-31 38TH AVE
Spiller City,St,Zip:	QUEENS, NY
Spiller Company:	001
Contact Name:	MATTHEW DIBONO
Contact Phone:	(917) 468-7488
DEC Memo:	"05/20/08-Vought-Off hours responder. Called Mathew Dibono (Fax:212-566-5764) who is a NYCDOB Inspector who was performing inspection and found oil in sump. Leak by fuel supply line into boiler entered drain by boiler which ran to drain adjacent to sump and hence impact to sump. Owner of property is Hunter Gardens. DOB Dibono left violations for oil in sump and left order to have it removed immediately. Rest of spill in basement on concrete. As per Dibono plug to sump electrical was not connected and sump off. As per PBS#2-332348 mailing address of owner is: Mr. Xiang Zhou Hunter Gardens John B Lovett & Assoc. 109-15 14th Avenue College Point, NY 11356 Ph: (718)445-9500x132 Fax: (718)445-9704 Site has one registered 15,000 gallon #6 fuel oil UST. DEC requires CSL with one month due date for: 1)cleanup of impacted sump. As per DEC Krimgold there are no PBS violations as no tightness testing required for #6 fuel oil UST. Vought called Monica Ghulam at above number and spoke to Delores and she has given information of spill to Mr Xiang. No odor complaints received to date. As per Delores spill may be a month old. Vought will follow up call tomorrow to ensure spill is cleaned. 07/28/09-Vought-Received call from and spoke to James Versocki (631-777-6908) who is attorney for Hunter Gardens Coop. Vought faxed him copy of spill report and discussed need to determine source of spill (either underground fuel line requiring soil borings or above groundline with summary of cleanup and no borings). 10/23/09-Vought-Received phone message from Greg Bodnouick (908-581-8560) as to status of spill case as he is preparing Phase I. Vought called Versocki and left message to return call with status of spill case. Called Bodnouick and left message of current status. Vought spoke to Greg and noted that DEC needs letter on whether line is above ground or below groundwater, summary of cleanup activities and repairs if necessary. Vought received message from Versocki who indicated that as part of refinancing that he is hiring Partner Engineering to perform Phase II and they will be submitting report. Vought called Versocki and left second message. 12/03/09-Hiralkumar Patel. case transferred from DEC Vought to DEC Patel as working on another case (0909229) under same management. this spill number is being investigated under spill #: 0909229. alternate addresses: 147-25 to 147-43 38th Avenue building #1: 147-25 to 147-27 38th Avenue building #2: 147-31 to 147-37 38th Avenue building #3: 147-41 to 147-43 38th Avenue PBS#: 2-154075 for building #1. as per PBS record, building 1 has one 5,000 gal #6 oil UST, installed in Jan. 1950. PBS#: 2-332348 for building #2. as per PBS record, building 2 has one 15,000 gal #6 oil UST, installed in Jan. 1950. PBS#: 2-154067

HUNTER GARDENS APARTMENT COMPLEX (Continued) **S109063001**

for building #3. as per PBS record, building 3 has one 5,000 gal #6 oil UST, installed in Jan. 1950. other spills: 9905220, 0502796, 0513186, 0710969, 0905129, 0909229 spill #: 9905220 was reported on 07/30/99 as 10 gal #6 oil spilled in building 2. case closed on 08/26/99. spill #: 0502796 was reported on 06/08/05 as 50 gal #6 oil spilled in boiler room in building 2. case closed on 10/21/05. spill #: 0513186 was reported on 02/16/06 as 2 gal #2 oil (possibly #6 oil) spilled in building 2 from faulty filter on boiler. case closed on 02/16/06. spill #: 0710969 was reported on 01/16/08 due to tank test failure in building 3. case is still open. DEC Falvey is case manager. spill #: 0905129 was reported on 08/03/09 due to tank test failure in building 3. case is still open. DEC Jacob is case manager. spill #: 0909229 was reported on 11/17/09 due to findings of soil contamination during Phase II. Hunter Gardens Owners Inc. **property owner** c/o John B. Lovett & Associates Ltd. 109-15 14th Avenue College Point, NY 11356 contact: Remo Rosano **property manager** Ph. (718) 445-9500 Ext. 133 Fax (718) 445-9704 11:29 AM:- left message for Mr. Rosano. James Versocki **owner's attroney** Archer, Byington, Glennon & Levine LLP. Ph. (631) 249-6565 (631) 777-6908 Fax (631) 777-6905 11:59 AM:- received message for Mr. Rosano. 3:44 PM:- left message for Mr. Rosano. 12/04/09-Hiralkumar Patel. received message for Mr. Rosano (at 4:11 PM on 12/03/09). 12/07/09-Hiralkumar Patel. 10:25 AM:- left message for Mr. Rosano. 12:05 PM:- received call from Mr. Rosano. he also mentioned that there is new property manager who will handle this site. Mr. Rosano will call back with information about cleanup of spill in sump. Janice Panaro **new property manager** Ph. (718) 445-9500 Ext. 116 email: janicep@lovettrealty.com 12/15/09-Hiralkumar Patel. 10:48 AM:- left message for Mr. Rosano about status of cleanup of spill in sump. 10:49 AM:- left message for Ms. Panaro about status of spill cleanup. 11:00 AM:- received call from Ms. Panaro. asked her about spill cleanup in sump. Ms. Panaro doesn't know but will find out and call back. asked Ms. Panaro to call by end of 01/15/10. 11:25 AM:- sent email to Ms. Panaro and asked her to submit sump spill cleanup report (according to letter dated 05/20/08, letter attached to email) and contractor information with work schedule by the end of 01/15/10. 11:34 AM:- received message from Mr. Rosano. he mentioned that sump cleanup will be included in tank removal work as they plan to remove tanks from three buildings. he asked to contact owner's attorney. 11:47 AM:- left message for Mr. Versocki and informed him that spill in sump must be cleaned up immediately, if not done yet. no further delay will be accepted and case may be referred to DEC legal. 12:04 PM:- received message from Mr. Versocki. 12:45 PM:- spoke with Mr. Versocki. Mr. Versocki mentioned that oil from sump has been removed but he doesn't know where drains ends (sump/city sewer or subsurface). asked Mr. Versocki to find out drain terminals and may need soil investigation if drains ends in subsurface. also asked him to provide contractor's info who will going to do tank removal work. Mr. Versocki will send updates. 12/29/09-Hiralkumar Patel. 3:34 PM:- received fax from Mr. Versocki. Mr. Versocki requested 30 days extension (till 02/15/10) to submit sump cleanup report and work plan for tanks closure. Mr. Versocki mentioned that spill #: 0801932 should be closed based on one soil sample result from sump area (this sample result is included in Phase II report dated 10/08/09. see notes and e-docs for spill #: 0909229 for more details). as per Phase II report, one soil boring was installed in basement, next to sump pump, to a depth of 1.5 ft where refusal encountered in the form of large stone fragments. no

HUNTER GARDENS APARTMENT COMPLEX (Continued) **S109063001**

contamination found in soil sample. but this report doesn't include any information about termination point of drain where oil was found. 01/05/10-Hiralkumar Patel. 11:42 AM:- sent email to Mr. Umbach (who submitted Phase II report) requiring to submit scaled site map of sump area as this map is not included in Phase II report. email copied to Ms. Panaro. 11:44 AM:- left message for Mr. Versocki. 01/06/10-Hiralkumar Patel. 12:53 PM:- received call from Mr. Versocki. Mr. Versocki mentioned that building owner is waiting for re-finance closing and once it done (most probably by 01/20/10), they will hire contractor for tank removal work and will submit schedule. asked Mr. Versocki to submit scaled site map of boiler room where oil found in drains and sump. also asked him to find out termination of drains where oil found. 01/21/10-Hiralkumar Patel. 2:32 PM:- spoke with Mr. Versocki. he mentioned that refinance closing is on 01/25/10 and them probably take two weeks to hire contractor. 03/24/10-Hiralkumar Patel. 1:37 PM:- left message for Ms. Panaro. 03/31/10-Hiralkumar Patel. 3:01 PM:- left message for Ms. Panaro. 04/01/10-Hiralkumar Patel. 12:35 PM:- received message from Ms. Panaro. she is dealing with her attorney for contract with cleanup company. she will call back by 04/05/10 with more details. 07/22/10-Hiralkumar Patel. 4:19 PM:- left message for Ms. Panaro to submit work schedule by end of 07/30/10 or else case will be referred to legal (final notice). 08/02/10-Hiralkumar Patel. 3:05 PM:- left message for Ms. Panaro. informed her that as no documents received by end of 07/30/10, these cases will be referred to legal. 3:07 PM:- spoke with Mr. Versocki. he mentioned that they have hired Eastmond and he drafted contract. he will call property manager and will call back. informed Mr. Versocki that if no response from management/owner with updates by end of tomorrow (08/03/10), then these cases will be referred to legal. 4:39 PM:- received email from Ms. Panaro. she mentioned that Hunter Gardens Board President is out of country for 3 weeks. she requested an extension until September when they can have a meeting with the Board President regarding the work schedule, as he would prefer that he be onsite when the work begins. 08/03/10-Hiralkumar Patel. received email from Mr. Versocki with copy of letter. he asked what else needs to be done about spill noticed in sump area. 08/05/10-Hiralkumar Patel. 11:26 AM:- left message for Mr. Versocki informing that the spill #: 0801932 can not be closed as no information available about termination of drains where oil found. 03/23/11-Hiralkumar Patel. 10:23 AM:- sent email to (and left message for) Ms. Panaro requiring to submit update (for spills 0710969 and 0801932) before 03/28/11. informed her that if no updates available by 03/28/11 then the case will be referred to legal. 10:26 AM:- left message for Mr. Versocki. 2:59 PM:- received call from Mr. Versocki. he doesn't have current status but will talk to property manager and will call back. 03/25/11-Hiralkumar Patel. 1:00 PM:- met with Xiang Yang Zhou, co-op board president, who came to office. asked Mr. Zhou to confirm termination point of the drains where oil found in 2008. informed him that if drains ends into city sewer system, then no further investigation is needed and case can be closed, but if drain ends into subsuface soil then the department requires soil investigation at the termination point of drains. also asked him to submit scaled map of boiler room showing sump, drains and previous soil boring location. Xiang Yang Zhou Board President Hunter Gardens Owners Inc. **property owner** Ph. (718) 690-0328 Email: xyz3308@gmail.com 3:59 PM:- sent email to Mr. Zhou requiring to submit a scaled site map (including boiler/sump/drains/drain

HUNTER GARDENS APARTMENT COMPLEX (Continued) **S109063001**

pipe/previous boring locations) and information about termination point of the drains. informed him that if drains terminate into subsurface then soil investigation is required at the terminal point. asked him to submit required information/document by the end of 04/15/11. informed Mr. Zhou that no more time extension will be approved. email copied to Ms. Panaro. 08/05/11-Hiralkumar Patel. 3:57 PM:- spoke with and resent email (that was sent on 03/25/11) to Mr. Zhou and asked him to submit documents by 08/12/11. email copied to Ms. Panaro. 08/16/11-Hiralkumar Patel. received email from Tara Murphy (at 7:07 PM on 08/15/11) from Catman Plumbing including letter confirming that the existing floor drain in the boiler room discharges into an existing sump pit. 09/26/11-Hiralkumar Patel. based on available info, case closed."

Remarks: "BOILER IS LEAKING; ENTERING PIT AND DRAINS; MATTHEW IS AN INSPECTOR WHO DISCOVERED THE SPILL; UNKOWN IF CLEAN UP OR CONTAINMENT HAS OCCURRED;"

Material:

Site ID:	397982
Operable Unit ID:	1154898
Operable Unit:	01
Material ID:	2145732
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

55
NNE
1/8-1/4
0.245 mi.
1293 ft.

Relative:
Lower

Actual:
62 ft.

MANHOLE # 461 **NY Spills** **S107409189**
LILLY POND AVE AND SCHOOL ROAD **N/A**
STATEN ISLAND, NY

SPILLS:

Facility ID:	0507651
Facility Type:	ER
DER Facility ID:	300388
Site ID:	353095
DEC Region:	2
Spill Date:	2005-09-25
Spill Number/Closed Date:	0507651 / 2005-11-17
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	GDBREEN
Referred To:	Not reported
Reported to Dept:	2005-09-26
CID:	444
Water Affected:	Not reported

MANHOLE # 461 (Continued) **S107409189**

Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2005-09-26
Spill Record Last Update:	2005-11-17
Spiller Name:	ERT DESK'
Spiller Company:	MANHOLE#461
Spiller Address:	LILLY POND/SCHOOL ROAD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	ERT DESK'
Contact Phone:	(212) 580-8383
DEC Memo:	"161230. 9/25/05 @ 1640 hrs, Emergency Supervisor Harry Maciver reports 1 pint oil and 6 Oz Insulatum in MH 461, Lily Pond Ave & School Rd. No Sewers or waterways, no smoke or fire. Insulatum is from 33 kv fdr 33R12 joint, oil source is unknown. MH 461 is D faulted. Spill is contained. Vincent Reneo, EGS 81202. Closed. 11-17-05. see eDocs. GB "
Remarks:	"A DEFAULT IN HOLE, LEAKING FROM A FEEDER: CONED # 161230: NEED TO DEFAULT :"

Material:

Site ID:	353095
Operable Unit ID:	1110565
Operable Unit:	01
Material ID:	2100599
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

K56 **257 MC LEAN AVE** **NY Spills** **S102148880**
SSW **257 MC LEAN AVE** **N/A**
1/8-1/4 **STATEN ISLAND, NY**
0.248 mi.
1308 ft. **Site 3 of 4 in cluster K**

Relative:
Lower

Actual:
76 ft.

SPILLS:

Facility ID:	9409509
Facility Type:	ER
DER Facility ID:	248439
Site ID:	307632
DEC Region:	2
Spill Date:	1994-10-17
Spill Number/Closed Date:	9409509 / 1994-10-17

257 MC LEAN AVE (Continued) **S102148880**

Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1994-10-17
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	1994-10-17
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-11-09
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	JOE RUGGIERO-RESIDENCE
Spiller Address:	257 MC LEAN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG "
Remarks:	"PIN HOLE LEAK IN SUCTION LINE-CLEANED UP WITH SPEEDY DRY-TEMP OIL LINE HAS BEEN REPLACED. CALLED MS RUGGIERO, SHE SAID SPILL HAS BEEN CLEANED UP."

Material:

Site ID:	307632
Operable Unit ID:	1003463
Operable Unit:	01
Material ID:	378935
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	3.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

57
ENE
1/4-1/2
0.252 mi.
1329 ft.

FORT WADSWORTH
203 DRUM AVE/ NEW YORK AVE
STATEN ISLAND, NY

NY Spills **S110488335**
N/A

Relative:
Lower

Actual:
102 ft.

SPILLS:

Facility ID:	1005051
Facility Type:	ER
DER Facility ID:	393358
Site ID:	438354
DEC Region:	2
Spill Date:	2010-08-03
Spill Number/Closed Date:	1005051 / 2010-08-13
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	smsanges
Referred To:	Not reported
Reported to Dept:	2010-08-04
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	Not reported
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2010-08-04
Spill Record Last Update:	2010-08-13
Spiller Name:	ALEX LECHICH
Spiller Company:	FORT WADSWORTH
Spiller Address:	203 DRUM AVE/ NEW YORK AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	ALEX LECHICH
Contact Phone:	(718) 354-4324
DEC Memo:	"minor spill - all cleaned"
Remarks:	"Lost to sewer at ny ave and drum ave ; clean up complete. Traffic control device failed"

Material:

Site ID:	438354
Operable Unit ID:	1189014
Operable Unit:	01
Material ID:	2183958
Material Code:	0010
Material Name:	hydraulic oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	Gallons
Recovered:	1.50
Resource Affected:	Not reported
Oxygenate:	Not reported

FORT WADSWORTH (Continued) **S110488335**

Tank Test:

N58 **ROADSIDE** **NY Spills** **S110138389**
WSW **20 POUCH TERRACE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.256 mi.
1352 ft. **Site 2 of 3 in cluster N**

Relative:
Lower

Actual:
123 ft.

SPILLS:

Facility ID:	0909486
Facility Type:	ER
DER Facility ID:	371143
Site ID:	422192
DEC Region:	2
Spill Date:	2009-11-24
Spill Number/Closed Date:	0909486 / 2009-11-25
Spill Cause:	Equipment Failure
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RMPIPER
Referred To:	Not reported
Reported to Dept:	2009-11-24
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2009-11-24
Spill Record Last Update:	2009-11-25
Spiller Name:	Not reported
Spiller Company:	RUCCI OIL
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"DECPiper spoke with Rucci. Oil came out of hose when reeling in. Speedy dry placed down. and swept. closed."
Remarks:	"Clean up complete."

Material:

Site ID:	422192
Operable Unit ID:	1178042
Operable Unit:	01
Material ID:	2170948
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00

ROADSIDE (Continued) **S110138389**

Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

K59 **257 MCCLEAN AVE** **NY LTANKS** **S101174535**
SSW **257 MCCLEAN AVE** **N/A**
1/4-1/2 **SOUTH BEACH, NY**
0.257 mi.
1355 ft. **Site 4 of 4 in cluster K**

Relative:
Lower

Actual:
71 ft.

LTANKS:

Site ID:	147876
Spill Number/Closed Date:	9404093 / 1994-06-23
Spill Date:	1994-06-23
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	1994-06-23
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	CAMMISA
Referred To:	Not reported
Reported to Dept:	1994-06-23
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1994-07-27
Spill Record Last Update:	2004-10-21
Spiller Name:	Not reported
Spiller Company:	JOE RUGGIERO
Spiller Address:	257 MCCLEAN AVE
Spiller City,St,Zip:	SOUTH BEACH S.I., ZZ
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	125870
DEC Memo:	""
Remarks:	"LEAK ON BOTTOM OF STORAGE TANK- PUT TEMPORARY PATCH. CLEANRITE TANK CO. WILL FIX PERM. PUT DOWN SPEEDY DRY."

Material:

Site ID:	147876
Operable Unit ID:	1000997
Operable Unit:	01
Material ID:	384244
Material Code:	0001A

257 MCCLEAN AVE (Continued) **S101174535**

Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

O60 **EDR Hist Cleaner** **1015104095**
SW **900 HYLAN BLVD** **N/A**
1/4-1/2 **STATEN ISLAND, NY 10305**
0.264 mi.
1396 ft. **Site 1 of 5 in cluster O**

Relative:
Lower

Actual:
50 ft.

EDR Historical Cleaners:

Name:	MY VALET DRYCLEANERS
Year:	2006
Address:	900 HYLAN BLVD
Name:	MY VALET DRYCLEANERS
Year:	2007
Address:	900 HYLAN BLVD
Name:	MY VALET DRYCLEANERS
Year:	2008
Address:	900 HYLAN BLVD
Name:	MY VALET DRYCLEANERS
Year:	2009
Address:	900 HYLAN BLVD
Name:	MY VALET THE DRY CLEANING
Year:	2010
Address:	900 HYLAN BLVD
Name:	MY VALET THE DRY CLEANING ESTABLISHM
Year:	2011
Address:	900 HYLAN BLVD
Name:	MY VALET THE DRY CLEANING ESTABLISHM
Year:	2012
Address:	900 HYLAN BLVD

O61 **LIZ CUSTOM/YOUNG'S CLEANERS** **NY DRYCLEANERS** **S110247158**
SW **900 HYLAN BLVD.** **N/A**
1/4-1/2 **STN. ISLAND, NY 10305**
0.264 mi.
1396 ft. **Site 2 of 5 in cluster O**

Relative:
Lower

Actual:
50 ft.

DRYCLEANERS:

Facility ID:	2-6404-00612
Phone Number:	718-816-1864
Region:	Not reported
Registration Effective Date:	1/19/2007
Inspection Date:	07JAN2
Install Date:	87/99
Drop Shop:	Not reported
Shutdown:	Not reported
Alternate Solvent:	Not reported
Current Business:	Not reported

O62 **IFO 900 HYLAN BLVD** **NY Spills** **S103274818**
SW **900 HYLAN BLVD** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.264 mi.
1396 ft. **Site 3 of 5 in cluster O**

Relative:
Lower

Actual:
50 ft.

SPILLS:

Facility ID:	0805460
Facility Type:	ER
DER Facility ID:	202949
Site ID:	402564
DEC Region:	2
Spill Date:	2008-08-12
Spill Number/Closed Date:	0805460 / Not Reported
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JAKOLLEE
Referred To:	APPRVD WELL INSTALLN & IRM PLAN 11/30/16
Reported to Dept:	2008-08-12
CID:	404
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	Not reported
Remediation Phase:	1
Date Entered In Computer:	2008-08-12
Spill Record Last Update:	2016-11-30
Spiller Name:	DAREN MURPHY
Spiller Company:	FORMER GAS STATION
Spiller Address:	900 HIGHLAND BLVD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	DAREN MURPHY
Contact Phone:	(516) 221-7500
DEC Memo:	"Sangesland spoke to Daren Murphy at Soil Mechanics, 3770 Merick Rd., Seaford, NY 11783 They are pulling Ten 550 gal tanks from a former

IFO 900 HYLAN BLVD (Continued) **S103274818**

gas station. Tanks had previously been closed in place (on 1-7-87 according to PBS) and were filled with cement. Mr. Murphy called to say 6 of tanks were out of ground as of 2 PM on 8/12/08 and he would like permission to remove them so they can pull last 4 tanks. Sangesland told him it was OK to remove tanks from site, but they should call Hasan Ahmed before they backfill hole to give him a chance to see it when end point samples are taken. ****NOTE a site with ten 550-gal tanks will also need groundwater samples*** There are 3 different lots next to each other. #900 is an old gas station with several tanks that were abandoned and are now being removed. #908 is a 1 story store front (no tanks) and #920 is another former gas station with a history of tanks, but no spill history. According to PBS, No. 2-610859, ten (10) 550-gallon gasoline tanks closed/abandoned, and excavated in 2008. UST Closure and Subsurface Investigation Summary Report (Soil Mechanics, Environmental Services, Inc. Ph: 516-221-7500 Fax: 516-679-1900 Mr. Vincent Nantista). Tank removal performed by Shamrock Materials LLC, 131 Willow Ave., Staten Island, NY. August 22, 2008 900 Hylan Blvd. Staten Island, NY NYSDEC Spill No. 0805460 The site consists of a two-story multi-tenant retail and office building (constructed circa 1987) with partial basement surrounded by concrete walkways and paved parking areas. It is bounded by Hylan Blvd. to the west, Sand Lane to the east, residential and commercial to the south, and Seton Foundation for Learning to the east. The property was previously a gasoline station, with 10 550-gallon single wall, steel tanks abandoned in place via the filling with concrete slurry. The excavation of tanks along with overburden material and concrete encasement took place August 12th to 15th 2008. All tanks were cut and cleaned on-site, and all associated piping removed. No fill ports and/or dispenser islands were present. Tank 'inspection revealed each to be in good condition with no obvious signs of holes and/or pitting. During removal, visibly contaminated soils were detected within overburden and surrounding material, and removed to the extent possible (847 tons). After excavation and tank/soil removal, the limits of the remedial excavation were about 40 by 25 with a depth of 15 bgs. Groundwater was not present at the time of work. Sidewall and endpoint samples were subsequently collected utilizing a hand auger; EP-1 from north wall, EP-2 and EP-5 from the bottom, EP-3 and EP-8 from west wall, EP-4 and EP-6 from east wall, and EP-7 from south wall. Semi-volatiles were either not detected or below TAGM. Volatile organics, however, were present in the following samples: 178ppb Benzene, 3,524ppb p-m Xylenes EP-1 (15 bg); 13,685ppb Toluene, 14,486 Ethylbenzene, 15,428 1,3,5 Trimethylbenzene, 48,802 1,2,4 Trimethylbenzene, 73,328ppb p-m Xylenes, 26,430 o-Xylene EP-2 (15 bg); 344ppb Benzene EP-4 (15 bg); 7.613ppb Benzene, 84.483 Toluene, 30.611 Ethylbenzene, 3.437ppb Isopropylbenzene, 10.773ppb n-Propylbenzene, 25.959ppb 1,3,5, Trimethylbenzene, 80.347ppb 1,2,4, Trimethylbenzene, 138.060ppb p-m Xylenes, 50.066ppb o-Xylene EP-5 (15 bg); 170ppb Benzene EP-6 (15 bg); 7.578ppb Benzene, 59.923ppb Toluene, 37.411ppb Ethylbenzene, 4.949ppb Isopropylbenzene, 15.140ppb n-Propylbenzene, 35.082ppb 1,3,5 Trimethylbenzene, 112.137ppb 1,2,4 Trimethylbenzene, 13.887ppb Naphthalene, 184.839ppb p-m Xylenes, 62.345ppb o-Xylene EP-7 (15 bg); 9.223ppb Toluene, 14.675ppb Ethylbenzene, 6.783ppb n-Propylbenzene, 16.683ppb 1,3,5 Trimethylbenzene, 50.623ppb 1,2,4 Trimethylbenzene, 6.152ppb Naphthalene, 63.326ppb p-m Xylenes, 24.934ppb o-Xylene EP-8 (15 bg). Additionally, five soil borings (B1 through B5) were drilled in the

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area of the tank excavation. The samples were collected at continuous 2 foot intervals from surface to groundwater (identified at depths of 42-44 below grade) in all samples except B-4. Boring B-4 contained impervious soil that was drilled down to 46 bgs. All soil borings exhibited detectable levels of organic vapor via head space analysis, ranging from 22 ppm and 2000+ ppm at B-1, 19-636ppm at B-2, 1-200+ppm at B-3, up to 2000+ppm at B-4, and 1,440-2000ppm at B-5. Based on these results, nine soil samples were submitted to the laboratory. B-1/S-19, B-1/S-21, B-2/S-3, B-2/S-21, B-3/S-21, B-4/S-23, B-5/S-8, B-5/S-15. The results are as follows: 7738ppb Benzene, 48708ppb Toluene, 14745ppb Ethylbenzene, 5908ppb n-Propylbenzene, 13795ppb 1,3,5 Trimethylbenzene, 37165ppb 1,2,4 Trimethylbenzene, 64069ppb p-m Xylenes, 24257ppb o-Xylenes B-1/S-19 (36 -38 bgs); 110860ppb Benzene, 446585ppb Toluene, 130412ppb Ethylbenzene, 13628ppb Isopropylbenzene, 46532ppb n-Propylbenzene, 97069ppb 1,3,5 Trimethylbenzene, 262744ppb 1,2,4 Trimethylbenzene, 42874ppb Naphthalene, 515151ppb p-m Xylenes, 204023ppb o-Xylenes B-1/S-21 (40 -42 bgs); 680ppb Benzene, 2325ppb Toluene B-3/S-21 (40 -42 bgs); 402ppb Benzene B-4/S-20 (38 -40 bgs); 481ppb Benzene, 31ppb 1,3,5 Trimethylbenzene, 80ppb 1,2,4 Trimethylbenzene, 471ppb Acetone, 2665ppb MEK B4/S-23 (44 -46 bgs); 1526ppb Benzene, 3141ppb Toluene, 910ppb Ethylbenzene, 266ppb n-Propylbenzene, 723ppb 1,3,5 Trimethylbenzene, 2237ppb 1,2,4 Trimethylbenzene, 600ppb Naphthalene, 1229ppb MEK, 3868ppb p-m Xylenes, 1573ppb o-Xylenes B-5/S-8 (28 -30 bgs); 56707ppb Benzene, 298730ppb Toluene, 94700ppb Ethylbenzene, 39619ppb n-Propylbenzene, 82868ppb 1,3,5 Trimethylbenzene, 216859ppb 1,2,4 Trimethylbenzene, 4886ppb Sec-Butylbenzene, 3641ppb P-Isopropyltoluene, 34225ppb Naphthalene, 375456ppb p-m Xylenes, 152491ppb o-Xylenes B-5/S-15 (42 -44 bgs). These results of endpoint samples from the walls and bottom of the remedial tank excavation and soil samples from soil borings, indicated that additional subsurface investigation is warranted. Supplemental Subsurface Investigative Activities Report (Soil Mechanics, Environmental Services, Inc. Ph: 516-221-7500 Fax: 516-679-1900 Mr. Vincent Nantista). January 20, 2009 In order to delineate the soil and groundwater contamination, the investigation included the drilling of three (3) soil borings, B-6, B-7, and B-8, close to the remedial excavation site. Soil boring samples were collected continuously from surface to the groundwater table, which is at an elevation of 13 to 20 above sea level. Depth to water was at depths of 42 to 47 feet bgs. Low specification monitoring wells, MW-1, MW-2, MW-3, MW-4, were installed at boreholes B-5 (of previous investigation), B-6, B-7, and B-8, respectively. Collected soil samples were analyzed with a PID, which revealed detectable levels of organic vapor in borings B-6 (up to 551ppm), B-7 (up to 2000ppm), and B-8 (up to 2000ppm). The soil sample results indicated detectable levels of semi-volatile organics, but below the TAGM limits. Volatile organics, however, were detected in soil samples: 342ppb Benzene and 5251ppb p-m Xylenes B-8/S-7 (30 -32 bgs); 2600ppb Benzene, 4792ppb Toluene, 2763ppb p-m Xylenes, 1222ppb o-Xylene, 248ppb MTBE B-8/S-9 (40-42 bgs). Additionally, the groundwater from the monitoring wells was analyzed for organic matter, all accept the MW-1 sample. A floating product was identified at MW-1, and was being analyzed at the time of reporting. The results for other three samples indicated presence of both volatile and semi-volatile organic matter. The results are as follows: 139ppb Naphthalene, 17ppb w-Methylnaphthalene, 2636ppb Benzene, 77ppb Toluene, 501ppb Ethylbenzene, 98ppb Isopropylbenzene, 97ppb n-Propylbenzene, 164ppb

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1,3,5 Trimethylbenzene, 454ppb 1,2,4 Trimethylbenzene, 770ppb p-m Xylenes, 204ppb o-Xylene, 222ppb MTBE MW-2 (40 -42 bgs); 252ppb Naphthalene, 48ppb 2-Methylnaphthalene, 7ppb Bis(2-ethylexyl)phthalate, 1611ppb Benzene, 105ppb Toluene, 733ppb Ethylbenzene, 99ppb Isopropylbenzene, 112ppb n-Propylbenzene, 216ppb 1,3,5 Trimethylbenzene, 622ppb 1,2,4 Trimethylbenzene, 2158ppb p-m Xylenes, 570ppb o-Xylene, 263ppb MTBE MW-3 (45 -47 bgs), 10ppb 3+4-Methylphenol, 11ppb 2,4-Dimethylphenol, 57ppb Naphthalene, 13ppb 2-Methylnaphthalene, 1832ppb Benzene, 2471ppb Toluene, 716ppb Ethylbenzene, 83ppb n-Propylbenzene, 198ppb 1,3,5 Trimethylbenzene, 579ppb 1,2,4 Trimethylbenzene, 2514ppb p-m Xylenes, 909ppb o-Xylene, 240ppb MTBE MW-4 (40 -42 bgs). Top of casing elevations and depth to water were recorded at monitoring well locations MW-2, MW-3, MW-4 for the purposes of preparing a site specific groundwater contour map. Additional subsurface investigative activities will be completed in the proximity of monitoring well MW-1 to investigate for the presence of floating product, as it will continue to be recovered. Groundwater Analysis Report (Soil Mechanics, Environmental Services, Inc. Ph: 516-221-7500 Fax: 516-679-1900 Mr. Vincent Nantista). November 16, 2009. The monitoring wells MW-2, MW-3, MW-4, were sampled a year after their initial installation in 2008. The results for most compounds revealed decreasing amounts of both semi-organic volatiles and organic volatiles. The decrease has been significant for samples MW-2 and MW-3: 139ppb Naphthalene, 17ppb 2-Methylnaphthalene, 1178ppb Benzene, 314ppb Ethylbenzene, 56.5ppb Isopropylbenzene, 62ppb n-Propylbenzene, 146ppb 1,3,5 Trimethylbenzene, 365ppb 1,2,4 Trimethylbenzene, 222ppb p-m Xylenes, 202ppb MTBE MW-2 (40 -42 bgs); 20ppb Naphthalene, 216ppb Benzene, 7ppb Toluene, 82ppb Ethylbenzene, 16ppb Isopropylbenzene, 22ppb n-Propylbenzene, 47ppb 1,3,5 Trimethylbenzene, 118ppb 1,2,4 Trimethylbenzene, 235ppb p-m Xylenes, 54ppb o-Xylene, 35ppb MTBE, 7ppb 1,2-Dichloroethane, 15ppb 2-Butanone, 10ppb p-Isopropyltoluene, 6ppb Sec-Butylbenzene MW-3 (45 -47 bgs); 100ppb Naphthalene, 26ppb 2-Methylnaphthalene, 2222ppb Benzene, 1562ppb Toluene, 726ppb Ethylbenzene, 104ppb n-Propylbenzene, 260ppb 1,3,5 Trimethylbenzene, 796ppb 1,2,4 Trimethylbenzene, 2384ppb p-m Xylenes, 561ppb o-Xylene, 337ppb MTBE MW-4 (40 -42 bgs). The free product that has been identified at monitoring wells MW-1, MW-5, MW-6, and MW-7, and has been removed in the amount of 48 gallons, is believed to be slowly leaching out of the relatively impervious soil formations located above the water table and immediately below the footprint of the recently removed gasoline UST s. Due to the low levels of semi-volatiles identified, the future analysis of aqueous samples will be conducted for volatile organics only. Report (Soil Mechanics, Environmental Services, Inc. Ph: 516-221-7500 Fax: 516-679-1900 Mr. Vincent Nantista). March 5, 2010 The bailing of free product for MW-1, MW-5, MW-6, MW-7 has continued on a biweekly basis for six weeks. The peripheral wells MW-2, MW-3, MW-4 have been sampled on a quarterly basis. A series of charts have been constructed to illustrate the product thickness obtained across time. The results are as follows: Nov 24th-9 , Dec. 8th-6 , Dec. 22nd-4.5 , Jan. 5th-4 , Jan. 19th-3.3 , Feb. 2nd-3 , Feb. 16th-2.7 , Mar. 2nd-2 MW-1; Nov 24th-2.8 , Dec. 8th-1.9 , Dec. 22nd-1.5 , Jan. 5th-1.5 , Jan. 19th-1.5 , Feb. 2nd-1.5, Feb. 16th-1.4 , Mar. 2nd-0.5 MW-5; Nov 24th-2.2 , Dec. 6th-1.4 , Dec. 22nd-1 , Jan. 5th-0.8 , Jan. 19th-0.8 , Feb. 2nd-0.7 , Feb. 16th-0.6 , Mar. 2nd-1 MW-6; Nov 24th-1.5 , Dec. 6th-1 , Dec. 22nd-0.8 , Jan. 5th-0.8 , Jan. 19th-0.7 , Feb. 2nd-0.7 , Feb. 16th-0.6 , Mar. 2nd-0.15 MW-7. Within

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this six (6) weeks period, 175 gallons of free product were recovered. Report (Soil Mechanics, Environmental Services, Inc. Ph: 516-221-7500 Fax: 516-679-1900 Mr. Vincent Nantista). May 25, 2010 Bi-weekly observation continues at seven monitoring wells. To date from the inception of investigation no free product in MW 2, 3 and 4. To date a total of 585 gal of gasoline have been recovered. Below are the groundwater data on 05/25/10: MW# Height of Product (ft) Product Removed (gal) 1 .77 2.5 5 .93 3 6 .68 2 7 .13 0.5 6/24/10-HRAHMED-After discussion with Randall Austin (RSE) this case is trasferred to Remediation section B for further investigation/remediation. case assigned to Vadim Brevdo. 7/2/2010 - Carlson: Case assigned to Carlson. Meeting held with owner Frank Fosseli, attys Michael Menicucci, Richard Rosenzweig, Vince Nantista - Soil Mechanics, and NYSDEC Carlson, Tibbe, Urda - Legal. Hand delivered letter and Stipulation dated July 1st requiring additional delineation and Stipulation Agreement. Deadline for Stipulation Agreement submittal extended to July 30th. 8/15/2010 - Carlson: Stipulation Agreement signed - effective 8/10/2010. 9/17/2010 - Carlson: Reviewed work plan. Three soil borings/wells proposed. Sent email/fax requiring submission of a revised work plan with two additional monitoring well locations, and modifying the site plan to include existing monitoring wells. Revision due in 30 days. 9/27/10 - Breen: We received a one-page revision to RIWP showing SB and MW locations from Soil Mechanics. See e-docs. 10/28/10 - Breen: I sent e-mail to Daren of Soil Mechanics asking them to update the entire RIWP, text as well as drawing. See e-docs. Daren replied that they had already done this. I found the document in Sarah's mail slot. 11/3/10 - Breen: Daren says that Vince does not have an e-mail address, so I should send e-mails to Daren, but not look to him for anything other than passing them on to Vince. 11/3/10 - Breen: I sent approval letter for Investigative Work Plan. It calls for five new borings/wells to further the delination of the g/w plume. 12/22/10 - Breen: Investigation Report received, one CD and one hard-copy. Two of the new wells are clean, one has free product, and the other two have dissolved. Soil and g/w delineation is pretty clear at this point. G/W elevation contours are not given. Consultant's conclusion is that bailing twice a month is optimum based on the painfully slow rate at which the soils release product (gasoline). In addition to the bailing DEC would like to see them sample the five wells that have dissolved on an annual basis. These wells are MW-2, MW-3, MW-4, MW-9 and MW-11. If dissolved does not attenuate on its own and/or in response to the bailing, we could wind up with five more wells with dissolved (MW-1, MW-5, MW-6, MW-7 and MW-12), and a more aggressive approach would have to be taken at that point. This station had ten 550s that were abandoned in place and later excavated. Since this release took place over thirty years ago, delaying aggressive remediation by a year or two to try bailing poses no risk. The same observation that says the soil is slow to release the gasoline it holds captive, also keeps the gasoline from migrating from where it is now. 1/6/11 - Breen: Daren inquires by e-mail on behalf of Vincent about status of review of IR and asks if they and their client could come in for meeting perhaps next week. I called Daren. I told him the letter was in the works. He said he did not know what the reason was for the meeting; he was just doing what Vince told him to do. I told him to hold off on having Vince call me until he gets the letter, which disapproved their investigation rpt. 3/14/11. Investigation report received. Copy went to Attorney, Michael Menicucci, Esq. 3/30/11. Vinnie Nantista called to follow up

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on the RI report. 516-221-2333. He is in a bind. The product is deep (43 feet to g/w) in pockets of clay, localized to a small area, is immobile, is hard to reach, is not degrading (is perfectly fine when they recover a gallon or two), has been there a long time, there are no receptors. I told him to look into EPA websites for guidance on how to present an exception to the Regulations. He has been around a long time (1930's, he says). These clients are older, in their eighties. They have a buyer. He's been on the hook for three years. I may have to consult with Albany on this case. Vinnie has been bailing for three years. Product is in a buried sponge. They poked holes in the sponge installing wells. Geology of this site is odd and difficult. It hampers recovery. It protects the environment, by the same token. Geology of the site is the key. G/W flows over a dam made of clay. G/W drops several feet in just a short distance. all of this is surrounded by sand. He has been bailing. Recharge is painfully slow. There is no pancake plume, rather pockets of product in chambers of clay. We may have introduced bleeding when we put in wells. Wells are 43 feet deep. Client calls Vinnie every day. Difficult project due to local geology, clays and silt. Product trapped in pockets. Recovery is two or three gallons per visit. I gave him two EPA websites to pursue for closure language and rationale. He wants closure as an exception. DEC does not close on that basis. Liquid gasoline does not qualify for an expection. His clients want him to appeal for an exception. Regulations do not allow us to close. His clients are looking for a way out, a way around Regulations. Let them explore EPA's rules. That may be the approach he should take. 3/31/11. Albany contacted region because a State Senator contacted them about closure. Site is under Stip since 8/15/2010. They are currently bailing gasoline at rate of two or three gallons per visit, yet they want closure because they are sick of this dragging on. 06/07/11: This spill case transferred from G. Breen to J. Kolleeny. - JK 06/10/11: Reviewed Revised Investigation Rpt by Soil Mechanics Envt'l Svcs, dated 3/14/11 (in eDocs), re-submitted with cover letter dated 5/17/11. Rpt summarizes supplmnt'l investigation involving soil borings and install'n of addt'l wells. Soil contam only found in smear zone, but free product detected in one new well (MW-12), plus four existing wells (MW-1, MW-5, MW-6 and MW-7); several wells without product have significant levels of dissolved-phase contam. Based on all data, Soil Mechanics recommends continued monthly product recovery by manual bailing, and quarterly sampling of down-gradient monitoring wells. They note that site has fine-grained soils which are holding product captive and hampering product recovery efforts. I contacted Vincent Nantista of Soil Mechanics, explained that this recommendation does not address dissolved GW contam and will not recover product in timely manner; asked if they had investigated use of high-vac extraction at site, which can be effective at sites with tight soils. He seemed unfamiliar with this technology. I sent email to his colleague Daren Murphy, stating: In my conversation with Vincent Nantista about various approaches to recovering separate-phase product and cleaning up site in timely manner, I mentioned that hi-vacuum extraction or dual-phase extraction is remedial technology that can be effective at sites with free product, dissolved-phase GW contam and soil contam, and where there are relatively fine-grained, tight soils. Here is a link to USEPA document about dual-phase extraction: http://www.epa.gov/oust/cat/dualphas.htm. I've also attached more detailed EPA guidance document about that remedial technology [from

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How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites]. In letter I will be sending in response to Soil Mechanic's March 2011 investig rpt, I will likely ask that pilot test be performed to see if such approach might be effective at site. For pilot test, mobile hi-vacuum extraction unit would be brought to site and vacuum would be applied to well, and other nearby wells would be checked for vacuum influence; this should be done using several different wells as vacuum extraction well. Also, some aquifer testing, such as slug tests, should be performed to determine aquifer characteristics such as hydraulic conductivity. A work plan for pilot testing would have to be prepared and submitted for DEC review. Please feel free to contact me at (718) 482-6388 if you have any questions. - J. Kolleeny 07/27/11: On 7/19/11, received letter dated 7/18/11 by Vincent Nantista of Soil Mechanics, stating that it is in response to my email of 6/20/11, but letter makes no mention of content of my email, or of phone discussions earlier that day. Letter states that a RAP will be submitted in near future, proposing monthly free product recovery & quarterly GW monitoring; i.e., continuing with current actions, same proposal made in March 2011 Revised Investig Rpt. I contacted Daren Murphy of Soil Mechanics about this, he indicated I would need to send letter to their client. I requested contact info for RP, he sent info (no email available): Sand Lane Development Corp. 254 Natick Street Staten Island, NY 10306 Attn: Mr. Dominick Tomasino, Secretary On 7/27/11, sent letter (in eDocs) to Mr. Dominick Tomasino, cc to Vincent Nantista, stating that remedial approach recommended in March 2011 rpt is not adequate to address site conditions, which include soil contam and dissolved-phase GW contam, in addition to free product. Requested pilot test of hi-vac / dual phase extraction, plus aquifer testing to determine hydraulic conductivity and other relevant aquifer parameters, and requested submission of pilot test work plan for these actions. - J. Kolleeny 09/23/11: Received email from Kathy Mucerino of Soil Mechanics: Attached please find Mr. Nantista's letter with regard to 900 Hylan Blvd., Staten Island (Sand Lane site). Mr. Nantista has asked me to send this to you and Mr. Brevdo. Any questions regarding this site, please contact Mr. Vincent Nantista. Attached was letter rpt (in eDocs as brief) describing rising head slug (bail down) test they performed on MW-1, which yielded permeability or conductivity of 2.79 x 10-5 cm/sec which is indicative of soil's poor drainage characteristics, accounting for very slow product recovery rate. (They are recovering product only by manual bailing.) Letter rpt also states that they are continuing to bail accumulated product in affected wells, and checking all wells during each site visit to confirm that plume is not migrating and to determine GW flow direction. - J. Kolleeny 09/30/11: Received phone call from Vincent Nantista of Soil Mechanics, who asked about possibility of coming in for a meeting to discuss requirements of dual-phase extraction pilot test work plan which I've requested. I told him a meeting is not necessary, and I explained basic elements of DPE pilot test work plan. Mr. Nantista agreed to submit such plan. - JK 10/19/11: On 10/12/11, received email from Soil Mechanics with attached pdf file of work plan for High Vacuum Dual Phase Extraction Pilot Test. After reviewing plan, on 10/19/11 I sent email to Daren Murphy of Soil Mechanics: Daren, I've looked over Oct. 10, 2011 pilot test work plan for this site. I originally had in mind that a mobile skid-mounted remedial unit with a liquid-ring pump (i.e., basically a small, mobile version of same equipment that would be used for an actual DPE

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system) would be used for pilot test. I understand vacuum truck being proposed by Miller Envt'l can generate a high vacuum. However, it's not clear to me that they will be using a drop tube in test well, positioned at GW surface for slurping of product/GW and soil vapor, as would be case in DPE system, or if they simply intend to hook up vacuum hose to top of well casing? I'm concerned that if their intention is latter, it would be very difficult to entrain liquids from depth of water table (~45-47 ft. below grade), so test might not properly evaluate whether or not DPE system would be effective at site. Can you check with Miller if they would be able to use drop tube fitted to vac truck's hose for this test, and if they have drop tube long enough to reach GW at 45-47 ft below grade? Also, during test, vacuum response should be measured in wells MW-2, MW-3, MW-4, MW-11 and MW-12 (in addition to wells mentioned in work plan - MW-5, MW-6 & MW-7, which are all approx same distance from test well MW-1), to see how induced vacuum in subsurface varies over distance and get better idea of effective radius of influence. Perhaps after checking with Miller about drop tube issue, work plan can be revised to address that issue and also to add wells I mentioned for vacuum monitoring? - J. Kolleeny 10/26/11: On 10/21/11, received email from Soil Mechanics with attached pdf file of revised High Vacuum Dual Phase Extraction Pilot Test Work Plan (in eDocs). Work Plan involves having Miller Envt'l bring 3,200-gal capacity vac truck to site capable of creating vacuum pressure of 270 inches H2O, connecting vac truck to monitoring well MW-1 (located in center of former UST field) using drop tube positioned at GW surface to slurp product, water and soil vapors. Nearby monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-11 and MW-12 will be monitored for induced vacuums to determine radius of influence; amounts of GW and product recovered will be measured/recorded, and sample of recovered vapors will be collected with SUMMA canister for lab analysis. Data will be evaluated to assess feasibility of using this technology to address contam at site. I sent letter (in eDocs) approving pilot test work plan to Mr. Dominick Tomasino, cc's to Vincent Nantista and Daren Murphy of Soil Mechanics. - JK 03/15/12: On 1/13/12, received pilot test results letter rpt from Soil Mechanics (in eDocs). Did brief review; rpt concludes that soils are too tight for dual-phase hi-vac extraction to be effective, recommends monthly hand-bailing of free product and quarterly monitoring of one down-gradient well which has dissolved-phase conta. Review showed rpt to be missing crucial data, such as induced vacuum measurements in surrounding wells during test. I contacted Soil Mechanics and requested addt'l data. Received data (most of what I requested) on 2/21/12; I combined with earlier letter rpt (in eDocs) and forwarded to Bill Ottoway of DEC Central Office tech support staff, requesting that he or member of his staff assist in review of rpt and its conclusions. Rpt was assigned to Kevin Carpenter to review. On 3/5/12, I received email from Kevin Carpenter with his comments on rpt, plus attached pdf file of rpt with post-it type notes attached throughout (in eDocs). Kevin C. concluded that, altho there were problems with pilot test and rpt, soils at site are so tight that any remedial approach involving trying to pull air or liquids thru soil would involve tremendous energy use with little success in cleaning up spill. He stated that proposed remedy of hand-bailing could be supported if spill is completely delineated, stable and/or shrinking, and there are no sensitive receptors or vapor intrusion concerns. He also mentioned possibility of in-situ thermal (but again, tight soils would limit ability to recover

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vapors) and application of K-permanganate by gravity feed. I also discussed his evaluation with him by phone. On 3/15/12, I sent letter (in eDocs) to Mr. Dominick Tomasino of Sand Lane Development Corp. (domtom105@aol.com), cc's to Daren Murphy & Vincent Nantista of Soil Mechanics, stating that DEC agrees that tight soils limit remedial options and we will not require install'n of hi-vac system; approved proposed monthly hand-bailing of product; noted that addt'l wells are needed for delineation and that once delineatin is complete, a quarterly monitoring program using sufficient number/locations of wells should be proposed, with quarterly reporting of product recov efforts and GW sampling data; and noted that if hand-bailing does not succeed in reducing product levels and dissolved-phase concentrations, a plan to apply K-permanganate should be developed. Required work plan for addt'l wells by 4/6/12. - J. Kolleeny
05/25/12: On 5/14/12, received email from Daren Murpy of Soil Mechanics, forwarding to me an email from Vincent Nantista of Soil Mechanics (in eDocs): Jonathan: I am in final throws of preparing remediation plan per your letter of March 15th to Sand Lane Development Corp. I apologize for delay in completing this task and would like, if possible, to work up plan as a final version. To do that, I need your pre-approval of my proposed modification to your scope of work as identified in letter of March 15th. To that end, I need your comments regarding what we had talked about earlier - that is, putting in less than requested 5 monitoring wells. I am including aerial photo for site to go with your marked-up site plan. You can see difficulty with customer access if we block travel path in and out of parking lot. You can also see how closely spaced existing wells are to building as they are visible in aerial photo. I discussed matter with our client. They understandably would like to do as few monitoring wells as possible to cap their costs. From practical perspective, I genuinely believe that if we do one (V-1) in front of stores instead of two as you requested (J-1, J-2); and similarly install one at northerly end of project identified as V-2 instead of two that you requested (J-4 and J-5)*; and finally, if we can eliminate J-3 since we already have MW-9 in place, which is down-gradient and has no evidence of dissolved product, we can provide you with information you need. Doing this will definitely spare Sand Lane Development Corp. added time and expense of these wells, not only in terms of their install'n, but also in terms of future quarterly monitoring and testing. Please provide your comments and, hopefully, approval of this request so that we can finalize our remediation plan and forward it to you for final approval. Attached to email was aerial photo of site plus site plan with addt'l wells marked on it by me (J wells) and alternate well locations suggested by Mr. Nantista (V wells) also marked on it (see email in eDocs). On 5/25/12, I sent email reply (in eDocs): Vincent: I've looked over your suggestions and thought about them, and I'm willing to eliminate my requested well J-3 (using your nomenclature) and combine requested wells J-4 and J-5 into one well you've designated as V-2. However, I think that both requested wells J-1 and J-2 near building are necessary. If there is concern about blocking access to stores with drill rig during install'n, then requested well J-1 can be moved further to north, closer to existing well MW-2. As for controlling quarterly monitoring costs down road, if wells near building show no significant contamination for two sampling events after they're installed, I'd be willing to suspend quarterly sampling of those wells and just ask for them to be sampled once a year until spill

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closure. I believe this is a fair compromise, balancing your client's cost concerns with Dept's concerns regarding plume delineation. Feel free to contact me if you have any questions. - J. Kolleeny 06/08/12: On 6/6/12, received email from Daren Murphy of Soil Mechanics: Hi Jon, Vincent asked that I send this e-mail to you in order to clarify whether or not NYSDEC requires sampling and analysis of soil samples during drilling activities associated with install'n of new GW monitoring wells at subject property. Thank you. On 6/8/12, I sent email reply: Hi Daren, Yes, soil should be screened and sampled during well install'n, with boring logs maintained. Please let me know if you have any other questions. - J. Kolleeny 06/22/12: On 6/19/12, received Work Plan for install'n of addt'l wells at site, prepared by Soil Mechanics. Plan proposes installing 3 addt'l wells, as agreed in negotiations between me and Vincent Nantista of Soil Mechanics (see entry above for 5/25/12). I sent letter (in eDocs) to Mr. Dominick Tomasino of Sand Lane Development Corp. (domtom105@aol.com), cc's to Daren Murphy & Vincent Nantista of Soil Mechanics, approving plan but asking that well MW-13 be moved short distance to east (site conditions permitting), away from sidewalk along Hylan Blvd., in order to intercept any contam moving from area of existing well MW-2 toward site building (strip mall). Awaiting more legible version of work plan for upload to eDocs. - JK 06/17/13: Reviewed Investigation Rpt by Soil Mechanics, dated 4/17/13, received 4/30/13 (in eDocs). Rpt summarizes install'n of 3 addt'l wells at site in Jan./Feb. 2013 to delineate areas of product and dissolved contam. Two new wells near on-site retail bldg (MW-13 & MW-14) showed no significant soil or GW impacts, new well installed in area of product plume (MW-15) showed significant soil impacts virtually from surface to water table at ~46 ft bgs, and had free product (0.18 ft in Feb. 2013; 0.36 ft in April 2013). Existing wells at site were also gauged & sampled. Wells MW-1, MW-5, MW-6, MW-7 and MW-12 also had product (MW-12 had 2.70 ft in April 2013). Significant dissolved contam in wells MW-4 (~9,388 ug/L total VOCs) and MW-11 (~50,448 ug/L tVOCs); also MW-2 had 1,259 ug/L tVOCs and MW-3 had 912 ug/L tVOCs. Based on data, Soil Mechanics recommends continued monthly recovery of free product from wells MW-1, MW-5, MW-6, MW-7, MW-12 and MW-15 by manual bailing, and quarterly sampling of GW from down-gradient monitoring wells. Rpt states that Soil Mechanics will evaluate results of these activities and report their findings, along with any recommendations appropriate to bring about spill closure. I sent letter (in eDocs) to Dominick Tomasino (RP), cc's to Daren Murphy of Soil Mechanics, approving continued monthly bailing of product from affected wells and quarterly GW sampling, but specified that wells MW-2, MW-3, MW-4, MW-11, MW-13 and MW-14 be sampled quarterly; and that if a well is ND or has no VOCs above standards for 3 consecutive sampling events (including past events), well may be temporarily removed from quarterly GW sampling program; however, removed wells and wells MW-8, MW-9 and MW-10 should be sampled annually. My letter also required that if wells currently showing product have no product during quarterly gauging event, wells should be sampled and added to quarterly program, and required that monitoring rpts be submitted quarterly and include all historical GW data, product thickness & recovery data, and that GW data tables include line for total VOCs. - JK 09/13/13: In August 2013, RP contacted DEC R2 Director to request a meeting to discuss remedial goals and spill closure requirements. On 9/13/13, met with RP Dom Tomasino of Sand Lane Development Corp., Mike Menicucci (RP's Atty), Vito Fossella of Land Planning &

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Engineering Consultants, and Vince Nantista of Soil Mechanics. Representing DEC were Vadim Brevdo (chief of Remedial Section B), Atty John Urda, RD Venetia Lannon, and myself (see meeting sign-in sheet in eDocs as brief). DEC stated that free product must be removed to extent feasible before spill closure can be considered. Vince Nantista of Soil Mechanics claimed it is not feasible to recover free product at this site. DEC suggested approaches that might help expedite product recovery, such as determining product recharge rate and timing recovery events accordingly, and agreed to be flexible with regard to extent of product removal required if data indicate that complete removal is not feasible. It was agreed that more aggressive product recovery would be attempted for a period of time, and that progress would then be evaluated. - J. Kolleeny 11/21/13: Sent email to RP, Dom Tomasino (cc's to Soil Mechanics): Dear Mr. Tomasino: I had an inquiry from our Regional Director regarding status of this site. I realize it's only been a little over two months since we met to discuss free product recovery methods and goals, but can you please provide an update on any work performed since then? Also, I believe site is overdue for quarterly GW sampling, so GW sampling event should be scheduled for near future. Please send an update on this project at your earliest convenience. Got phone call from Mr. Tomasino, who said he and his partner (Vito Fossella) will meet with their engineer next week or week after, and will relay my email and instruct him to gather together data collected to submit as rpt; they will also tell him of GW sampling requirement. - J. Kolleeny 12/20/13: In early December 2012, got phone call from Vince Nantista of Soil Mechanics, saying he would put together rpt to update DEC on status of product recovery at site. I reminded him that dissolved-phase GW sampling needs to be performed, and he said they would do that. On 12/20/13, received email from Lori Moccio of Soil Mechanics, with attached letter from Vince (in eDocs) stating that they've been holding off on submitting update on product recovery in order to do GW sampling as requested, but that GW sampling has now been done and lab data received, so rpt will likely be submitted in early January 2014. - J. Kolleeny 03/19/14: Reviewed Cover Letter (with water elevation profiles and depth to water graphs) dated 2/21/14, plus Monitoring Rpt dated 1/28/14, received on 2/24/14, both prepared by Soil Mechanics (in eDocs). Cover letter summarizes site history, from 2006 Phase I which found site to be former gas station, thru removal of ten 550-gal USTs plus ~850 tons of contaminated soil, install'n of monitoring wells, discovery of product (gasoline) in wells, recovery to date of ~1,180 gals of product by hand bailing, performance of DPE pilot test as required by DEC which showed DPE would likely not be effective at site due to tight soils, and on-going hand bailing of product. Cover letter states, as have earlier submitted rpts, that product is not really free, but held in place by tight soils, and that drilling of wells created conduits allowing product to flow down and accumulate on water table. Product recovery rate is ~5-7 gals per bailing event. Letter asserts that product and small dissolved plume are held on-site by tight soils, and that in light of depth to GW of 38-46 ft, residual captive product and dissolved contam pose no threat to public, and therefore Soil Mechanics requests spill closure. Accompanying monitoring rpt states that on 12/10/13, wells MW-2, MW-3, MW-13 and MW-14 were sampled; free product was ID'ed in wells MW-1, MW-4, MW-5, MW-6, MW-7, MW-8, MW-11, MW-12 & MW-15. Rpt states that product recovery has continued on an approx. monthly basis from

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May 2013 thru Jan. 2014. On 1/13/14, they returned for product recovery event and measured 1.50 ft of product in MW-1, 1.26 ft in MW-5, 0.20 ft in MW-7, 0.01 ft in MW-11, 2.11 ft in MW-12, and 0.43 ft in MW-15; wells MW-4 and MW-6 could not be accessed. Total of 7 gals of product were recovered. Dissolved GW data for Dec. 2013 show MW-2 had 328 ug/L total VOCs (down from 1,281 ug/L in Feb. 2013), MW-3 had 420 ug/L tVOCs (down from 927 ug/L in Feb. 2013), MW-13 & MW-14 were ND (same as in Feb. 2013). On 3/7/14, I spoke with Vincent Nantista of Soil Mechanics, I pointed out that they have not implemented more aggressive product recovery schedule as agreed at Sept. 2013 meeting and that spill cannot be closed with over 2 ft of product in one well, over 1 ft in several more wells. On 3/11/14, Mr. Nantista left phone message saying they had returned to site three days after a recovery event and found product recharge of a little less than half thickness measured before recovery, and again bailed wells, and would return again in 3 days. I called Mr. Nantista and explained that I had not requested that they perform product recovery at 3-day intervals. I stated that amount of recharge suggested wells would likely fully recharge within 7 to 10 days, and I suggested that recovery events be performed 3 times a month for 4 to 6 months, at which time progress (if any) in reducing product thicknesses would be evaluated and situation at site reassessed. Mr. Nantista agreed to pursue this course of action. - J. Kolleeny 09/17/14: On 8/27/14, received email from Ginny Cikos of Soil Mechanics, with attached letter, LNAPL thickness & recovery data table, and site plan showing well locations (pdf file, in DecDocs). Data table shows 8-week sequence of weekly product gauging and recovery events, beginning on 6/13/14 and ending on 8/1/14. Data show six wells with measurable free product; on 6/13/14, well MW-1 had 1.00 ft of product, well MW-5 had 1.84 ft, well MW-6 had 1.04 ft, well MW-7 had 0.28 ft, well MW-12 had 4.50 ft, and well MW-15 had 0.23 ft; ~10.5 gals of product were recovered on that date. By last event on 8/1/14, well MW-1 had 0.42 ft, well MW-5 had 0.37 ft, well MW-6 had 0.30 ft, well MW-7 had 0.10 ft, well MW-12 had 0.37 ft, and well MW-15 had 0.01 ft; ~1.07 gals of product were recovered then. Soil Mechanics' letter notes that all wells now have less than 6 inches of product, target criterion established at 9/13/13 meeting, that site has not been a gas station for more than 25 yrs, and that tight soil formation at site prevent migration of product plume. Based on data, letter requests that wells be decommissioned and spill closed. After discussion with Vadim Brevdo (my supervisor) I sent letter (in DecDocs) to Dominick Tomasino (RP), cc's to Mike Menicucci (atty), Vincent Nantista (Soil Mechanics), Venetial Lannon (DEC R2 Director) and Vadim Brevdo (DEC Remedial Section B Chief) stating that before spill can be closed, DEC requires (1) submission of waste disposal manifests for product recovered during 8-week period of weekly recovery events; (2) performance of addt'l round of well gauging to confirm that free product thicknesses have stabilized at less than 6 inches and have not rebounded; and (3) if product thickness in any well has rebounded above 6-inch criterion, product recovery events should resume until it can be shown that product thicknesses remain below 6 inches when wells have been allowed to fully recharge and come to equilibrium. - J. Kolleeny 01/13/15: I sent email to RP Dominick Tomasino (in DecDocs): Dear Mr. Tomasino: I am writing to inquire about status of this spill cleanup project. DEC last issued correspondence re this site on 9/17/14 (see attached). In that letter, DEC requested waste disposal manifests for free product recovered at site in course of

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8-week intensive effort of weekly product recovery, and we requested another round of well gauging to confirm that product thicknesses in wells at site have remained below informal target level of 6 inches. Letter stated that if product has rebounded to a thickness of greater than 6 inches in any well, product recovery efforts should resume and continue until 6-inch target level can be maintained as an equilibrium condition. Shortly after issuing this letter, I was contacted by your consultant, Mr. Vincent Nantista, who acknowledged that free product had rebounded to thicknesses greater than 6-inch target level, although he declined to provide specific information about which wells had rebounded and about measured product thicknesses. Mr. Nantista maintained, as he has on other occasions, that it is not possible to bring about significant reductions in product thicknesses at site within a reasonable period of time. I stated that an 8-week period of intensive product recovery is not adequate to conclusively establish feasibility, or infeasibility, of reducing product thicknesses at site, and I repeated my request that an intensive product recovery program (comprising 3 or 4 product recovery events per month) be implemented for 4 to 6 months, at which point DEC will be better able to truly evaluate feasibility of reducing product accumulations in wells at site. Since that conversation, DEC has not received any information about remedial activities at site. DEC is interesting in resolving this open spill case in an expeditious manner, and I remind you that you have signed a Stipulation Agreement which commits you to that same goal. Please acknowledge your receipt of this email and provide a project update at your earliest convenience. - JK 01/14/15: I received email reply from Vincent Nantista of Soil Mechanics: Dear Mr. Kolleeny, I wish you a Happy New Year! In response to your email, please accept my apology for delay in responding to your September [2014] letter. While I don t wish to bore you with details, I encountered a serious health issue which required a hospital stay and subsequent doctor visits. Only reason I mention this is that it impacted my ability to stay course with projects. Sometimes life does that to you, takes you off course. I m happy to say that all is well and I can now redirect my focus back to issue at hand. I hope you understand. You will be receiving my response by next week. - J. Kolleeny 03/03/15: On 2/26/15, I received letter from Soil Mechanics dated 2/23/15, with attached data table showing 8 weekly well gauging/product recovery events from 6/13/14 thru 8/1/14, plus a 9th well gauging/product recovery event performed on 11/13/14. Nov. 13th event shows all 6 affected by free product having LNAPL thickness of less than 0.5 ft, similar to results of 8/1/14 gauging event: well MW-1 had 0.46 ft (up from 0.42 ft on 8/1/14), well MW-5 had 0.45 ft (up from 0.37 ft on 8/1/14), well MW-12 had 0.45 ft (up from 0.37 ft on 8/1/14). Table includes no indications of site visit with well gauging event in late Sept. or early Oct. 2014 discussed with Mr. Vincent Nantista in phone conversation, in which he acknowledged that product levels in some wells had rebounded back above 6 inches. Letter requests spill closure. On 3/3/15, I sent email to Mr. Nantista: Dear Mr. Nantista: Thank you for your letter dated Feb. 23, 2015 pertaining to this spill site, accompanied by well gauging and product recovery data table, waste manifest and disposal certificate. As stated in your letter, well gauging table presents free product thickness data showing that on Nov. 13, 2014, six site wells impacted by free product all had less than 6 inches of product. I have a number of questions and comments about letter and accompanying data. First, on

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Sept. 17, 2014, I sent a letter to Mr. Dominick Tomasino in response to a document you had submitted summarizing 8 weekly free product removal events, culminating in product thickness measurements of less than 6 inches in impacted wells. In my letter, I asked that you return to site and gauge wells to confirm that product thicknesses had remained below 6 inches as an equilibrium condition. Shortly after sending my letter, I received a phone call from you. During our conversation, you stated that you had gauged wells again, and that product levels in some wells had rebounded above 6-inch target thickness (altho you were not specific about which wells or about measured product thicknesses). However, well gauging event you mentioned in our phone conversation does not appear to have been reported in data table accompanying your letter of Feb. 23, 2015. Second, well gauging data table which accompanies your 2/23/15 letter does not clearly indicate whether product thickness measurements taken on 11/13/14 were taken before or after removal of free product from wells (table does indicate that free product recovery was performed on that date). I believe that my letter of 9/17/14 makes clear that 6-inch product thickness target level should be an equilibrium condition (i.e., a measurement taken long enough after a product recovery event to have allowed product to fully recharge into wells) as a prerequisite for consideration of spill closure. Finally, DEC requires that all submissions be accompanied by an electronic version of submission; your 2/23/15 letter with data table and waste disposal documents was not accompanied by a pdf file of these documents. DEC requests that you please revise and resubmit 2/23/15 letter and accompanying data table to include any and all well gauging events performed at site between 8/1/14 and 11/13/14, and with explanation in letter s text affirming that product thickness measurements taken on 11/13/14 were taken before any product removal was performed on wells. Revised letter and data table should be accompanied by a compact disk with a pdf file of letter, data table, and waste disposal documents for upload to our database. In event that 11/13/14 product thickness measurements were taken after product removal was performed on wells, please return to site and gauge wells again, prior to performing any product recovery and at least 7 days after any product recovery has been performed, and report results to DEC. Please feel free to contact me if you have any questions or concerns. - J. Kolleeny 03/19/15: Received CD with pdf files of Soil Mechanics' 2/23/15 letter with well gauging data table, waste manifest and disposal certificate, plus revised version of 2/23 letter, re-dated 3/16/15. Revised letter includes an addt'l sentence stating that 11/13/14 well gauging measurements presented in data table were collected prior to recovering product from wells, like all other such measurements. However, table was not revised to include any gauging data for an event between 8/1/14 and 11/13/14, which was discussed in conversation I had with Mr. Nantista in late Sept. or early Oct. 2014, in which he acknowledged that product thicknesses had rebounded above 6 inches. I called Mr. Nantista and noted absence from table of addt'l gauging data from event discussed in our phone conversation; he stated that he could not recollect details of our conversation and that he had no other well gauging data, nor any record of a gauging event conducted between 8/1/14 & 11/13/14. He said that he was preparing another letter to send to DEC explaining difficulties in measuring depths to product and/or water table and difficulties in recovering product at site, due to complex Staten Island subsurface lithology with fine-grained soils and unexpected

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differenced in water table elevation from one well to next. I stated I would like to see another well gauging event to confirm that product levels have remained below 6 inches as an equilibrium condition, under different seasonal water table conditions. Mr. Nantista stated I should make this request in writing. I said I would do so after receiving letter he said he was preparing. - J. Kolleeny 03/24/15: I sent email to Kevin Hale of DEC Central Office, asking if DEC has any standard or guidance regarding how many well gauging events are required (and at what time intervals) to establish that LNAPL has been successfully removed from monitoring wells at a site. Kevin Hale sent email response stating that a rule of thumb was four quarters of gauging. He added that appearing/disappearance of LNAPL is often keyed to water table elevation, with LNAPL reappearing at sites during times of drought and lowered water table elevations. - JK 03/30/15: Received email from Ginny Cikos of Soil Mechanics, with attached pdf file of letter from Vincent Nantista of Soil Mechanics dated 3/17/15 (in DecDocs). Letter acknowledges receipt of my 3/3/15 email response to their 2/23/15 letter rpt; letter states that Soil Mechanics' SOP for all well gauging/product recovery events at site (including event of 11/13/14) was to first measure depths to product & GW to determine product thicknesses, then to bail product from wells into 55-gal drum. Letter states that product recovery efforts at site have been going on for almost 7 yrs, states that they have complied with all my requests to accomplish goal of accelerating product recovery [JK-actually, they never performed 4 to 6 months of intensive product recovery as I requested on several occasions, including 9/13/13 meeting]; letter states that hydraulic dynamics at site are complicated due to soil profiles, that water table depth varies over time, changing hydraulic gradient across site and affecting product thicknesses in wells, which letter writer describes as seepage product as opposed to my use of free phase or floating product [I had discussed Mr. Nantista's insistence on this distinction with Kevin Carpenter of DEC Central Office, who discounted this distinction and stated that if product can drain from soil pores and accumulate in wells, it is free product - JK]. Letter further states that product plume is very small and has not migrated, as spill must've occurred more than 25 yrs ago, and that remaining product is virtually being held captive by fine-grained soils, which make product recovery painfully slow despite aggressive efforts which have been made. Letter then states, in apparent reference to JK's phone conversation with Mr. Nantista in Fall 2014 in which Nantista acknowledged significant rebound of product above 6 inches, that While this writer recollects speaking with Mr. Kolleeny about product depths, he does not recollect specifics of that conversation nor do we have any other data than that presented in rpts. Letter says they hope DEC is satisfied with their efforts to allow closure of spill case. - J. Kolleeny 04/06/15: I prepared and issued letter (in DecDocs) to RP Dominick Tomasino, cc's to Venetia Lannon (RD) and Vadim Brevdo of DEC, Vincent Nantista of Soil Mechanics, and Mike Menicucci (RP's atty), responding to Soil Mechanics' letter of Feb. 23, 2015 with accompanying well gauging data and SM's letter of March 17, 2015. My letter stated that DEC acknowledges difficult soil conditions at site, which is why we are considering spill closure request in spite fact that free product at site has not been reduced to trace or ND levels, as is commonly done prior to petitioning DEC for spill closure. Letter states that DEC's usual practice is to require 4 quarters of well gauging to confirm removal/reduction of

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product under different seasonal conditions, and therefore, since last gauging event was in Nov 2014, DEC requires one addt'l gauging event to confirm that product levels have been reduced to less than 6 inches as an equilibrium condition. Letter asks that all site wells, including those which do not exhibit product, be included in this gauging event, and that results be presented in a letter rpt including gauging table with data for all wells from 9 gauging events performed from June to Nov 2014, and with addt'l columns providing TOC elevations, depth to water & product measurements, and water table elevations, to evaluate changes in water table els and effects (if any) of seasonal water table fluctuations on product thicknesses. Letter states that rpt should also include a water table contour map based on measurements from upcoming well gauging event, to confirm current GW flow direction at site. Finally, letter states that if upcoming gauging event shows that product thickness in any well has rebounded above 6 inches, product recovery events should resume until product thicknesses remain below 6 inches when wells have been allowed to fully recharge and come to equilibrium for minimum of 2 weeks after bailing of product from wells. - J. Kolleeny 05/29/15: Received email from Ginny of Soil Mechanics, sent on behalf of Vincent Nantista. Attached to email are letter stating that wells were gauged on 4/20/15 and all six wells that have historically shown product had less than 6 inches, and data table showing depth to water, depth to product, product thickness and product recovered measurements for six wells (MW-1, MW-5, MW-6, MW-7 & MW-12). Letter requests spill closure. I sent email reply: Dear Ginny and Mr. Nantista: Thank you for your letter and accompanying data table. I have attached a copy of my letter dated April 6, 2015 for your reference. Please note that page 2 of letter includes following paragraph: The results of addt'l well gauging event should be presented in a letter rpt with a well gauging data table. Table should include data for all site wells from nine gauging events performed from June to Nov. 2014, and should include addt'l columns providing top of well casing elevation measurements, depth to water and depth to product measurements, and water table elevation measurements, in order to evaluate changes in water table elevations and effects (if any) of seasonal water table fluctuations on product thicknesses. (Product recovery data should be presented in a separate column in table.) Letter rpt should also include a water table contour map based on water table elevation measurements from upcoming well gauging event, to confirm current GW flow direction at site. Data table you have submitted today only includes data for wells which have historically exhibited free product; my April 6, 2015 letter required well gauging data for all site wells (including wells which do not exhibit free product). Letter also required that data table include columns providing Top of Casing Elevations for each well, and Water Table Elevations for each well. Finally, letter required that a water table contour map based on most recent gauging data (i.e., April 20, 2015) accompany well gauging data table. Please revise data table to include missing columns and gauging data for all site wells, and prepare a water table contour map showing up-to-date local GW flow direction, and re-submit these documents. Feel free to contact me if you have any questions. - J. Kolleeny 06/04/15: On 6/3/15, received email from Ginny Cikos of Soil Mechanics, sent on behalf of Vincent Nantista of Soil Mechanics, with attached letter (revised from 5/29/15 letter), plus attachments: data table for six wells impacted by product, with depth to product, depth to water,

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product thickness and product volume (recovered) measurements; data table listing all site wells (MW-1 thru MW-15), with depth to product, depth to water and water table elevation measurements (no column for product thickness); GW contour map dated 4/22/13; and small topo map of site area showing land contours. I sent email noting that GW contour map should be based on most recent gauging data from 4/20/15. On 6/4/15, Ginny re-sent all documents; email states that date on GW contour map was a typo, revised map is dated 4/22/15. Letter plus attachments are in DecDocs. Table with data for six product-impacted wells shows that on 4/20/15, well MW-1 had 0.44 ft of product and 0.25 gals of product were recovered, well MW-5 had 0.38 ft of product and 0.25 gals were removed, well MW-6 had 0.26 ft of product and 0.12 gals were recovered, well MW-7 had 0.15 ft of product and 0.12 gals were recovered, well MW-12 had 0.30 ft of product and 0.38 gals were recovered, and well MW-15 had 0.01 ft of product and no measurable gals of product were recovered. Table with data for all site wells shows that wells MW-2, MW-3, MW-4, MW-8, MW-9, MW-10, MW-11, MW-13, and MW-14 had no product detected. GW contour map shows GW flow to NNE (toward off-site well MW-8, consistent with past measurements. I will review further and confer with other staff. - J. Kolleeny 06/29/15: I sent email to RP Dominick Tomasino, Ginny Cikos of Soil Mechanics, and att'y Michael Menicucci, cc to Vince [Nantista] @Soil Mechanics: Mr. Tomasino: Sorry for delay in responding to Soil Mechanics last submission. Because this project is somewhat unique among those I ve worked on, I wanted to check with senior staff in DEC Central Office before proceeding with spill closure. I d like to meet at site with Soil Mechanics staff and check wells one more time to confirm that product levels have remained below 6 inches. Either tomorrow (Tuesday June 30th) or Wednesday July 1st would be good for me, at about 10:30 or 11 A.M. (I could also meet in early afternoon if that s more convenient). Please let me know if someone from Soil Mechanics can meet me at site tomorrow or Wednesday. I received phone call from Vincent Nantista, who said Tuesday (6/30/15) would be difficult, but Wednesday (7/1/15) would be good; we agreed to meet at site on 7/1/5 at 10:30 A.M. - J. Kolleeny 07/28/15: After 7/1/15 site visit, received Soil Mechanics' data tables and write-up letter on 7/10/15; requested revisions and corrections. Received revised letter requesting spill closure on 7/23 and revised/corrected data tables on 7/28/15. Will review data & respond. - JK 11/06/15: Sent letter to RP Dominick Tomasino (cc's to John Urda of DEC R2 Office of General Counsel and Michael Menicucci, Mr. Tomasino's att'y), stating that spill closure is not approved as DEC has determined that significant product thicknesses remain in several wells. Letter requires submission of new RAP to address petroleum impacts by Dec. 18, 2015. - JK 12/16/15: On 12/9/15, I received letter dated 12/3/15 (in DecDocs) from Michael Menicucci, RP's att'y, stating that RP has retained a new envt'l consultant, Ireland Brook Enterprises, LLC, requesting extension of 12/18/15 deadline for submission of new RAP, and requesting meeting with all parties to discuss outstanding issues at site that must be addressed. On 12/16/15, after R2 Regional Att'y Karen Mintzer spoke with Menicucci, I sent email to RP Dominick Tomasino, cc's to Karen Mintzer and John Urda of DEC R2 Office of General Counsel and to Menicucci: Dear Mr. Tomasino: I have received a letter from your att'y, Mr. Michael Menicucci, informing Dept that you have retained a new envt'l consulting firm and requesting that 12/18/2015 deadline for submission of new RAP for this spill site be extended. It is my

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understanding that Mr. Menicucci spoke with our Regional Att'y Ms. Karen Mintzer today and that Mr. Menicucci will propose dates for a meeting with all concerned parties in Jan. 2016. 12/18/2015 deadline for submission of a new RAP is suspended; a new due date will be discussed when we meet in Jan. 2016. Feel free to contact me if you have any questions. - JK 01/06/16: DEC remediation staff (Kolleeny & Brevdo)and legal staff (Mintzer & Urda) met with property owners Dominick Tomasino and Vito Fossella, their att'y Michael Menicucci and new consultant James Johnston of Ireland Brook Enterprises. Menicucci asked for clarification of DEC s 11/6/15 letter which stated that DEC s investigations confirmed substantial product thicknesses remaining in several site wells. DEC explained that they had gauged wells at site in June 2015, finding more than 3 ft of product in one well, more than 2 ft in another well, and more than 1 ft of product in a 3rd well. DEC stated that a new RAP must be prepared which will aggressively target free product at site and reduce product levels to extent feasible, suggesting that addt'l investigation, possibly including install'n of addt'l wells, may be helpful in developing a plan. New consultant Johnston asked when DEC would require new RAP; DEC responded they will issue a letter setting a deadline for RAP submission in mid-February 2016. Johnston and Menicucci asked if DEC would provide their well gauging data. DEC legal staff responded that they will consider this request. - J. Kolleeny 01/14/16: After conferring with Urda & Mintzer of R2 Office of General Counsel, I sent letter (in DecDocs) to RP Tomasino, cc's to Fossella, att'y Menicucci, and consultant Johnston of Ireland Brook Enterprises, stating that as discussed at 1/6/16 meeting, DEC requires a new RAP proposing actions to address petroleum impacts at site, with deadline of 3/4/16 for RAP submission. Letter also stated that regarding request for DEC's data, I have been advised by DEC legal staff that data are not available for release at this time, as under FOIL, documents related to a law enforcement investigation may be withheld from disclosure. - JK 02/19/16: Reviewed Remedial Investigation Work Plan prepared by Matrix New World Engineering, P.C. and dated 2/12/16 (in DecDocs). Work Plan summarizes past investigations at site and proposes addt'l investigation to enable preparation of a suitable RAP. Addt'l investigation will involve geophysical survey to identify subsurface utilities and look for unknown USTs, gauging of all wells for depth to GW and product thicknesses, collection of GW samples from wells MW-2, MW-3, MW-4 & MW-11 to evaluate dissolved impacts, and performance of a laser-induced fluorescence (LIF) investigation to delineate NAPL distribution in subsurface. LIF survey will involve 5 initial direct-push borings and 6 secondary borings. After evaluating results, Matrix will prepare & submit a Remedial Investigation Rpt / RAP within 8 weeks of completion of investigation. I sent letter (in DecDocs) to RP Dominick Tomasino, cc's to Karen Mintzer & John Urda of DEC OGC, Michael Menicucci (RP's atty), Vito Fossella (RP's associate) and James Johnston of Ireland Brook Enterprises, approving work plan but requesting that an addt'l LIF boring be advanced in sidewalk west of MW-12 (if feasible), that LIF results be used to determine locations for addt'l permanent wells for NAPL recovery, that if significant GW contam is found in either well MW-2 or MW-3, then wells MW-13 & MW-14 also be sampled; and extending deadline for RAP submission from 3/4/16 to 4/29/16. - JK 03/14/16: Received email from Jim Johnston of Ireland Brook Enterprises with update on LIF investigation at site. Email and attachments (in DecDocs) indicate

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they drilled 7 LIF borings and found significant spikes in two borings (LIF-3 and LIF-5). Well gauging on 3/8/16 found measurable free product in six wells: well MW-1 had 1.15 ft, well MW-4 had 0.17 ft, well MW-5 had 5.88 ft, well MW-6 had 1.35 ft, well MW-7 had 0.67 ft, well MW-12 had 4.06 ft. Dissolved GW samples were collected from 3 wells. Email states that they are evaluating LIF data and waiting for GW results; once they have all data they will send to me and arrange a conference call to discuss a path forward to developing a RAP. - J. Kolleeny 05/02/16: I sent email to Jim Johnston of Ireland Brook Enterprises: Jim, Can you tell me status of this project? Your 3/14/16 email stated that once you had all data from LIF investigation, you would forward data & contact me to discuss RAP, but I never got any other data and I wasn t contacted. Deadline for submission of RAP was last Friday [4/29/16]. Please let me know project status ASAP. Jim sent reply: Jonathan, I needed to meet with client to confirm our RAP approach before we could finalize document. We were able to meet on last Wednesday. My fault for not getting you remainder of data (oversight on my part). We will have final RAP to you Wednesday [5/4/16]. We are proposing an aggressive vacuum extraction program using stingers and knockout pots within a manifold system that will be attached to wells that have historically exhibited product to date. This is similar to a system that I believe you were involved with out at JFK. Once you review, we can then conference call to discuss path forward. I sent reply: Jim, Thanks for getting back to me. While I m in favor of implementing an aggressive remedial approach, depth to GW at this site is much greater than at JFK. Do you know that a hi-vac system will be able to recover LNAPL from depth of ~45 ft below grade, and that tight soils won t prevent system from functioning properly? Previous consultant performed a dual-phase extraction pilot test using a vac truck and concluded that such a system wouldn t work at site. I m not sure they performed test correctly, but I want to be sure that system you re proposing will be able to function before approving it. Anyway, I look forward to receiving final RAP. Jim replied: Jonathan, group we intend to use claims it will work under conditions that exist. We intend to pilot it as part of RAP. I just don t see any better way of reducing free product in a timely fashion. Continuous skimming will take forever, and surfactants will not be effective until we are able to knock free product down to a manageable level. I think it is worth a shot. We discussed pros & cons with our Client and they understand and are willing to try it in order to move this forward. I replied: Okay, thanks. - J. Kolleeny 05/23/16: Reviewed Remedial Investigation Rpt & Remedial Action Plan by Matrix New World Engineering, P.C. dated 5/5/16 (received by email on 5/6/16). Rpt presents results of well gauging & sampling on 3/8/16, GPR survey, and LIF soil investigation. GPR survey did not find any unknown USTs. Rpt states that well gauging found measurable LNAPL in 4 wells: MW-1, MW-5, MW-7 & MW-12. Gauging data table lists LNAPL thicknesses, shows MW-1 had 1.15 ft, MW-5 had 5.88 ft, MW-7 had 0.67 ft, & MW-12 had 4.06 ft; data table gives depth to product and water measurements for wells MW-4 & MW-6, but product thickness column shows 0.00 ft of product in those wells (conflicts with data table sent on 3/14/16, which showed measurable product in six wells, with 0.17 ft in MW-4 and 1.35 ft in MW-6). Results of LIF investigation suggest LNAPL present at boring LIF-1 (ID'ed as motor oil), LIF-3 (ID'ed as gasoline or diesel) and LIF-5 (ID'ed as motor oil). GW sampling showed dissolved impacts at MW-2, MW-3 & MW-11 (altho it seems lab didn't analyze for usual

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STARS/CP-51 gasoline compound list). Worst was MW-11 with ~1,000 ug/L total BTEX (other compounds also detected). Rpt concludes that dissolved GW impacts are not migrating. Based on data, Matrix recommends semi-ann GW sampling, and using existing wells for vac extraction product recovery, performed monthly for 3 months and then quarterly; after 1 yr, results will be evaluated and if approach has not been effective, a more aggressive approach such as application of surfactants will be considered. If LNAPL is reduced to less than 6 inches in all wells for minimum of 6 months, they will petition for spill closure. I sent email to Jim Johnston of Ireland Brook Enterprises pointing out discrepancy between this rpt and data I received in March re which wells have LNAPL, and stating that rpt seems to suggest use of vac truck instead of hi-vac system he indicated would be proposed in his 5/2/16 email. I stated that brief remedial approach suggestion at end of rpt doesn't constitute a RAP as required, and that monthly vac truck recovery was attempted by previous consultant and found to be ineffective. I asked that he clarify and expand on remedial approach, resolve LNAPL in wells discrepancy, and submit revised RAP. Jim stated he would review my comments and get back to me. - J. Kolleeny 05/26/16: I sent email to Jim Johnston: Jim, when I can expect to hear from you regarding issues I raised about RIR/RAP? I'd like to issue a formal response, but I wanted to confirm several things first, such as actual number of wells with measurable free product when wells were gauged in March (4 vs. 6), whether remedial proposal is to use a vac truck for product recovery events, and if so, why there was a change from idea of installing a manifolded hi-vac system (which was my understanding based on email from you in early May) to use of a vac truck. Also, what sort of pilot testing do you have in mind? I also wanted to ask why results of LIF investigation were not used to propose addt'l wells at locations where indications of LNAPL found? If purpose of LIF investig was not to determine locations for addt'l product recovery wells, then what was point of that investigation? In what way have results of that investig been incorporated into current remedial proposal? It would be helpful if we could discuss these issues by phone. Please call me at your earliest convenience. - J. Kolleeny 05/27/16: Received reply from Jim Johnston: Jonathan, We had a team meeting yesterday and have begun revision of RIR/RAP to address issues you noted and to fortify RAP portion of rpt. We are working with subcontractor to provide more detail on process, as well as method we will use to optimize recovery efforts. It has been our belief from beginning that having a 24/7 high-vacuum recovery system would not be efficient due to anticipated low recharge of formation. Due to vacation schedules, we don t think we can get a draft redline rpt to you for discussion until Wednesday [6/1/16]. We can then schedule a conference call for Thursday [6/2/16]. Hopefully this works for you? I sent reply: Jim, Yes, Wedn/Thurs of next week would be fine to send a draft rpt and have a conversation about remedial approach. - JK 06/02/16: Received email from Mindy Chassin Horowitz of Matrix New World Engineering, P.C., with attached revised RIR/RAP dated 6/1/16. RAP includes revised remedial proposal, involving vacuum truck recovery (VER) of product using stingers installed in 6 LNAPL-impacted wells, manifolded together with hoses to vac truck; clear tubing will be used so LNAPL can be observed and stingers can be adjusted for optimal product recovery. Proposed schedule is to vac 6 hrs/day for 5 days in 1st week, gauge wells middle of 2nd week, vac 3-5 days in 3rd week, gauge wells middle of 4th week, vac 1-5 days in

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5th week, gauge wells middle of 6th week; after that, VER frequency will be evaluated based on results, with VER projected to continue weekly for 6 months, after which effectiveness will be evaluated with DEC. If VER is found to not be effective, a more aggressive approach, such as introduction of surfactants, will be considered. On 6/2/16, I participated in conference call with Jim Johnston of Ireland Brook Enterprises and Mindy Horowitz of Matrix, to discuss revised RAP. It was agreed that they would perform a VER pilot test, with follow-up well gauging to determine product recharge rate and optimal schedule for VER events, and revise RAP based on results. They also agreed to consider my suggestion of installing addt'l and/or larger diameter recovery wells, and to consider install'n of continuously operating product skimming system if VER is not effective. Pilot test originally scheduled for 6/27/16, but rescheduled for 7/12/16. - JK 07/12/16: Visited site to observe VER pilot test. Mark Sprengel & Tiffany (last name?) of Matrix were on-site. Gauging of wells prior to VER showed well MW-5 had more than 8 ft of product, MW-12 had 4.62 ft, and three other wells had a foot or more of product. Vac truck spent 20-30 minutes vacuuming each impacted well. Matrix field staff will return to site at intervals of 1, 3 & 7 days to check on product recharge rate. A slug test was also performed on a well without product to evaluate hydraulic conductivity of local aquifer. - J. Kolleeny 08/01/16: On 7/21/16, Jim Johnston of Ireland Brook Enterprises sent email: Jonathan, Sorry I missed you at site. Field crew told me you showed up shortly after I left. By all accounts VER went very well. Only hiccup was that dumpster was on top of MW-4 and could not be moved in time for VER. Appended is product recovery & rebound data for wells. Based on rebound to date, I believe it makes sense to go out next Tuesday again and see where we are. We will also gauge and hand bail well #4 (if there is any product). We performed 2 slug tests and are evaluating data on those. In addition, we are estimating amount of product and water in each well column versus final volume of product/water removed by VER contractor to determine how successful we were in inducing product removal from formation outside wells. This will help determine efficacy of VER efforts vis a vie hand bailing or other passive methods. Of note (and I know that you've mentioned this before) is dramatic difference in product in wells (photo attached). Given this condition, we will recommend to client that we do fingerprinting on two different products. I am concerned that there may be an off-site source impacting site. After we gauge and bail on July 26th, we would like to have a quick call on 28th to discuss all results and a path forward prior to issuing rpt. Hopefully you'll be available? On 8/1/16, I sent email reply: Jim, Thanks for update and product recharge data. Did you return to site on July 26th, and were you able to gauge well MW-4? Sorry I was out of town and could not discuss results with you on July 28th; I ll be in office all week so let me know when you d like to talk about data. As for different appearance of LNAPL, by all means it makes sense to do fingerprint analysis and age-dating of product. However, I don t know of any other potential sources in area, and that coupled with fact that there seems to be very little migration of product (for instance, towards on-site down-gradient wells between wells with LNAPL and shopping center), due most likely to tight soils below site, I think it s unlikely that there s an off-site source. Was a Phase I ever done for this property? If not, it might be worth getting a set of Sanborn Maps and searching City databases to see if there were any other gas stations in immediate area in past. It s

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possible that different tanks or piping at site began to leak at different times, and/or that amount of organic matter in subsurface soils varies laterally, either or both of which might help explain different appearance of LNAPL. And I still think it would be worth trying to put in some addt'l wells near MW-12 (which has light-colored LNAPL) to try to delineate product in that well. (I know you can t drill in sidewalk, but perhaps you could drill wells near MW-12 in area of soil along edge of parking lot.) Please keep me posted and let me know when you d like to talk. Well gauging data and LNAPL photo are in DecDocs as brief. - JK 08/29/16: Received email from Jim Johnston of Ireland Brook Enterprises: Jonathan, wanted to update you on progress at 900 Hylan Blvd & see if you would be available for a conference call on Thursday [9/1/16]. Below is some of our progress to date. " High vac extraction was performed on 7/12 Went well. " We also did permeability testing on 7/12 results show a higher value than we would have expected, given tightness of soil. " We returned on 13th, 15th, 19th & 27th [28th?] to gauge wells and measure free product recovery [recharge]. Surprisingly, by 28th, MW-5 (worst well) had only rebounded from 5+ ft to 1.92 ft. Gauging data attached [in DecDocs as brief]. " We also did product fingerprinting (MW-5 & MW-12 (clean product)) and lab reported that both samples are mixtures of gasoline & diesel, with MW-5 having more diesel than MW-12. They opined that difference in color could be attributed to different mixtures, or interactions of products with organic material in soil. Diesel portion of both samples are from same source. They were not able to easily tell same about gasoline portions. They don t recommend any addt'l analyses on these samples as presence of diesel would bias results. " Given slow rebound that we are seeing, we are thinking of recommending installing a passive skimmer system (http://www.qedenv.com/Products/Recovery/Passive_Skimmer_Overview), and would like to hear your thoughts. " To increase recovery and hasten closure, we may install a 6 or 8 well to replace MW-15 (appears to have failed), since we will need to replace this well anyway. Please let me know if you will be available on Thursday [9/1/16] to discuss. I sent email reply: Jim, Thanks for update with addt'l data, and for your thoughts on how to proceed from here on this project. I m available on Thursday [9/1/16] for a conference call to discuss these issues. I have a couple of thoughts on your comments. First, if slug tests gave higher permeability values than you were expecting, I m surprised that you re giving up on idea of VER (or something like a combination of surfactant injections and VER). I checked out link you provided to passive skimming system, and if I m understanding it correctly, this would be my least favored option for site (after VER or even hand-bailing). Passive skimmers usually have a capacity to hold only a gallon or even 1/2 gallon of LNAPL, which must be manually retrieved and emptied, so I don t see how this would be an improvement over hand bailing, and would require fairly frequent site visits to empty accumulated product. Technology I ve suggested in past is a Spill Buster, which pumps LNAPL to a holding tank when its reservoir is filled, so it can operate more or less continuously without requiring frequent site visits to retrieve and empty product. Here s a link: http://cleanearth.biz/products/magnum-spill-buster/ about-magnum-spill-buster/ Second, while I agree that well MW-15 must be replaced if it s become unusable, and I like idea of installing larger diameter wells at site to facilitate product recovery, I m not sure if that s optimal location for install'n of a 6- or 8-inch

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diameter well; it might make more sense to put in a larger well(s) at location(s) of MW-5 and/or MW-12, which seem to have greatest product accumulations at site. And as I believe I have mentioned several times in past, I still believe it would be worthwhile to install 1 or 2 delineation wells near MW-12 in strip of soil along north edge of parking lot, to see if there is more recoverable product in that area of site (unless there are site constraints such as overhead obstructions that would prevent drilling in that area). We can discuss these issues and others on Thursday. Please let me know best time for conference call. We agreed on 3 pm for call on 9/1/16. - JK 08/31/16: I sent email to Jim Johnston of Ireland Brook Enterprises, cc's to Mindy Chassin Horowitz, Ed Sullivan & Brian Crespi of Matrix: Jim, is there any chance your staff could return to site and gauge wells one more time prior to our conference call tomorrow afternoon? Last gauging event was more than a month ago. I realize this is very short notice, but I think data would be very useful for our discussion. They could save a little time by only gauging wells that had measurable product on July 28th. Please let me know if this can be done; if not, we ll work with data you already have. Thanks. Jim sent reply: Jonathan, Yes, we will send somebody out to site to gauge wells. By time we get data & have it plotted it will probably be towards end of day. Accordingly, we should probably reschedule our conference call for Tuesday [i.e., Sept. 6th]. Are you available around 10 a.m.? I replied that they should call in at ~11 a.m. on Tuesday Sept. 6th. - J. Kolleeny 09/06/16: Had conference call with Jim Johnston of Ireland Brook Enterprises and Mindy Chassin Horowitz of Matrix New World Engineering. Mindy explained that product skimmer pumps they propose to use have storage capacities ranging up to 4 gals (equal to ~1.5 feet of LNAPL in well and well pack); since follow-up well gauging after vac truck pilot test showed it took 9 days for well MW-5 to recharge that amount, if New World monitors site wells weekly they should be able to empty skimmer before it fills completely. They stated that well MW-15 is damaged and cannot be accessed, so they propose to replace it. They also propose to install a large-diameter (6 -8) well between MW-5 and MW-12 to assist in LNAPL recovery. I urged that they also install a well in strip of soil MW-12 is located in, about 10 ft to north of MW-12, to better delineate LNAPL plume. They agreed to this. I asked that they prepare and submit a brief work plan for install'n of 3 addt'l wells, and after wells have been installed they should complete preparation of a new RAP. - J. Kolleeny 10/04/16: On 9/30/16, sent email to Jim Johnston of Ireland Brook Enterprises, cc to Mindy Chassin Horowitz of Matrix New World Engineering: Mindy and Jim, I was expecting to receive a work plan for install'n of addt'l wells at this site soon after our last conference call. Can you update me on status of this project and well install'n work plan? Been almost a month since conference call& On 10/4/16, I sent another email: Jim, I wanted to confirm if you received my email below, sent last Friday? I am concerned that progress on this project appears to have stalled since our last conference call. Please let me know if you received my email, and please provide an update on status of project. If there s something holding things up, I need to know that. Jim Johnston sent reply: Sorry Jonathan. Could have sworn I sent you a reply. Our client was not prepared for magnitude of cost for addt'l work we discussed moving forward. They are evaluating same, and I will let you know when we have any addt'l information. I am suggesting that they just release us on well install'n at this point. - JK 10/13/16:

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Having heard nothing further from RP or his consultants, I sent letter (in DecDocs) to RP Dominick Tomasino, cc's to John Urda of DEC OGC, Michael Menicucci (RP's atty), Vito Fossella (RP's associate), James Johnston of Ireland Brook Enterprises, and Mindy Chassin Horowitz of Matrix, stating that results of VER pilot test have not been formally submitted, and requiring submission of a new RAP by 11/10/16. Letter stated that new RAP should propose actions to aggressively target product at site, & should include proposals to replace any damaged wells & install addt'l wells to better delineate product plume and assist in product recovery. Stated that failure to submit RAP by 11/10/16 will be Stip violation. - JK 11/30/16: Reviewed Remedial Investigation Work Plan prepared by Matrix New World Engineering, P.C., dated 11/14/16, received same date (in DecDocs). Work plan summarizes VER pilot test performed at site in July 2015. Based on results, Matrix concludes that use of a vac truck for product recovery at site will not be cost-effective. Instead, plan proposes install'n of passive skimmers in each well with measurable product and weekly maintenance of skimmers as an IRM. Work plan also proposes install'n of 3 addt'l monitoring wells: one to replace damaged well MW-15, one well to better delineate of product plume, and a large-diameter well to enhance product recovery efforts. After install'n, new & existing wells will be surveyed to provide accurate data for GW elevation modeling. A round of GW samples will be collected from a selection of wells which do not contain product to evaluate dissolved GW contam. Work plan includes a schedule stating that new wells will be installed within 3 weeks of DEC approval of plan, followed by GW sampling and install'n of passive skimmers. If skimmers prove to be effective for product recovery, Matrix will continue their use & provide details in a RAP. An RIR/RAP summarizing these activities will be prepared & submitted to DEC within two months of well install'n. I sent letter (in DecDocs) to RP Dominick Tomasino, cc's to John Urda of DEC OGC, Michael Menicucci (RP's atty), Vito Fossella (RP's associate), James Johnston of Ireland Brook Enterprises, and Mindy Chassin Horowitz of Matrix, approving work plan and requiring submission of RIR/RAP by 2/28/17. - J. Kolleeny "

Remarks: "unknown amount spilled; found contaminated soil during tank removal; samples will be taken; will investigate futhur; there are 10 550g tanks on property;"

Material:

Site ID:	402564
Operable Unit ID:	1159315
Operable Unit:	01
Material ID:	2150432
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

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Facility ID:	9802637
Facility Type:	ER
DER Facility ID:	202949
Site ID:	247167
DEC Region:	2
Spill Date:	1998-05-29
Spill Number/Closed Date:	9802637 / 1998-06-30
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	CAENGELH
Referred To:	Not reported
Reported to Dept:	1998-05-29
CID:	270
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Affected Persons
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1998-05-29
Spill Record Last Update:	2000-06-26
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	NEW YORK, NY
Spiller Company:	999
Contact Name:	FRANK MASSERIA
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ENGELHARDT Notes from O'Connell: 5/29/98 - Spoke to Stan Piszczatowski, Con Ed ERT: Pole top transformer struck by lightning. Approx. 100 gallons leaked from transformer, none entered catch basins. Clean up completed 5/30/98 @ 1500 hrs. 6/19/98 e-mail from ERT Lukshides responding to previous spill update inquiry: Cleanup measures? speedy dry spread over area, clean up complete by Miller Environmental. Transformer repaired / replaced? transformer replaced 29 May 98. 6/24/98 e-mail from Con Ed ERT Stan Pioszczatowski responding to earlier inquiry: No soil was affected. Oil sprayed from the transformer (which was replaced) onto four vehicles and the asphalt parking lot. Oil residue was also found on the facade of the buildings and on the windows of several stores in the strip mall, and in a basement well infront of 900 Hylan Blvd. Cleanup was performed by Miller Environmental. 6/24/98 E-MAIL FROM Con Ed ERT Stan Piszczatowski: Oil contained no PCBs as per transformer manufacturers tag."
Remarks:	"PRODUCT ON GROUND FROM TRANSFORMER FOR UNKNOWN REASON AT THIS TIME"

Material:

Site ID:	247167
Operable Unit ID:	1060575
Operable Unit:	01
Material ID:	320960
Material Code:	0020A

IFO 900 HYLAN BLVD (Continued) **S103274818**

Material Name:	transformer oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

L63 **EDR Hist Cleaner** **1014969521**
SSE **103 CEDAR AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY 10305**
0.269 mi.
1418 ft. **Site 2 of 2 in cluster L**

Relative:
Lower

Actual:
45 ft.

EDR Historical Cleaners:

Name:	MATTHEWS CLEANERS & VALET
Year:	1999
Address:	103 CEDAR AVE
Name:	MATTHEWS CLEANERS & VALET
Year:	2000
Address:	103 CEDAR AVE
Name:	MATTHEWS CLEANERS & VALET
Year:	2001
Address:	103 CEDAR AVE

N64 **FRONT OF** **NY Spills** **S106011239**
WSW **32 POUCH TERR** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.271 mi.
1429 ft. **Site 3 of 3 in cluster N**

Relative:
Lower

Actual:
127 ft.

SPILLS:

Facility ID:	0211054
Facility Type:	ER
DER Facility ID:	122534
Site ID:	143709
DEC Region:	2
Spill Date:	2003-02-04
Spill Number/Closed Date:	0211054 / 2003-04-03
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	AERODRIG
Referred To:	Not reported
Reported to Dept:	2003-02-04
CID:	199
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party

FRONT OF (Continued) **S106011239**

Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2003-02-04
Spill Record Last Update:	2003-04-03
Spiller Name:	CALLER
Spiller Company:	CON ED
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	NEW YORK, NY 10003
Spiller Company:	001
Contact Name:	LARRY COSTA
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RODRIGUEZ e2MIS 147048 2/4/03 ... 1115 hrs. Employee F. Gerdes, responding to ticket SE03001137, discovered that a 50kva OH transformer i/f/o # 38 Pouch Terrace, had leaked approx. 1 qt. of dielectric fluid from a hole in the side of the unit. The fluid mixed with rainwater underneath on the asphalt roadway beneath the transformer and ran down the hill in the form of a sheen for approx. 300' to the intersection of Hylan Blvd. There is a sewer catch basin at the corner of Hylan Blvd. and Pouch Terr. Mr. Gerdes and Supervisor R. Moloughney, who also responded to this site, are unable to say whether or not any oil got into the sewer. There is no smoke or fire condition. No private property is involved. Mr. Gerdes cut clear the transformer and bagged it to stop the leak. Mr. Moloughney is containing the spill around the catch basin with diapers and bumpers. CDOH assistance has been requested. E.H. & S. was notified and is enroute to site. CIG notified at 1129 hrs. We have a Jaco report dated 5/12/92 indicating that there is 15 ppm pcb content. We cannot use this report and spill will be treated as 50-499 ppm pcb..... T. Bergendale # 23178. 02/04/03 ... 1415 hrs. Ann Ip reported cleanup contractor Ken Marine had arrived on site and started cleanup operations. They will have to clean an area approx. 1' x 800' at the curbline down Pouch Terrace and onto Hylan Blvd. to the corner of Fingerboard Rd. Also, EPA provisional # NYP-004-106902 was obtained from the ERT at the request of Ann Ip....T. Bergendale # 23178. 2/4/03 ....2030 hrs Received Chem lab results. Results show 4 PPM PCB notified CDOH foreman Quinonez 2/4/03....2340 hrs ...F Quinonez reports cleanup complete. F/O 38 Pouch 8 foot by 30 foot area. Area on road 5 foot by 20 foot. Across from 38 Pouch 5 foot by 20 foot area ...a 3 foot by 1300 foot area along curb from 38 Pouch to Roderick to Hylan Blvd. to Fingerboard Rd. All area's double washed with citrus cleaner then double rinsed with water. Also catch basin at 4607 Hylan Blvd. cleaned. 10 55 gal drums of oily waste removed by oil contractor 2/5/03 1050 hrs.....This report is updated to provide the following additional information: 1) The roof of a customer's vehicle (1992 Ford Explorer, license plate G186PH) parked directly underneath the leaked transfomer was also affected by this spill. As a result, the entire roof was double washed and rinsed with a mild degreaser and water. The vehicle owner was then provided with a car wash voucher and was directed to a car wash. 2) Prior to beginning the double washing and rinsing operation, all the debris on the affected area was sweeped and placed into 55-gallon drums. The affected areas were then double pressure washed and rinsed with an

FRONT OF (Continued) **S106011239**

oil degreaser (oil eater) and water. The following lists the sizes of the areas affected and the sizes of the areas cleaned: - 6'x20' asphalt roadway in front of 38 Pouch Terrace was affected. Approx. 8'x30' of the roadway was cleaned. Sections of the concrete sidewalk (~1' wide x30' long) were also cleaned as a precaution. - 3'x6' asphalt roadway (in the mid section of the roadway) in front of 38 Pouch Terrace was affected. Approx. 5'x20' roadway was cleaned. - 3'x15' asphalt roadway on the opposite side of 38 Pouch Terrace was affected. Approx. 5'x20' roadway was cleaned. - ~1' wide and ~1300' long roadway along the curb from Pouch Terrace to Roderick Ave., to Hylan Blvd. was affected. Approx. 3' wide by 800' long roadway was double pressure washed and rinsed with an oil degreaser and water. Upon receiving the PCB result of the oil sample taken from the transformer (i.e., 4 ppm), contractor Ken's Marine Services was instructed to clean the remaining 500' long section of the roadway by single washing and rinsing with oil eater and water. - A catch basin located on Hylan Blvd, adjacent to Fingerboard Road was affected. As a result of the cleanup, all the oily sediment was removed from the catch basin. The basin was pressure washed and rinsed with oil eater and water. 3) As a result of the cleanup performed by Ken's Marine Service, a total of 10 drums of non-hazardous oily debris and 550 gallons of non-hazardous oily liquid waste were generated. These wastes were shipped separately to Cycle Chem located at Elizabeth, NJ for disposal. There is no need to utilize the EPA provision number since waste is non-hazardous. 4) ERT (Dan Pontecorvo) visited the site on 2/4/03 at approx. 1545 hrs. SIEHS (Ann Ip) toured the site with him and discussed the cleanup plan with him and Ken's Marine Service. All three of them mutually agreed on the cleanup plan. Dan left the site at approx. 1620 hrs. 5) The time CIG was notified was not entered in the section of First Reported to CIG . Re-entered date and time in this section. 6) The lab sequence # of the PCB lab result (4 ppm) received on 2/4/03 is 03-01021-001.....A.Ip (71684) UPDATE 2/5/03 1405 Hrs. Finder was F. Gerdes, employee #25706, Troubleshooter, Control Operations. As per Construction transformer was replaced on 2/4/03 UPDATE 3/11/03 1316 hrs.....As per supervisor Fred Quinonez, the primary tap fell and made contact on side of the transformer, burned a hole on the side and cause the spill. "

Remarks: "1 QT OF FLUID LEAKED FROM AN OVERHEAD TRANSFORMER - MATERAL WAS WASHED DOWN STREET INTO CATCH BASIN - CON ED SPILL# NOT ASSIGNED AT THIS TIME -- UNK IF MATERAL IS PCB OR NOT "

Material:

Site ID:	143709
Operable Unit ID:	862095
Operable Unit:	01
Material ID:	514417
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

65
SSE
1/4-1/2
0.272 mi.
1435 ft.

45 OCEAN AVENUE
45 OCEAN AVENUE
STATEN ISLAND, NY

NY Spills **S102150266**
N/A

Relative:
Lower

Actual:
43 ft.

SPILLS:

Facility ID:	9502874
Facility Type:	ER
DER Facility ID:	190213
Site ID:	230824
DEC Region:	2
Spill Date:	1995-06-06
Spill Number/Closed Date:	9502874 / 1995-08-07
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	NIEVES
Referred To:	Not reported
Reported to Dept:	1995-06-06
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	1995-08-07
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-06-13
Spill Record Last Update:	1995-08-07
Spiller Name:	Not reported
Spiller Company:	SAME
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"1 PINT - CUSTOMER OIL TANK LEAKING - SIPCO RECONNECTED - CUSTOMER CALL SOMEONE TO REPAIR TANK - CUSTOMER WILL HAVE IT FIXED BY TOMORROW."

Material:

Site ID:	230824
Operable Unit ID:	1014112
Operable Unit:	01
Material ID:	367934
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

45 OCEAN AVENUE (Continued) **S102150266**

Tank Test:

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66 **EDR Hist Cleaner** **1015054193**
NNE **40 BRIDGE CT** **N/A**
1/4-1/2 **STATEN ISLAND, NY 10305**
0.275 mi.
1451 ft.

Relative:
Lower

Actual:
62 ft.

EDR Historical Cleaners:

Name:	ATRIUM CLEANING SERVICE
Year:	2007
Address:	40 BRIDGE CT
Name:	ATRIUM CLEANING SERVICE
Year:	2008
Address:	40 BRIDGE CT

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67 **SHOOTER ISLAND** **NY LTANKS** **1009234752**
NE **212 COAST GUARD DRIVE** **NY Spills** **N/A**
1/4-1/2 **STATEN ISLAND, NY** **NY MANIFEST**
0.276 mi.
1457 ft.

Relative:
Lower

Actual:
94 ft.

LTANKS:

Site ID:	273008
Spill Number/Closed Date:	0313709 / 2004-04-06
Spill Date:	2004-03-15
Spill Cause:	Tank Overfill
Spill Source:	Vessel
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	SMSANGES
Referred To:	Not reported
Reported to Dept:	2004-03-15
CID:	444
Water Affected:	NORTH BAY
Spill Notifier:	Local Agency
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2004-03-15
Spill Record Last Update:	2004-04-06
Spiller Name:	HEATHER
Spiller Company:	SHOOTER ISLAND
Spiller Address:	212 COAST GUARD DRIVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller County:	001
Spiller Contact:	HEATHER
Spiller Phone:	(718) 354-4121
Spiller Extention:	Not reported
DEC Region:	2

SHOOTER ISLAND (Continued) **1009234752**

DER Facility ID: 222170
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was SANGESLAND "
Remarks: "CALLER UNSURE WHAT HAPPENED AT THIS TIME BUT THINKS IT MAY BE AN OVERFILL: "

Material:
Site ID: 273008
Operable Unit ID: 880820
Operable Unit: 01
Material ID: 495305
Material Code: 0008
Material Name: diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: 13.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

SPILLS:
Facility ID: 0310219
Facility Type: ER
DER Facility ID: 222170
Site ID: 116090
DEC Region: 2
Spill Date: 2003-12-02
Spill Number/Closed Date: 0310219 / 2004-03-05
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: CESAWYER
Referred To: Not reported
Reported to Dept: 2003-12-02
CID: 444
Water Affected: UPPER NY BAY
Spill Source: Vessel
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: Not reported
Spill Record Last Update: 2004-03-05
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: ***Update***, ZZ
Spiller Company: 001

SHOOTER ISLAND (Continued) **1009234752**

Contact Name: ANGELA ALONSO
Contact Phone: (718) 354-4121
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAWYER 12/5/03 TJD Initial response to event was two-fold. Krimgold responded to Activities NY (USCG) and was transported via boat to vessel that caused spill. Demeo & Sawyer were assigned to survey Coney Island shoreline in area of Norton Point. At Norton Point heavy oil impacts were identified at high water line. Impacts include tar patties and tar balls along high water rack line. In addition there is substanial oil impacting the rock jetties in this area. Impacts were found between 44th and 51st Streets. Miller Environmental was retained by RP for cleanup. Crews are maintaining absorbents, picking tar balls off beach and using a hotsie to power wash rocks. 12/8/03 TJD Spill reassigned to Sawyer as per direction of Nagi/Austin/Kunkel 3/5/04 - Sawyer - Did shoreline inspection with Steve Kemelman and Randall Austin in December and determined that the rip-rap along the most impacted area of the SeaGate community shoreline had been properly cleaned up. Closed."
Remarks: "vessel named brussel equipment while transforing to tanks it went into waterway."

Material:
Site ID: 116090
Operable Unit ID: 875316
Operable Unit: 01
Material ID: 499144
Material Code: 0003A
Material Name: #6 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 1900.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

NY MANIFEST:
Country: USA
EPA ID: NYP000941443
Facility Status: Not reported
Location Address 1: 212 COAST GUARD DR
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: STATEN ISLAND
Location State: NY
Location Zip: Not reported
Location Zip 4: Not reported

NY MANIFEST:
EPAID: NYP000941443
Mailing Name: US COAST GUARD
Mailing Contact: JACOB HOBSON
Mailing Address 1: 212 COAST GUARD DR

SHOOTER ISLAND (Continued) **1009234752**

Mailing Address 2:	Not reported
Mailing City:	STATEN ISLAND
Mailing State:	NY
Mailing Zip:	10301
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	7183544121

NY MANIFEST:

Document ID:	PAE3343631
Manifest Status:	Not reported
seq:	01
Year:	1998
Trans1 State ID:	PAAH0554
Trans2 State ID:	Not reported
Generator Ship Date:	08/26/1998
Trans1 Recv Date:	08/26/1998
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	08/27/1998
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP000941443
Trans1 EPA ID:	NJR000011528
Trans2 EPA ID:	Not reported
TSDF ID 1:	PAD067098822
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	01800
Units:	P - Pounds
Number of Containers:	014
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

M68 **SPILL NUMBER 9807643** **NY Spills** **S104647902**
SSE **50-02 55TH AVE** **N/A**
1/4-1/2 **QUEENS, NY**
0.278 mi.
1466 ft. **Site 5 of 7 in cluster M**

Relative:
Lower

Actual:
34 ft.

SPILLS:

Facility ID:	9807643
Facility Type:	ER
DER Facility ID:	282831
Site ID:	259548
DEC Region:	2
Spill Date:	1998-09-23
Spill Number/Closed Date:	9807643 / 2003-08-01
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4101
Investigator:	MXTIPPLE
Referred To:	Not reported
Reported to Dept:	1998-09-23
CID:	382
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1998-09-23
Spill Record Last Update:	2004-09-14
Spiller Name:	NANCY MURPHY
Spiller Company:	CANNON -EXPRESS CORP
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	NANCY MURPHY
Contact Phone:	(978) 897-6461
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIPPLE CONTACTED NANCY MURPHY AT (978)897-6461. SPILL CAME FROM TRUCK. SPILL OCCURED ON STREET. HMHTTC GROUP HAS GONE TO CLEAN UP. FOR FURTHER INFO CONTACT JOE NEWICK WHO IS IN THIS GROUP AT (908)558-0156. 01/31/01 Reassigned from O'Dowd to Tipple. See also 9701735."
Remarks:	"SPILL WAS CALLED IN FROM MASSACHUSETTS. SPILL HAS BEEN CONTAINED "

Material:

Site ID:	259548
Operable Unit ID:	1065212
Operable Unit:	01
Material ID:	315201
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	70.00
Units:	Gallons
Recovered:	70.00

SPILL NUMBER 9807643 (Continued) **S104647902**

Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

M69 **POLE #90573** **NY Spills** **S109415746**
SSE **73-14 57TH AVE** **N/A**
1/4-1/2 **QUEENS, NY**
0.282 mi.
1487 ft. **Site 6 of 7 in cluster M**

Relative:
Lower

Actual:
33 ft.

SPILLS:
Facility ID: 0812834
Facility Type: ER
DER Facility ID: 359719
Site ID: 410478
DEC Region: 2
Spill Date: 2009-02-26
Spill Number/Closed Date: 0812834 / 2009-03-30
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: asnagi
Referred To: Not reported
Reported to Dept: 2009-02-26
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: Not reported
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2009-02-26
Spill Record Last Update: 2009-03-30
Spiller Name: ERT
Spiller Company: CON ED
Spiller Address: 73-14 57TH AVE
Spiller City,St,Zip: QUEENS, NY
Spiller Company: 999
Contact Name: ERT
Contact Phone: (212) 580-8383
DEC Memo: "03/30/09 - See eDocs for Con Ed report detailing cleanup and closure. 2/26/09 - Raphael Ketani. I called up the Con Ed ERT desk. The person at the desk said that the pint leak simply fell onto the sidewalk. No one was contaminated and no property. Movement on the sidewalk is not impeded. Con Ed is waiting for the power to be turned off before they bag the transformer. Because it is a minor spill, this case has been assigned to Amar Nagi."
Remarks: "Caller states a transformer failure caused one pint of oil to spill to concrete. Cleanup is ongoing."

Material:
Site ID: 410478

POLE #90573 (Continued) **S109415746**

Operable Unit ID:	1166962
Operable Unit:	01
Material ID:	2158487
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.13
Units:	Gallons
Recovered:	.13
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

M70 **APARTMENT BLDG** **NY Spills** **S102662980**
SSE **96-04 57TH AVE** **N/A**
1/4-1/2 **QUEENS, NY**
0.282 mi.
1487 ft. **Site 7 of 7 in cluster M**

Relative:
Lower

Actual:
33 ft.

SPILLS:

Facility ID:	9708811
Facility Type:	ER
DER Facility ID:	200724
Site ID:	244362
DEC Region:	2
Spill Date:	1997-10-25
Spill Number/Closed Date:	9708811 / 1998-04-02
Spill Cause:	Equipment Failure
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4101
Investigator:	O'DOWD
Referred To:	Not reported
Reported to Dept:	1997-10-28
CID:	312
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1997-10-28
Spill Record Last Update:	1998-04-02
Spiller Name:	Not reported
Spiller Company:	APARTMENT BLDG
Spiller Address:	96-04 57TH AVE
Spiller City,St,Zip:	QUEENS, NY
Spiller Company:	001
Contact Name:	CARL NIVERYO
Contact Phone:	(718) 271-5000
DEC Memo:	""

APARTMENT BLDG (Continued) **S102662980**

Remarks: "CALLER COMPANY IS THE OPERATOR OF THE APT BLDG - 1500 GAL INTO BASEMENT FROM DEFECTIVE GAUGE - NYC DEP IS AWARE"

Material:

Site ID:	244362
Operable Unit ID:	1051893
Operable Unit:	01
Material ID:	566610
Material Code:	0003A
Material Name:	#6 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1500.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9701941
Facility Type:	ER
DER Facility ID:	200724
Site ID:	244361
DEC Region:	2
Spill Date:	1997-05-14
Spill Number/Closed Date:	9701941 / 1997-05-14
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4101
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1997-05-14
CID:	370
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1997-05-14
Spill Record Last Update:	2004-07-20
Spiller Name:	ALBERT CURRIER
Spiller Company:	RESIDENCE
Spiller Address:	16 TOWNLY DR
Spiller City,St,Zip:	BURNT HILLS, NY
Spiller Company:	001
Contact Name:	JEFFREY BLACK
Contact Phone:	(718) 575-4646
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was M TIBBE Richard Delayo, 718-575-4647 - Supervisor Lefrak City Eastmond cleaning. only 10-15 gallons. CLEANED BY RP."

APARTMENT BLDG (Continued) **S102662980**

Remarks: "air in line caused backup and caused a spill of 50 - 100 gals onto driveway spill contained and cleanup in progress"

Material:
Site ID: 244361
Operable Unit ID: 1044555
Operable Unit: 01
Material ID: 334878
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 100.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

---

71 ESE 1/4-1/2 0.284 mi. 1499 ft. **SPILL NUMBER 9914595** **NY Spills** **S104509995**
3 MCCLEAN AVE **N/A**
STATEN ISLAND, NY

Relative: Lower

Actual: 99 ft.

SPILLS:
Facility ID: 9914595
Facility Type: ER
DER Facility ID: 257446
Site ID: 319536
DEC Region: 2
Spill Date: 2000-03-26
Spill Number/Closed Date: 9914595 / 2002-03-27
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: JHOCONNE
Referred To: Not reported
Reported to Dept: 2000-03-26
CID: 257
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2000-03-26
Spill Record Last Update: 2002-03-27
Spiller Name: CALLER
Spiller Company: CON ED
Spiller Address: 4 IRVING PL
Spiller City,St,Zip: NEW YORK, NY

SPILL NUMBER 9914595 (Continued) **S104509995**

Spiller Company:	001
Contact Name:	JIMMY FOX
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL "
Remarks:	"blown riser on pole 34931 - other material is a blue insulating material which was on the ground and the lead was onto a private vehicle parked there - both products were about 4ozs each ref#130564"

Material:

Site ID:	319536
Operable Unit ID:	1092608
Operable Unit:	01
Material ID:	555877
Material Code:	0030A
Material Name:	lead
Case No.:	07439921
Material FA:	Hazardous Material
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported
Site ID:	319536
Operable Unit ID:	1092608
Operable Unit:	01
Material ID:	555878
Material Code:	0064A
Material Name:	unknown material
Case No.:	Not reported
Material FA:	Other
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9913065
Facility Type:	ER
DER Facility ID:	257446
Site ID:	319535
DEC Region:	2
Spill Date:	2000-02-16
Spill Number/Closed Date:	9913065 / 2002-02-27
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2000-02-16
CID:	282
Water Affected:	Not reported
Spill Source:	Commercial/Industrial

SPILL NUMBER 9914595 (Continued) **S104509995**

Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-02-16
Spill Record Last Update:	2002-02-28
Spiller Name:	CALLER
Spiller Company:	CON ED
Spiller Address:	4 IRVING PL
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	MIKE CESARE
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL "
Remarks:	"DEFECTIVE JOINT ON A FEEDER.SPILL IS 1 PINT SPILL TREATED AS 50 TO 499.CON ED 130013"

Material:

Site ID:	319535
Operable Unit ID:	1091778
Operable Unit:	01
Material ID:	294925
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

72
SSW
1/4-1/2
0.288 mi.
1519 ft.

Relative:
Lower

Actual:
65 ft.

ROADWAY **NY Spills** **S110752008**
108 SAND LANE **N/A**
STATEN ISLAND, NY

SPILLS:

Facility ID:	1011213
Facility Type:	ER
DER Facility ID:	399742
Site ID:	444852
DEC Region:	2
Spill Date:	2011-02-08
Spill Number/Closed Date:	1011213 / 2011-03-22
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN

ROADWAY (Continued) **S110752008**

Referred To:	Not reported
Reported to Dept:	2011-02-08
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2011-02-08
Spill Record Last Update:	2011-03-22
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-8383
DEC Memo:	"3/22/11 - Austin - Pole transformer leaked, impacting snow and pavement - Con Ed contained and cleaned up the spill - See eDocs for further info - Spill closed - end"
Remarks:	"0859 THE CALLER ADVISED DISPATCH THE TRANSFORMER WAS STRUCK BY SNOW AND ICE WHICH CAUSED THE SYSTEM TO LEAK. THE SPILL WAS CONTAINED AND CLEAN UP IS PENDING. THE CALLER DECLINED CALL BACK FROM SPILLS REP."

Material:

Site ID:	444852
Operable Unit ID:	1195288
Operable Unit:	01
Material ID:	2191333
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.50
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

P73 **TOMPKINS AVE/FINGERBOARD** **NY Spills** **S102145825**
North **TOMPKINS AVE/FINGERBOARD** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.289 mi.
1525 ft. **Site 1 of 2 in cluster P**

Relative:
Lower

Actual:
80 ft.

SPILLS:

Facility ID:	9002523
Facility Type:	ER
DER Facility ID:	88153
Site ID:	99157
DEC Region:	2

TOMPKINS AVE/FINGERBOARD (Continued) **S102145825**

Spill Date:	1990-06-05
Spill Number/Closed Date:	9002523 / 1990-06-05
Spill Cause:	Abandoned Drums
Spill Class:	Not reported
SWIS:	4301
Investigator:	WILSON
Referred To:	Not reported
Reported to Dept:	1990-06-05
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Federal Government
Cleanup Ceased:	1990-06-05
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1990-06-13
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"ABANDONED (4) 55GAL DRUMS LEAKING INTO STREET, POSSIBLY SEWER, NO LABEL ON DRUMS, NYCDEP (PAUL WONG) NOTIFIED."

Material:

Site ID:	99157
Operable Unit ID:	942375
Operable Unit:	01
Material ID:	437265
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

P74 **ROADWAY** **NY Spills** **S106006153**
North **FINGERBOARD RD/TOMPKINS** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.290 mi.
1529 ft. **Site 2 of 2 in cluster P**

Relative:
Lower

Actual:
78 ft.

SPILLS:

Facility ID:	0204595
Facility Type:	ER
DER Facility ID:	205456
Site ID:	250641
DEC Region:	2
Spill Date:	2002-07-31
Spill Number/Closed Date:	0204595 / 2005-05-20
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2002-07-31
CID:	252
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2002-07-31
Spill Record Last Update:	2005-05-20
Spiller Name:	ANTHONY NATALE
Spiller Company:	CON ED
Spiller Address:	4 IRVING PL
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	001
Contact Name:	ANTHONY NATALE
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RODRIGUEZ e2MIS NOTES 144287 07/31/02 ... 1715 hrs. Troubleshooter discovered a dielectric fluid spill from 33kv aerial cable joint on feeder 33R13 between poles 10851 and 8693 on Fingerboard Rd. and Tompkins Ave. Approx. 8 oz. of dielectric fluid leaked onto the sidewalk and curb area beneath the joint and a vehicle. Spill was confined on sidewalk and curb. An area of sidewalk and curb approx. 8' x 3' is impacted. Mr. Colon will treat the spill as 50-499 ppm PCB's. He will attempt to determine if he can bag the leaking joint until the feeder can be scheduled out for permanent repairs to the joint. 7/31/02 @ 1915 hrs, R. Remauro reports that cleanup is still in progress, The vehicle mentioned above was parked under the leaking cable. It is NOT a joint, it is a capped end of aerial cable. 7/31/02 @ 1915 hrs, D. Colon reports cleanup complete. The vehicle and the affected sidewalk & curb were double washed and rinsed with Rip-Tide and water. The size of the sidewalk & curb cleaned was 10' x 5'. The end of the aerial cable is temporarily bagged. Permanent repair pending outage of cable. UPDATE 8/7/02 1100 Hrs. As per J. Minucci this cable is dead and an outage is not required. 9/11/02....1135

ROADWAY (Continued) **S106006153**

hrs. R. Mazza # 26963 reports cable ends at this location leaked approx. 2 oz. oil. An area of concrete 5 foot by 5 foot affected. Spill was confined on sidewalk. Cable ends re-bagged and 6 foot by 6 foot area of concrete cleaned using speedy dry and double citrus washed. UPDATE 9/12/02 This report will stay open until cable is removed. Update .... 6/14/04 .... at 1838 hrs responding to SE04006392 T/S R.Wallner reports that an abandoned section of aerial cable between 136 and 138 Fingerboard Rd has leaked approximately 100 drops (8 oz) of dielectric fluid onto the sidewalk. The oil is spread over an aera 2ft wide and 7' long on the cement. No sewers or waterways were affected, there is no active smoke or fire and no private property was affected. The crew responding is treating the oil as 50 - 499 ppm pcbs. Upon arrival the t/s barricaded the area and spread speedi-dri to absorb the oil. At 2020 hrs the clean up was complete. The crew double washed and rinsed an area approximately 4'x9' with citrus cleaner and water. The absorbed the liquid residue with speedi-dri and generated 1 plastic bag of waste. They also installed additional absorbant pads and plastic bags on the aerial cable. The bag will be labled as hazardous waste and will be taken to the VBSC for disposal as such. The stop time on the report was changed to reflect this latest cleanup at the location.....GG 27365. UPDATE 3/22/05 0750 Hrs. As per Construction Overhead (V. Minucci, Foreman) cable was removed on 3/21/05 and disposed of at VBSC."

Remarks: "APPROX 8 OUNCES OF DIELECTRIC FLUID LEAKED FROM A FEEDER ON TO PAVEMENT. CLEANUP TO BE TREATED AS 50 TO 499 PPM. CON ED #144287 "

Material:

Site ID:	250641
Operable Unit ID:	857337
Operable Unit:	01
Material ID:	518840
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

75
NNE
1/4-1/2
0.306 mi.
1616 ft.

Relative: Lower

Actual: 51 ft.

HYD FLUID FRM CON ED VEHICLE 91901 **NY Spills** **S108296266**
80 LYMAN AVE **N/A**
STATEN ISLAND, NY

SPILLS:

Facility ID:	0609715
Facility Type:	ER
DER Facility ID:	323727
Site ID:	374013
DEC Region:	2
Spill Date:	2006-11-25

HYD FLUID FRM CON ED VEHICLE 91901 (Continued) **S108296266**

Spill Number/Closed Date:	0609715 / 2007-01-17
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	GDBREEN
Referred To:	Not reported
Reported to Dept:	2006-11-25
CID:	41
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2006-11-25
Spill Record Last Update:	2007-01-17
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"01/17/07 - See e-docs for Con Ed report detailing cleanup and closure. 203431. see eDocs"
Remarks:	"one qt - cleanup in progress - con ed ref #203431 - no to five questions"

Material:

Site ID:	374013
Operable Unit ID:	1131698
Operable Unit:	01
Material ID:	2121411
Material Code:	0010
Material Name:	hydraulic oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

O76 **26 LANDIS AVE/ST JOHNSVIL** **NY LTANKS** **S102671562**
SW **26 LANDIS AVENUE** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.306 mi.
1617 ft. **Site 4 of 5 in cluster O**

Relative:
Lower

Actual:
49 ft.

LTANKS:

Site ID:	140478
Spill Number/Closed Date:	9005644 / 1990-10-29
Spill Date:	1990-08-22
Spill Cause:	Tank Overfill
Spill Source:	Commercial/Industrial
Spill Class:	Not reported
Cleanup Ceased:	1990-10-29
Cleanup Meets Standard:	True
SWIS:	4301
Investigator:	JAMES
Referred To:	Not reported
Reported to Dept:	1990-08-22
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Local Agency
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1990-11-06
Spill Record Last Update:	1990-11-07
Spiller Name:	Not reported
Spiller Company:	EMPIRE STATE FUEL CO
Spiller Address:	1640 MCDONALD AVENUE
Spiller City,St,Zip:	BROOKLYN, NY
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	119974
DEC Memo:	""
Remarks:	"OVERFILL OF TANK AT SCHOOL, STICKLINE CAP NOT ON DURING DELIVERY, PRODUCT SPRAYED OUT."

Material:

Site ID:	140478
Operable Unit ID:	943184
Operable Unit:	01
Material ID:	433132
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

O77 **ST JOSEPH HILL ACADEMY** **NY LTANKS** **U000408318**
SW **850 HYLAN BOULEVARD** **NY UST** **N/A**
1/4-1/2 **STATEN ISLAND, NY 10305** **NY HIST UST**
0.306 mi. **NY Spills**
1617 ft. **Site 5 of 5 in cluster O**

Relative:
Lower

Actual:
49 ft.

LTANKS:

Site ID:	130604
Spill Number/Closed Date:	8801510 / 1992-11-19
Spill Date:	1988-05-18
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	1992-11-19
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	BATTISTA
Referred To:	Not reported
Reported to Dept:	1988-05-19
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1988-05-20
Spill Record Last Update:	2004-05-14
Spiller Name:	Not reported
Spiller Company:	ST. JOSEPH'S HILL ACADEMY
Spiller Address:	850 HYLAN BLVD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	112534
DEC Memo:	""
Remarks:	"10K TANK WITH A SYSTEM FAILURE, HIGH VOLUME LEAK, HORNER EZY CHECK."

Material:

Site ID:	130604
Operable Unit ID:	916991
Operable Unit:	01
Material ID:	460653
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Site ID: 130604
Spill Tank Test: 1533928
Tank Number: Not reported
Tank Size: 0
Test Method: 00
Leak Rate: .00
Gross Fail: Not reported
Modified By: Spills
Last Modified: Not reported
Test Method: Unknown

UST:
Id/Status: 2-426830 / Active
Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 11/16/2017
UTM X: 578520.19539
UTM Y: 4494724.55641
Site Type: School

Affiliation Records:
Site Id: 19734
Affiliation Type: On-Site Operator
Company Name: ST JOSEPH HILL ACADEMY
Contact Type: Not reported
Contact Name: JOSEPH A. BOWDEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 815-4371
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 2012-12-11

Site Id: 19734
Affiliation Type: Emergency Contact
Company Name: CONG. OF THE DAUGHTERS OF DIVINE
Contact Type: Not reported
Contact Name: LOUIS A. VALENTI
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 727-5700
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Site Id:	19734
Affiliation Type:	Facility Owner
Company Name:	CONG. OF THE DAUGHTERS OF DIVINE
Contact Type:	Not reported
Contact Name:	Not reported
Address1:	850 HYLAN BLVD.
Address2:	Not reported
City:	STATEN ISLAND
State:	NY
Zip Code:	10305
Country Code:	001
Phone:	(718) 727-5700
EMail:	Not reported
Fax Number:	Not reported
Modified By:	NRLOMBAR
Date Last Modified:	2013-12-26

Site Id:	19734
Affiliation Type:	Mail Contact
Company Name:	ST JOSEPH HILL ACADEMY
Contact Type:	Not reported
Contact Name:	JOSEPH A. BOWDEN
Address1:	850 HYLAN BOULEVARD
Address2:	Not reported
City:	STATEN ISLAND
State:	NY
Zip Code:	10305
Country Code:	001
Phone:	(718) 727-5700
EMail:	Not reported
Fax Number:	Not reported
Modified By:	NRLOMBAR
Date Last Modified:	2013-12-26

Tank Info:

Tank Number:	001
Tank ID:	30898
Tank Status:	In Service
Material Name:	In Service
Capacity Gallons:	10000
Install Date:	09/01/1986
Date Tank Closed:	Not reported
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)

Tightness Test Method:	21
Date Test:	03/26/2008
Next Test Date:	10/11/2016
Pipe Model:	Not reported
Modified By:	MSBAPTIS
Last Modified:	12/11/2012

Equipment Records:

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
L09 - Piping Leak Detection - Exempt Suction Piping
D01 - Pipe Type - Steel/Carbon Steel/Iron
E00 - Piping Secondary Containment - None
J02 - Dispenser - Suction Dispenser
K00 - Spill Prevention - None
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None
I05 - Overfill - Vent Whistle

Tank Number:	002
Tank ID:	30899
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	10000
Install Date:	Not reported
Date Tank Closed:	07/01/1998
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)
Tightness Test Method:	03
Date Test:	10/01/1993
Next Test Date:	Not reported
Pipe Model:	Not reported
Modified By:	TRANSLAT
Last Modified:	03/04/2004

Equipment Records:

C00 - Pipe Location - No Piping
I04 - Overfill - Product Level Gauge (A/G)
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
A00 - Tank Internal Protection - None
G00 - Tank Secondary Containment - None
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number:	003
Tank ID:	30900
Tank Status:	Closed - Removed
Material Name:	Closed - Removed
Capacity Gallons:	1080
Install Date:	Not reported
Date Tank Closed:	08/01/1998
Registered:	True
Tank Location:	Underground
Tank Type:	Steel/carbon steel
Material Code:	0001
Common Name of Substance:	#2 Fuel Oil (On-Site Consumption)

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron
I00 - Overfill - None
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
H00 - Tank Leak Detection - None
B02 - Tank External Protection - Original Sacrificial Anode
F00 - Pipe External Protection - None

Tank Number: 004
Tank ID: 30901
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 1080
Install Date: Not reported
Date Tank Closed: 07/29/2002
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

H00 - Tank Leak Detection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J03 - Dispenser - Gravity
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None
I05 - Overfill - Vent Whistle

Tank Number: 005
Tank ID: 30902
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/1998
Registered: True

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: ZZ
Date Test: 10/01/1993
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
I00 - Overfill - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

Tank Number: 006
Tank ID: 30903
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: 08/01/1998
Date Tank Closed: 08/01/1998
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: 03
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

J02 - Dispenser - Suction Dispenser
D01 - Pipe Type - Steel/Carbon Steel/Iron
H00 - Tank Leak Detection - None
G00 - Tank Secondary Containment - None
I00 - Overfill - None
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
F00 - Pipe External Protection - None
B00 - Tank External Protection - None

Tank Number: 007
Tank ID: 77995

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Tank Status: In Service
Material Name: In Service
Capacity Gallons: 2500
Install Date: 09/01/2000
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Equivalent technology
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: MSBAPTIS
Last Modified: 12/11/2012

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground)
E00 - Piping Secondary Containment - None
J02 - Dispenser - Suction Dispenser
K00 - Spill Prevention - None
A00 - Tank Internal Protection - None
C02 - Pipe Location - Underground/On-ground
I01 - Overfill - Float Vent Valve
I02 - Overfill - High Level Alarm
L09 - Piping Leak Detection - Exempt Suction Piping
D08 - Pipe Type - Equivalent Technology
F06 - Pipe External Protection - Wrapped
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring
B00 - Tank External Protection - None

Tank Number: 007-A
Tank ID: 77996
Tank Status: Closed - In Place
Material Name: Closed - In Place
Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/1998
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 03/04/2004

Equipment Records:

I00 - Overfill - None
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

A00 - Tank Internal Protection - None
H00 - Tank Leak Detection - None
D02 - Pipe Type - Galvanized Steel
B00 - Tank External Protection - None
F00 - Pipe External Protection - None

HIST UST:

PBS Number:	2-426830
SPDES Number:	Not reported
Emergency Contact:	LOUIS A. VALENTI
Emergency Telephone:	(718) 727-5700
Operator:	LOUIS A. VALENTI
Operator Telephone:	(718) 815-4371
Owner Name:	CONG. OF THE DAUGHTERS OF DIVINE
Owner Address:	850 HYLAN BLVD. "CONVENT"
Owner City,St,Zip:	STATEN ISLAND, NY 10305
Owner Telephone:	(718) 727-5700
Owner Type:	Corporate/Commercial
Owner Subtype:	Not reported
Mailing Name:	ST. JOSEPH HILL ACADEMY
Mailing Address:	850 HYLAN BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	STATEN ISLAND, NY 10305
Mailing Contact:	LOUIS A. VALENTI, SUPT.
Mailing Telephone:	(718) 815-4371
Owner Mark:	First Owner
Facility Status:	1 - Active PBS facility, i.e. total capacity of the PBS tanks is greater than 1,100 gallons, regardless if Subpart 360-14 tanks exist or not at the facility.
Facility Addr2:	850 HYLAN BLVD
SWIS ID:	6401
Old PBS Number:	Not reported
Facility Type:	SCHOOL
Facility Type:	PRIVATE RESIDENCE
Inspected Date:	Not reported
Inspector:	Not reported
Inspection Result:	Not reported
Federal ID:	Not reported
Certification Flag:	False
Certification Date:	11/10/2000
Expiration Date:	11/16/2002
Renew Flag:	False
Renewal Date:	Not reported
Total Capacity:	13580
FAMT:	True
Facility Screen:	No Missing Data
Owner Screen:	Minor Data Missing
Tank Screen:	Minor Data Missing
Dead Letter:	False
CBS Number:	Not reported
Town or City:	NEW YORK CITY
County Code:	64
Town or City:	01
Region:	2
Tank Id:	002
Tank Location:	UNDERGROUND

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Tank Status:	Closed-Removed
Install Date:	Not reported
Capacity (gals):	10000
Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Type:	Steel/carbon steel
Tank Internal:	Not reported
Tank External:	Not reported
Pipe Location:	Not reported
Pipe Type:	STEEL/IRON
Pipe Internal:	Not reported
Pipe External:	Not reported
Second Containment:	None
Leak Detection:	None
Overfill Prot:	Product Level Gauge
Dispenser:	Suction
Date Tested:	10/01/1993
Next Test Date:	Not reported
Missing Data for Tank:	Minor Data Missing
Date Closed:	07/01/1998
Test Method:	Horner EZ Check
Deleted:	False
Updated:	True
Lat/long:	Not reported

Tank Id:	003
Tank Location:	UNDERGROUND
Tank Status:	Closed-Removed
Install Date:	Not reported
Capacity (gals):	1080
Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Type:	Steel/carbon steel
Tank Internal:	None
Tank External:	Sacrificial Anode
Pipe Location:	Underground
Pipe Type:	STEEL/IRON
Pipe Internal:	None
Pipe External:	None
Second Containment:	None
Leak Detection:	None
Overfill Prot:	None
Dispenser:	0
Date Tested:	Not reported
Next Test Date:	Not reported
Missing Data for Tank:	No Missing Data
Date Closed:	08/01/1998
Test Method:	Not reported
Deleted:	False
Updated:	True
Lat/long:	Not reported

Tank Id:	004
Tank Location:	UNDERGROUND
Tank Status:	In Service
Install Date:	Not reported
Capacity (gals):	1080

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Type:	Steel/carbon steel
Tank Internal:	None
Tank External:	Not reported
Pipe Location:	Underground
Pipe Type:	STEEL/IRON
Pipe Internal:	None
Pipe External:	None
Second Containment:	None
Leak Detection:	None
Overfill Prot:	Vent Whistle
Dispenser:	Gravity
Date Tested:	Not reported
Next Test Date:	Not reported
Missing Data for Tank:	Minor Data Missing
Date Closed:	Not reported
Test Method:	Not reported
Deleted:	False
Updated:	True
Lat/long:	Not reported

Tank Id:	005
Tank Location:	UNDERGROUND
Tank Status:	Closed-In Place
Install Date:	Not reported
Capacity (gals):	550
Product Stored:	UNLEADED GASOLINE
Tank Type:	Steel/carbon steel
Tank Internal:	None
Tank External:	None
Pipe Location:	Underground
Pipe Type:	STEEL/IRON
Pipe Internal:	None
Pipe External:	None
Second Containment:	None
Leak Detection:	None
Overfill Prot:	None
Dispenser:	Suction
Date Tested:	10/01/1993
Next Test Date:	Not reported
Missing Data for Tank:	No Missing Data
Date Closed:	08/01/1998
Test Method:	Not reported
Deleted:	False
Updated:	True
Lat/long:	Not reported

Tank Id:	007
Tank Location:	UNDERGROUND
Tank Status:	Closed-In Place
Install Date:	Not reported
Capacity (gals):	550
Product Stored:	UNLEADED GASOLINE
Tank Type:	Steel/carbon steel
Tank Internal:	None

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Tank External:	None
Pipe Location:	Underground
Pipe Type:	GALVANIZED STEEL
Pipe Internal:	None
Pipe External:	None
Second Containment:	None
Leak Detection:	None
Overfill Prot:	None
Dispenser:	0
Date Tested:	Not reported
Next Test Date:	Not reported
Missing Data for Tank:	No Missing Data
Date Closed:	08/01/1998
Test Method:	Not reported
Deleted:	False
Updated:	True
Lat/long:	Not reported

SPILLS:

Facility ID:	8805902
Facility Type:	ER
DER Facility ID:	112534
Site ID:	130605
DEC Region:	2
Spill Date:	1988-10-12
Spill Number/Closed Date:	8805902 / 1989-10-12
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Unknown Responsible Party. Corrective action taken. (ISR)
SWIS:	4301
Investigator:	TOMASELLO
Referred To:	Not reported
Reported to Dept:	1988-10-12
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1988-10-25
Spill Record Last Update:	2004-05-14
Spiller Name:	Not reported
Spiller Company:	HAZCO ?
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"HAZCO MAY BE RESPONSIBLE. TANK TESTING RESTARTED. SYSTEM RETURN LINEFOUND UNCONNECTED. HUMAN ERROR, HAZCO RESPONSIBLE."

Material:

ST JOSEPH HILL ACADEMY (Continued) **U000408318**

Site ID:	130605
Operable Unit ID:	921070
Operable Unit:	01
Material ID:	457814
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	5000.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

78
NW
1/4-1/2
0.309 mi.
1631 ft.

HILLS OF GRASMERE CONDOS **NY Spills** **S106015035**
209 GRASMERE DR **N/A**
STATEN ISLAND, NY

Relative:
Higher

Actual:
137 ft.

SPILLS:

Facility ID:	0302747
Facility Type:	ER
DER Facility ID:	155894
Site ID:	186526
DEC Region:	2
Spill Date:	2003-06-14
Spill Number/Closed Date:	0302747 / 2003-06-16
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. No DEC Response. No corrective action required.
SWIS:	4301
Investigator:	JBVOUGHT
Referred To:	Not reported
Reported to Dept:	2003-06-14
CID:	281
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Affected Persons
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2003-06-14
Spill Record Last Update:	2003-06-16
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	EDWARD MCCARTHY
Contact Phone:	(718) 720-1710

HILLS OF GRASMERE CONDOS (Continued) **S106015035**

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was VOUGHT sewage Closed"
Remarks: "Caller states that over the last 2 years raw sewage for neighboring condos has been comming into his residence thru the shower drain. Caller has spoken to condo managment and has no sucess in solbing problem. Caller requesting to speak to DEC in reference to situation."
Not reported

Material:
Site ID: 186526
Operable Unit ID: 870490
Operable Unit: 01
Material ID: 507202
Material Code: 0062A
Material Name: raw sewage
Case No.: Not reported
Material FA: Other
Quantity: .00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

Q79 **FEEDER CABLE** **NY Spills** **S118951656**
SSE **70 OCEAN AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.315 mi.
1664 ft. **Site 1 of 4 in cluster Q**

Relative:
Lower

Actual:
35 ft.

SPILLS:
Facility ID: 1605966
Facility Type: ER
DER Facility ID: 483838
Site ID: 532529
DEC Region: 2
Spill Date: 2016-09-14
Spill Number/Closed Date: 1605966 / 2016-10-24
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: RWAUSTIN
Referred To: Not reported
Reported to Dept: 2016-09-14
CID: Not reported
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2016-09-14

FEEDER CABLE (Continued) **S118951656**

Spill Record Last Update:	2016-10-24
Spiller Name:	DENNIS ROHRER
Spiller Company:	CON ED
Spiller Address:	70 OCEAN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	DENNIS ROHRER
Contact Phone:	(212) 580-8383
DEC Memo:	"10/24/16 - Austin - 1 pint of dielectric fluid leaked from an overhead cable onto pavement and a private vehicle - Con Ed contained and cleaned up the spill - See document files for further information - Spill closed - end"
Remarks:	"Spill to the concrete and pavement and a personal vehicle. Clean up will not be completed within the 2 hour time frame. Clean up pending waiting on contractor."

Material:

Site ID:	532529
Operable Unit ID:	1281302
Operable Unit:	01
Material ID:	2286563
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.13
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Q80 **OVERHEAD CABLE** **NY Spills** **S118706196**
SSE **70 OCEAN AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.315 mi.
1664 ft. **Site 2 of 4 in cluster Q**

Relative:
Lower

Actual:
35 ft.

SPILLS:

Facility ID:	1603283
Facility Type:	ER
DER Facility ID:	483838
Site ID:	529737
DEC Region:	2
Spill Date:	2016-07-05
Spill Number/Closed Date:	1603283 / Not Reported
Spill Cause:	Equipment Failure
Spill Class:	Not reported
SWIS:	4301
Investigator:	Con Ed Unassigned
Referred To:	Not reported
Reported to Dept:	2016-07-05
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Transformer
Spill Notifier:	Responsible Party

OVERHEAD CABLE (Continued) **S118706196**

Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	1
Date Entered In Computer:	2016-07-05
Spill Record Last Update:	2016-07-05
Spiller Name:	CON EDISON
Spiller Company:	CON EDISON
Spiller Address:	70 OCEAN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	CON EDISON
Contact Phone:	(212) 580-8383
DEC Memo:	"7/5/16- Ahmed - Minor spill, assigned to ConEd unassigned."
Remarks:	"On going leak 4 drip per minute. Spilled onto grass, blacktop, sidewalk and private vehicle. Cleanup is underway."

Material:

Site ID:	529737
Operable Unit ID:	1278557
Operable Unit:	01
Material ID:	2283476
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Q81 **AERIAL JOINT** **NY Spills** **S111318444**
SSE **72 OCEAN AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.320 mi.
1689 ft. **Site 3 of 4 in cluster Q**

Relative:
Lower

Actual:
34 ft.

SPILLS:

Facility ID:	1109565
Facility Type:	ER
DER Facility ID:	411825
Site ID:	457344
DEC Region:	2
Spill Date:	2011-10-31
Spill Number/Closed Date:	1109565 / 2011-12-13
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2011-10-31

AERIAL JOINT (Continued) **S111318444**

CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2011-10-31
Spill Record Last Update:	2011-12-13
Spiller Name:	Not reported
Spiller Company:	CON ED
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	2125808383
DEC Memo:	"12/13/11 - Austin - A pint of dielectric fluid sprayed from a pole transformer, impacting pavement and grass (including private property) - Con Ed contained and cleaned up the spill - See the documents in eDocs for further information - Spill closed - end"
Remarks:	"SPILL TO GROUND, CLEANUP PENDING."

Material:

Site ID:	457344
Operable Unit ID:	1207468
Operable Unit:	01
Material ID:	2204743
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.13
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

82
West
1/4-1/2
0.321 mi.
1695 ft.

Relative:
Lower

Actual:
91 ft.

POLE # 25756
649 WEST FINGERBOARD RD
STATEN ISLAND, NY

NY Spills **S106384808**
N/A

SPILLS:

Facility ID:	0400411
Facility Type:	ER
DER Facility ID:	61730
Site ID:	63995
DEC Region:	2
Spill Date:	2004-04-13
Spill Number/Closed Date:	0400411 / 2004-07-16
Spill Cause:	Equipment Failure

POLE # 25756 (Continued) **S106384808**

Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SKARAKHA
Referred To:	Not reported
Reported to Dept:	2004-04-13
CID:	404
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-04-13
Spill Record Last Update:	2004-07-16
Spiller Name:	MARK SCHLAGEL
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	001
Contact Name:	MARK SCHLAGEL
Contact Phone:	(212) 580-8383
DEC Memo:	"e2mis 152905 4/13/04 @ 2025 Hrs. J.Lindstrom reports 1 75 KV Transformer on pole 25756 in front of 649 Fingerboard Rd. leaking from main body of transformer. An area of 15 ft. by 20 ft. on grass and street was affected. There were also 2 sanitary sewer catch basins affected. The transformer was a Porter Delta Serial # 620418. Jaco sample on transformer show non-detectable PCB. Sample # SI 200693. Transformer will be treated as 50 - 499 PCB until sample is taken. Dan Pontecorvo E.R.T. reports oily sheen on sewer grating 150 east of transformer. Car under pole covered with oil- Honda Element Ohio Plate # EA 14DS. Dan Pontecorvo taking oil sample to Astoria Chem. Lab. Lab Report from Chem Lab Sequence # 04-2819-00 < 1.0 PPM 3 1/2 ft. by 15 ft. grass in tree lane removed. Roadway in front of Transformer. 20 Ft. by 15 ft. wide was double washed with safety wash and water. Catch Basin 145 ft. east of transformer was cleaned out by vactor and double washed with safety wash and water. Also area across the street 1 ft. wide and 30 ft. long was double washed with safety wash and rinsed. Blacktop in front of transformer 16 ft. by 25 ft. was double washed and rinsed. Pole # 25756 was also washed down with safety wash and rinsed. Above vehicle was also washed and note was left for owner to contact control center for further cleaning. The damaged transformer was removed and replaced in the early morning of 4/14/04. The entire cleanup completed at 0440 hrs on 4/14/04."
Remarks:	"CLEANUP IN PROGRESS. FAULTY TRANSFORMER. AN UNKNOWN AMOUNT (ABOUT 15 GALLONS) WENT INTO THE SEWER. REF NUMBER "

Material:

Site ID:	63995
Operable Unit ID:	884749
Operable Unit:	01
Material ID:	491667
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported

POLE # 25756 (Continued) **S106384808**

Material FA: Petroleum
Quantity: 15.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

83
SSE
1/4-1/2
0.322 mi.
1700 ft.

Relative:
Lower

Actual:
29 ft.

MANHOLE #18348 **NY Spills** **S104788605**
224 - 08 77TH AVENUE **N/A**
QUEENS, NY

SPILLS:
Facility ID: 0006012
Facility Type: ER
DER Facility ID: 208994
Site ID: 255159
DEC Region: 2
Spill Date: 2000-08-21
Spill Number/Closed Date: 0006012 / 2001-12-13
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4101
Investigator: JHOCONNE
Referred To: Not reported
Reported to Dept: 2000-08-21
CID: 255
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Affected Persons
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2000-08-21
Spill Record Last Update: 2001-12-13
Spiller Name: Not reported
Spiller Company: UNKNOWN
Spiller Address: Not reported
Spiller City,St,Zip: ZZ -
Spiller Company: 001
Contact Name: MARK SCHLAGEL
Contact Phone: (212) 580-6763
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL E2MIS NOTES: 8/21/2001: APPROXIMATELY 3 GALLONS OF OIL ON APPROXIMATELY 500 GALLONS OF WATER IN MH 18348. LAB. RESULTS <1.00 PPM PCB. 8/23/2000: CLEANUP COMPLETED, NO LEAKING COMPANY EQUIPMENT, AND TAG 15541 WAS REMOVED. SEALED SUMP AND NO SAMPLES ARE NEEDED. UPDATE. 9/1/2000. INCIDENT CLOSED."
Remarks: "3 gal unknown oil on 500 gallons of water - clean up pending test

MANHOLE #18348 (Continued) **S104788605**

results"

Material:
Site ID: 255159
Operable Unit ID: 828836
Operable Unit: 01
Material ID: 547145
Material Code: 0066A
Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: 3.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

84
NE
1/4-1/2
0.330 mi.
1745 ft.

Relative:
Lower

Actual:
54 ft.

SPILL NUMBER 0012316 **NY Spills** **S104951398**
SCHOOL RD & DENNIS ST **N/A**
STATEN ISLAND, NY

SPILLS:
Facility ID: 0012316
Facility Type: ER
DER Facility ID: 95538
Site ID: 108731
DEC Region: 2
Spill Date: 2001-02-16
Spill Number/Closed Date: 0012316 / 2002-07-11
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: MCTIBBE
Referred To: Not reported
Reported to Dept: 2001-02-16
CID: 205
Water Affected: Not reported
Spill Source: Commercial Vehicle
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2001-02-16
Spill Record Last Update: 2002-07-11
Spiller Name: CALLER
Spiller Company: NYC TRANSIT
Spiller Address: 370 JAY STREET
Spiller City,St,Zip: BROOKLYN, NY 11201-
Spiller Company: 001

SPILL NUMBER 0012316 (Continued) **S104951398**

Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE 50 GALLON SPILL FROM RUPTURED BUS TANK. OIL ENTERED SEWER. NYCT CONTRACTOR VACCED SEWER UNDER NYCDEP SUPERVISION."
Remarks:	"caller reports bus ran over some object in road and caused spill. cleanup crew enroute. unk amount may have entered sewer drain."

Material:

Site ID:	108731
Operable Unit ID:	834213
Operable Unit:	01
Material ID:	542590
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

85
North
1/4-1/2
0.336 mi.
1775 ft.

JOINT IN AERIAL CABLE LEAKING **NY Spills** **S108638236**
777 THOMPKINS AVENUE **N/A**
STATEN ISLAND, NY

Relative:
Lower

Actual:
85 ft.

SPILLS:

Facility ID:	0703237
Facility Type:	ER
DER Facility ID:	332602
Site ID:	383128
DEC Region:	2
Spill Date:	2007-06-19
Spill Number/Closed Date:	0703237 / 2008-02-20
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	gdbreen
Referred To:	Not reported
Reported to Dept:	2007-06-19
CID:	444
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2007-06-19

JOINT IN AERIAL CABLE LEAKING (Continued) **S108638236**

Spill Record Last Update:	2008-02-20
Spiller Name:	ERTSDESK
Spiller Company:	CON EDISON
Spiller Address:	777 THOMPKINS AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	ERTSDESK
Contact Phone:	(212) 580-8383
DEC Memo:	"02/20/08 - See eDocs for Con Ed report detailing cleanup and closure. 206522. see eDocs"
Remarks:	"8 OUNCES LEAKED AND NO TO 5 QUESTIONS: CONED # 206522"

Material:

Site ID:	383128
Operable Unit ID:	1140501
Operable Unit:	01
Material ID:	2130577
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

86
SW
1/4-1/2
0.341 mi.
1800 ft.

325 MAJOR AVE **NY LTANKS** **S100493440**
325 MAJOR AVE **N/A**
STATEN ISLAND, NY

Relative:
Lower

Actual:
46 ft.

LTANKS:

Site ID:	217882
Spill Number/Closed Date:	9201050 / 1992-04-27
Spill Date:	1989-05-23
Spill Cause:	Tank Failure
Spill Source:	Commercial/Industrial
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Unable/unwilling Responsible Party. Corrective action taken. (ISR)
Cleanup Ceased:	1992-04-27
Cleanup Meets Standard:	True
SWIS:	4301
Investigator:	TOMASELLO
Referred To:	Not reported
Reported to Dept:	1989-05-23
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1992-04-30

325 MAJOR AVE (Continued) **S100493440**

Spill Record Last Update:	1994-06-08
Spiller Name:	Not reported
Spiller Company:	QUICK LUBE S/S
Spiller Address:	920 HYLAN BLVD
Spiller City,St,Zip:	S I, ZZ
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	180262
DEC Memo:	""
Remarks:	"WORK DONE PREVIOUSLY BY CONTRACTOR WHO WAS HIRED BY SPILLER WHO REFUSES TO PAY BILL."

Material:

Site ID:	217882
Operable Unit ID:	968443
Operable Unit:	01
Material ID:	415802
Material Code:	0022
Material Name:	waste oil/used oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Q87 **88 OCEAN AVENUE** **NY Spills** **S106015593**
SSE **88 OCEAN AVENUE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.351 mi.
1851 ft. **Site 4 of 4 in cluster Q**

Relative:
Lower

Actual:
28 ft.

SPILLS:

Facility ID:	0303360
Facility Type:	ER
DER Facility ID:	258846
Site ID:	321319
DEC Region:	2
Spill Date:	2003-06-30
Spill Number/Closed Date:	0303360 / 2005-05-24
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SKARAKHA
Referred To:	Not reported
Reported to Dept:	2003-06-30
CID:	216
Water Affected:	Not reported
Spill Source:	Commercial/Industrial

88 OCEAN AVENUE (Continued) **S106015593**

Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2003-06-30
Spill Record Last Update:	2005-05-24
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	NEW YORK, NY 10003
Spiller Company:	001
Contact Name:	BILL MURPHY
Contact Phone:	(212) 580-6763
DEC Memo:	"E2MIS 148990 1050 hrs. Field Supervisor J Raggi reports aerial cable leaked approxiamately 16 ounces of dielectric fluid leaked to grass in curb lane affecting an area of 18 inches by 10 foot grass and soil. Also affected was an area of 2 foot by 10 foot on sidewalk. Private vehicle 1995 GMC Jimmy plate AEC - 8239 has oil on roof and side. No sewers or waterways affected. No smoke or fire present. Underground to clean spill. Troubleshooter to bag joint. Spill will be treated as 50 -499 PCB containing.....Rl 26233..... 6/30/03 1135 hrs Raggi notified by owner of house at 88 Ocean Ave that the front steps and front porch have drops on them. Vehicle to be double wash and double rinsed before the owner takes it to car wash. 6/30/03 1140 hrs. DEC Abraham was notified of impact to private property as per Ann Ip EH&S 6/30/03 1148 hrs. Raggi reports an additional vehicle affected. 1994 Mercury Tracer Gray station wagon plate CAU-8054 NY .Oil spots on back window and rear tail gate. CIG notified of additional vehicle 6/30/03 1710 hrs R Moloughney # 98618 Field foreman reports Mr. Biago Brignina reports his son 's vehicle was parked under cable while visiting . Vehicle 1989 Chrysler convertable no license available son lives upstate .Phone number 347-526-9645 Claims roof was stained.....CIG notified Kens marine service on site to do clean-up EPA provisional number NYP 004112561....RL 26233... 6/30/03 1900 hrs UPDATE: A sample (oil on wipe) was taken and it was sent to the Chem Lab for PCB analysis at 1500 hrs. Cleanup contractor Ken's Marine Service arrived the site at approx. 1645 hrs. SIEHS (A.Ip & K.Toomey) discussed the cleanup plan with Ken's Marine. Ken's Marine began the cleanup at approx. 1530 hrs. All the affected solid surface (i.e., concrete sidewalk, concrete front yard, asphalt roadway, cement stariways, and the wooden porch) were first hand scrubbed with seawash and then followed by double pressure washed with seawash and water. The affected wood rail, metal rail, metal fence, stucco surface, and two plastic trash cans and the cans' covers were double pressure washed with seawash and water. The affected grass area was removed and the affected shrub located at the corner of the house was trimmed on both the top and the sides. The two customer vehicles (GMC Jimmy and Mercury Tracer) werealso triple pressure washed with seawash and water. The following lists the size of the affected areas and the size of areas cleaned:1) 4'x40' concrete sidewalk affected, 4'x42' area cleaned 2) 1'x40' grass area between sidewalk and roadway affected, 1'x42'x2 soil/grass removed 3) 4'x16' conrete front yard affected, 4'x18' area cleaned 4) 4'x30' wooded front porch with painted surface affected, 4'x30' area

88 OCEAN AVENUE (Continued) **S106015593**

cleaned 5) 5'x30' stucco surface affected, 5'x30' area cleaned 6) 12'x40' asphalt roadway affected, 13'x42' area cleaned The entire cleanup was completed at approx. 1745 hrs. A total of two fully stuffed 55-gallons drums (270 kg) were generated and they were transported by Ken's Marine to Cycle Chem (Elizabeth, NJ) for disposal as PCB solid waste (manifest # NJA4135973). Customer resides at 88 Ocean Ave (Lina DiGioia 718-815-9307) expressed concern about the result of the PCB anaysis and requested that the Company to verbally inform her of the result when it becomes available. Ms. DiGioria also expressed concern about some of the stains that are still visible after completion of the cleanup (most stains have been removed or lightened). She was informed to contact the UG Planner to followup on this issue. The leaked cable was temporarily wrapped with absorbent pads and plasitc. Currently pending outage for permanent repair of the cable. Post cleanup photos were taken by the Company photographer at approx. 1830 hrs UPDATE 7/1/03 1513 Hrs. The finder was J. Raggi, employee #15861, Field Supervisor, Control Operations and the pole number is 6324. Lab report 03-05389- 001 dated 7/1/03 indicates <1 PPM PCB... G. Triolo, #01868. 7/5/03 @ 2045 hrs, SSO Vito Aglio reports that the the cable leaked again. 1/2 ounce of oil leaked several spots covering an area of 20' x 4' ifo 88 Ocean Ave. TS dispatched to location to perform cleanup and re wrap cable. Vincent Reneo, EGS 81202 7/5/03 @ 2150 hrs, SSO V. Aglio reports that TS Lars Bleivik verified that the plastic wrap over the cable is dry and that there is no evidence of oil leaking from cable. Another bag was installed over the existing one anyway. The visible drops on the concrete were from the previous cleanup. No cleanup required. Vincent Reneo, EGS 81202 7/10/03 1455 hrs..... Update: On 7/1/03, UG Planner Joe D'Aquila visited customer resided at 88 Ocean Ave. Information regarding the PCB result (i.e., <1 ppm) of sample taken on 6/30/03 was provided to the customer. The mint plants (located close to the spill area but not affected by the spill based on visual inspection) was also removed by Joe D'Aquila as a precaution. In addition, the metal fence and metal rails were cleaned again with Knuckle Cleaner to lighten the stains that were still visible after the cleanup performed on 6/30/03.....A.Ip (71684) 8/28/03 0920 hrs.....Update J . Raggi emp# 15861 reports bagged aerial cable leaked approxiamately 6 ounces dielectric fluid. Areas affected 4 feet by 28 feet of sidewalk, 1 foot by 28 feet tree lane and 1 foot by 28 feet asphalt street. No smoke or fire present. No sewers or waterways affected. CDUG on site to do cleanup. Oil samlpe # 146457 from Jun. 30 -2003 shows < 1 PPM PCB. Areial joint was rebagged by troubleshooter. CIG DiDonato #01669 notified @ 0946 hrs.====RL 26233========== 8/28/03 1205 hrs. Update G Conroy # 38488 CDUG foreman reports spill clean. Spill cleaned 4 feet by 30 feet on sidewalk and 1 foot by 30 feet on street by double washing with citrus then double rinsing with water. The tree lane 1 foot by 30 feet soil and grass removed. 2 large bags of debris removed to be disposed at the VBSC. 33 KV feeder 33R13 must be taken out of service to make permanent repairs . Due to heat contingency UPDATE 1/23/04 1020 Hrs. The tree lane 1'x30'x3 of soil and grass was removed. As per Construction aerial cable was repaired on 1/22/04 by replacing a section of aerial cable and making new joint "

Remarks: "LEAK FROM OVERHEAD CABLE JOINT LEAK ON TO PRIVATE PROPERTY AND PRIVATE CAR NY REG AEC8239 THEY WILL CLEAN UP PENDING 50-499 PPM "

Material:

Site ID: 321319

88 OCEAN AVENUE (Continued) **S106015593**

Operable Unit ID:	870461
Operable Unit:	01
Material ID:	504233
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

R88 **EDR Hist Cleaner** **1014999449**
SSW **159 SAND LN** **N/A**
1/4-1/2 **STATEN ISLAND, NY 10305**
0.355 mi.
1877 ft. **Site 1 of 4 in cluster R**

Relative:
Lower

Actual:
47 ft.

EDR Historical Cleaners:

Name:	SUN BRITE LAUNDROMAT
Year:	2001
Address:	159 SAND LN
Name:	SUN BRITE LAUNDROMAT
Year:	2002
Address:	159 SAND LN
Name:	SUN BRITE LAUNDROMAT
Year:	2003
Address:	159 SAND LN
Name:	SUNBRITE LAUNDROMAT
Year:	2005
Address:	159 SAND LN
Name:	SUNBRITE LAUNDROMAT
Year:	2006
Address:	159 SAND LN
Name:	SUNBRITE LAUNDROMAT
Year:	2010
Address:	159 SAND LN
Name:	SUNBRITE LAUNDROMAT
Year:	2011
Address:	159 SAND LN
Name:	SUNBRITE LAUNDROMAT
Year:	2012
Address:	159 SAND LN

89
SSW
1/4-1/2
0.357 mi.
1886 ft.

POLE
347 MCCLEAN AVE
STATEN ISLAND, NY

NY Spills **S110489415**
N/A

Relative:
Lower

Actual:
31 ft.

SPILLS:

Facility ID:	1003990
Facility Type:	ER
DER Facility ID:	392203
Site ID:	437243
DEC Region:	2
Spill Date:	2010-07-09
Spill Number/Closed Date:	1003990 / 2010-10-18
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2010-07-09
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2010-07-09
Spill Record Last Update:	2010-10-18
Spiller Name:	ERT
Spiller Company:	CON ED
Spiller Address:	347 MCCLEAN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-8383
DEC Memo:	"10/18/10 - Austin - 1 pint cable joint leak that impacted pavement, grass, and a property owner's chain link fence - Con Ed contained and cleaned up the release - see eDocs documents for more information - closed - end "
Remarks:	"Caller reporting a spill of 1 pint of dielectric fluid to soil. Clean up pending."

Material:

Site ID:	437243
Operable Unit ID:	1187925
Operable Unit:	01
Material ID:	2182814
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.25
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported

POLE (Continued) **S110489415**

Oxygenate: Not reported

Tank Test:

90
West
1/4-1/2
0.364 mi.
1923 ft.

565 STEUBEN ST
STATEN ISLAND, NY 10305

EDR Hist Cleaner **1015075981**
N/A

Relative:
Lower

Actual:
89 ft.

EDR Historical Cleaners:
Name: ST PAULS LAUNDROMAT CORP
Year: 2007
Address: 565 STEUBEN ST

R91
SSW
1/4-1/2
0.366 mi.
1933 ft.

NICOL RESIDENCE
154 SAND LN
STATEN ISLAND, NY

Site 2 of 4 in cluster R

NY Spills **S102238652**
N/A

Relative:
Lower

Actual:
45 ft.

SPILLS:
Facility ID: 9512378
Facility Type: ER
DER Facility ID: 67815
Site ID: 71708
DEC Region: 2
Spill Date: 1996-01-04
Spill Number/Closed Date: 9512378 / 1996-01-24
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: SMMARTIN
Referred To: Not reported
Reported to Dept: 1996-01-04
CID: 257
Water Affected: Not reported
Spill Source: Private Dwelling
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1996-01-04
Spill Record Last Update: 1996-02-05
Spiller Name: PETER LEPORE
Spiller Company: WHALECO FUEL OIL
Spiller Address: 1 COFFEE ST
Spiller City,St,Zip: BROOKLYN, NY
Spiller Company: 001
Contact Name: MR NICOL
Contact Phone: (718) 448-9755

NICOL RESIDENCE (Continued) **S102238652**

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was MARTINKAT "
Remarks: "on to sidewalk all cleaned up "

Material:
Site ID: 71708
Operable Unit ID: 1026592
Operable Unit: 01
Material ID: 356126
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 1.00
Units: Gallons
Recovered: 1.00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

S92 **X/S SINGERBOALD RD** **NY Spills** **S106017470**
NNE **18 SUMMER ST** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.368 mi.
1945 ft. **Site 1 of 2 in cluster S**

Relative:
Lower

Actual:
47 ft.

SPILLS:
Facility ID: 0305529
Facility Type: ER
DER Facility ID: 116194
Site ID: 135321
DEC Region: 2
Spill Date: 2003-08-24
Spill Number/Closed Date: 0305529 / 2003-12-15
Spill Cause: Unknown
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: CESAWYER
Referred To: Not reported
Reported to Dept: 2003-08-24
CID: 365
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Affected Persons
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2003-08-24
Spill Record Last Update: 2003-12-15
Spiller Name: MRS SABRINA LAGUKA
Spiller Company: X/S SINGERBOALD RD
Spiller Address: 18 SUMMER ST

X/S SINGERBOALD RD (Continued) **S106017470**

Spiller City,St,Zip: STATEN ISLAND, NY
Spiller Company: 001
Contact Name: MRS SABRINA LAGUKA
Contact Phone: (718) 448-3869
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAWYER 12/15/03 1011 Hrs - Sawyer - Talked to Mrs. Laguka about the diesel fuel smell. She expressed to me that it was a false alarm and it seemed to be nothing. Closed."
Remarks: "owner of house is digging trench to secure foundation - some water started coming up - and an odor of diesel also"

Material:
Site ID: 135321
Operable Unit ID: 872124
Operable Unit: 01
Material ID: 502781
Material Code: 0008
Material Name: diesel
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

93
East
1/4-1/2
0.370 mi.
1951 ft.

Relative:
Lower

Actual:
99 ft.

FORT WADSWORTH - BATTERY WEED **NY SHWS** **S106905137**
NAVAL STATION - NEW YORK **N/A**
STATEN ISLAND, NY 10305

SHWS:
Program: HW
Site Code: 58302
Classification: C
Region: 2
Acres: 1.5
HW Code: 243015
Record Add: 11/18/1999
Record Upd: 01/11/2008
Updated By: JAAVERSA
Site Description: This site is located in a commercial/residential area of Staten Island. The site Topography slopes east. The nearest Water body is adjacent to the site (Lower New York Bay).Fort Wadsworth was first occupied by the US Army in 1794. The first structures (artillery batteries) were built over 24 acres of the site in order to defend New York City during the War of 1812, including Fort Richmond (now called Battery Weed). On October 1, 1987, Fort Wadsworth was transferred to the US Navy. Since the building functions and generated waste disposal activities were not well documented by the Army, the Navy decided to investigate the base to determine hazardous waste contents and impacts to the environment. A 1990 study identified four potential areas of concern: Moat Transformer Area, Incinerator Ash Disposal Area, Pesticide Shop Area, and Battery Weed

FORT WADSWORTH - BATTERY WEED (Continued) **S106905137**

	Courtyard Area. A Site Inspection (SI) completed in 1992 identified the contaminants of concern as lead, PCBs, pesticides and semi-volatile organic compounds (SVOCs). However, an extended SI completed in the fall of 1994 indicated that the only area containing hazardous waste was the Battery Weed Courtyard Area. On-site soils contained hazardous levels of PCBs (above 50 ppm). In the Fall of 1995, a removal action was undertaken at the site which brought levels of PCBs in the soil below cleanup objectives. Fort Wadsworth, which was decommissioned on August 31, 1994, is currently occupied by the National Park Service.
Env Problem:	Past unknown site operations had caused on-site soils to become contaminated with PCBs. This contamination did not exist outside of the courtyard area. It is unknown whether this contamination had impacted groundwater or the adjacent surface water body. However, in light of the removal action, and the location of the groundwater, it seems highly unlikely. No additional remedial action is planned. The site is no longer considered a significant environmental threat.
Health Problem:	The potential for exposure to PCB-contaminated soils in the courtyard has been eliminated with the removal of these soils as part of a base-wide cleanup conducted in the Fall of 1995. The base is currently occupied by the National Park Service and is open to the public. The site is served by public water, therefore, no exposure to on-site groundwater is expected.
Dump:	False
Structure:	True
Lagoon:	False
Landfill:	False
Pond:	False
Disp Start:	unknown
Disp Term:	1987
Lat/Long:	40:36:13:0 / 74:04:01:0
Dell:	False
Record Add:	11/18/1999 12:00:00 PM
Record Upd:	11/18/1999 12:00:00 PM
Updated By:	INITIAL
Own Op:	Disp. Owner
Sub Type:	NNN
Owner Name:	Not reported
Owner Company:	U.S. ARMY
Owner Address:	Not reported
Owner Addr2:	Not reported
Owner City,St,Zip:	ZZ
Owner Country:	United States of America
Own Op:	On-Site Operator
Sub Type:	D
Owner Name:	Not reported
Owner Company:	US Department of the Army
Owner Address:	FORT HAMILTON
Owner Addr2:	Not reported
Owner City,St,Zip:	BROOKLYN, NY
Owner Country:	United States of America
Own Op:	Owner
Sub Type:	NNN
Owner Name:	Not reported
Owner Company:	U.S. Navy, Northern Division
Owner Address:	10 Industrial Highway, MSC 82
Owner Addr2:	Not reported

FORT WADSWORTH - BATTERY WEED (Continued) **S106905137**

Owner City,St,Zip:	Lester, PA 19113
Owner Country:	United States of America
Own Op:	Owner
Sub Type:	D
Owner Name:	ENG, COM NAVAL FACIL.
Owner Company:	U.S. ARMY
Owner Address:	10 INDUSTRIAL HIGHWAY, MSC 82
Owner Addr2:	Not reported
Owner City,St,Zip:	LESTER, PA 191132090
Owner Country:	United States of America
HW Code:	243015
Waste Type:	PCBS (B007 WASTE)
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
Crossref ID:	NY2170084485
Cross Ref Type Code:	05
Cross Ref Type:	EPA Site ID
Record Added Date:	11/18/1999 12:00:00 PM
Record Updated:	5/10/2001 4:31:00 PM
Updated By:	REGTRANS

R94 **BORINQUEN PLAZA** **NY LTANKS** **S100145318**
SSW **130 HUMBODLT STREET** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.378 mi.
1995 ft. **Site 3 of 4 in cluster R**

Relative:
Lower

Actual:
43 ft.

LTANKS:

Site ID:	79858
Spill Number/Closed Date:	9100135 / 1995-04-25
Spill Date:	1991-04-03
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	1995-04-25
Cleanup Meets Standard:	True
SWIS:	2401
Investigator:	HEALY
Referred To:	Not reported
Reported to Dept:	1991-04-03
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1991-04-17
Spill Record Last Update:	1995-04-25
Spiller Name:	Not reported
Spiller Company:	NYCHA
Spiller Address:	250 BROADWAY
Spiller City,St,Zip:	NEW YORK, NY
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported

BORINQUEN PLAZA (Continued) **S100145318**

DEC Region: 2
DER Facility ID: 74088
DEC Memo: ""
Remarks: "5K TANK,SYSTEM TEST,FAILED HORNER EZY CHECK WITH A GROSS LEAK, WILL EXCAVATE, ISOLATE & RETEST. SEE SPILL # 9402292"

Material:
Site ID: 79858
Operable Unit ID: 950966
Operable Unit: 01
Material ID: 426348
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: -1.00
Units: Not reported
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:
Site ID: 79858
Spill Tank Test: 1538413
Tank Number: 001
Tank Size: 0
Test Method: 00
Leak Rate: .00
Gross Fail: Not reported
Modified By: Spills
Last Modified: Not reported
Test Method: Unknown

---

95 SSE 1/4-1/2 0.381 mi. 2010 ft.

Relative: Lower

Actual: 19 ft.

MANHOLE # 2215
104 OCEAN AVE
STATEN ISLAND, NY

NY Spills **S111835757**
N/A

SPILLS:
Facility ID: 1200762
Facility Type: ER
DER Facility ID: 417816
Site ID: 463420
DEC Region: 2
Spill Date: 2012-04-24
Spill Number/Closed Date: 1200762 / 2012-06-15
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: RWAUSTIN
Referred To: Not reported
Reported to Dept: 2012-04-24
CID: Not reported
Water Affected: Not reported

MANHOLE # 2215 (Continued) **S111835757**

Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2012-04-24
Spill Record Last Update:	2012-06-15
Spiller Name:	ERT
Spiller Company:	CON EDISON
Spiller Address:	104 OCEAN AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-8383
DEC Memo:	"04/24/12- Zhune spoke to Liza Lunkshides from Con-Ed ERT. She said Hydraulic oil mix with water in manhole. They are going to take a sample. They will clean the spill as soon as they get the results. 6/15/12 - Austin - 1 1/2 gal. hydraulic oil leak from con Ed tow truck onto pavement - Con Ed contained and cleaned up the spill - See eDocs files for further information - Spill closed - end"
Remarks:	"Oil mixed with 20 gals of water. Cleanup is pending."

Material:

Site ID:	463420
Operable Unit ID:	1213513
Operable Unit:	01
Material ID:	2211491
Material Code:	0010
Material Name:	hydraulic oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.50
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

96
SW
1/4-1/2
0.382 mi.
2016 ft.

Relative:
Lower

Actual:
33 ft.

32 LINWOOD AVENUE
32 LINWOOD AVENUE
STATEN ISLAND, NY

NY Spills **S102149379**
N/A

SPILLS:

Facility ID:	9413756
Facility Type:	ER
DER Facility ID:	120648
Site ID:	141273
DEC Region:	2
Spill Date:	1995-01-16
Spill Number/Closed Date:	9413756 / 1995-01-16
Spill Cause:	Equipment Failure

32 LINWOOD AVENUE (Continued) **S102149379**

Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1995-01-16
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	1995-01-16
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-03-22
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	SAME
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"FITTING ON SUCTION FAILED, CLEANUP WITH SPEEDY DRY. FITTING REPAIRED" Not reported

Material:

Site ID:	141273
Operable Unit ID:	1011311
Operable Unit:	01
Material ID:	561448
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

R97 **387 HUMBOLDT ST/BKLYN** **NY Spills** **S102145738**
SSW **387 HUMBOLDT STREET** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.394 mi.
2078 ft. **Site 4 of 4 in cluster R**

Relative:
Lower

Actual:
38 ft.

SPILLS:

Facility ID:	9000154
Facility Type:	ER
DER Facility ID:	82509
Site ID:	91839

387 HUMBOLDT ST/BKLYN (Continued) **S102145738**

DEC Region:	2
Spill Date:	1990-04-05
Spill Number/Closed Date:	9000154 / 1990-04-05
Spill Cause:	Unknown
Spill Class:	Not reported
SWIS:	2401
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1990-04-05
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Federal Government
Cleanup Ceased:	1990-04-05
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1990-05-10
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"NYCDEP WAS NOTIFIED, NO ACTION TAKEN, DEC (SIGONA)REPORTED TO NYCDEP HAZ MAT WHO WILL INVESTIGATE."

Material:

Site ID:	91839
Operable Unit ID:	938496
Operable Unit:	01
Material ID:	438568
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

98
NNW
1/4-1/2
0.401 mi.
2117 ft.

BEHIND 35 HILLBROOK COURT
CONDOMINIUM
STATEN ISLAND, NY

NY Spills **S104789356**
N/A

Relative:
Lower

Actual:
102 ft.

SPILLS:

Facility ID:	0006852
Facility Type:	ER
DER Facility ID:	112154
Site ID:	130164
DEC Region:	2
Spill Date:	2000-09-09
Spill Number/Closed Date:	0006852 / 2004-03-26
Spill Cause:	Deliberate
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SACCACIO
Referred To:	Not reported
Reported to Dept:	2000-09-09
CID:	282
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Citizen
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-09-09
Spill Record Last Update:	2004-03-26
Spiller Name:	Not reported
Spiller Company:	UNKNOWN FOR NOW
Spiller Address:	SAME
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	SAMANTHA DUGAN
Contact Phone:	(718) 273-4688
DEC Memo:	""
Remarks:	"a homeowner has cess pool that they are pumping out into the road raw sewage is out in the street. update 9/10 0953 address for source is 28 wagner st. "

Material:

Site ID:	130164
Operable Unit ID:	829680
Operable Unit:	01
Material ID:	555774
Material Code:	0062A
Material Name:	raw sewage
Case No.:	Not reported
Material FA:	Other
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

BEHIND 35 HILLBROOK COURT (Continued) **S104789356**

Tank Test:

S99 **VACANT LOT** **NY Spills** **S108129893**
NNE **51 HIGH ST** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.403 mi.
2128 ft. **Site 2 of 2 in cluster S**

Relative:
Lower

Actual:
51 ft.

SPILLS:

Facility ID:	0605484
Facility Type:	ER
DER Facility ID:	318553
Site ID:	368651
DEC Region:	2
Spill Date:	2006-08-10
Spill Number/Closed Date:	0605484 / 2006-12-06
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	HRPATEL
Referred To:	Not reported
Reported to Dept:	2006-08-10
CID:	409
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2006-08-10
Spill Record Last Update:	2006-12-06
Spiller Name:	UNKNOWN
Spiller Company:	Unknown
Spiller Address:	UNKNOWN
Spiller City,St,Zip:	UNKNOWN, NY
Spiller Company:	999
Contact Name:	ALBERT HOKE
Contact Phone:	(718) 442-8633
DEC Memo:	"8/11/2006 - Ryan Piper visited the site on his way to another site on Staten Island. Site is residential lot with a half buried ~250 gal oil tank in the rear of the yard. Over time the oil in the tank has leaked out and contaminated the soil. According to the neighbor, the owner of the lot may have died. Neighbor believes the site is now up for sale. NYC Tax records AND Property Shark both show owner as: Mr. & Mrs Artman 51 High St Staten Island, NY 10305 Need to send a CSL (add a statement that the old oil tank must be removed when the contaminated soil is removed. A CSL was semding 08/15/06 to Mr. Mrs Artman at: 51 High St Staten Island, NY 10305 10/03/06-Hiralkumar Patel. visited site on 10/02/06. house was empty. spoke with Mr. Vinny (347-582-3920), neighbour of subject site. he never smelled any oil. dialed broker of house and got phone number for owner's daughter Ms. Joan. spoke with Ms. Joan (732-546-1305). as per her house has

VACANT LOT (Continued) **S108129893**

gas heating system and she doesn't know whether there was any tank in past. found 275 gal tank paritally buried in backyard of property. no evidence of leaking from top. not sure about any leak from bottom of tank and nobody knows how long this tank at location. asked Ms. Joan to hire contractor to dispose this tank properly. she will call back with contractor's information. Joan Doyle 21 Vanbrunt Place Middletown, NJ 07748 Fax: (732) 706-5531 10/11/06-Hiralkumar Patel. left message for Ms. Doyle. 10/12/06-Hiralkumar Patel. received call from Ms. Doyle. she has hired company to remove tanks from site. as per Ms. Doyle, there is one more tank inside the building. company will remove both tanks. explained to Ms. Doyle that the Department may need soil samples after tanks removal depends on site observations. asked Ms. Doyle to give company's name and number who will going to remove these tanks. she will fax document with consultant's name & number. received fax from Ms. Doyle. she has hired Evertight Tank Lining Co. (718-981-1818). 10/31/06-Hiralkumar Patel. left message for Ms. Doyle. 11/07/06-Hiralkumar Patel. spoke at Evertight Tank. they are not working at subject site. left message for Ms. Doyle. CSL sent out to Ms. Doyle via certified mail. letter faxed to Ms. Doyle. 11/16/06-Hiralkumar Patel. received certified mail receipt. 12/06/06-Hiralkumar Patel. received message from Ms. Doyle (Home: 732-495-0182, Cell: 732-546-1305). she hired PTC for tank removal. PTC removed tank on 12/04/06 from backyard. as per Anthony from PTC, there was no oil in tank and area around it was clean. as per Ms. Doyle, Anthony has took some pics. left message for Ms. Doyle left message for Anthony. received call from Anthony Lara. he found tank empty and clean. took PID around tank and found clean soil. based on available information, case closed."

Remarks: "250 GAL TANK THAT IS LEAKING. NEEDS TO BE PICKED UP."

Material:

Site ID:	368651
Operable Unit ID:	1126518
Operable Unit:	01
Material ID:	2116058
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

100 ESE 1/4-1/2 0.403 mi. 2128 ft. **POLE T-4** **NY Spills** **S112229458**
AYRES RD AND USS TENNESSEE RD **N/A**
STATEN ISLAND, NY

Relative: Lower

Actual: 90 ft.

SPILLS:

Facility ID:	1209347
Facility Type:	ER
DER Facility ID:	426666
Site ID:	472411
DEC Region:	2
Spill Date:	2012-11-06
Spill Number/Closed Date:	1209347 / 2014-03-04
Spill Cause:	Storm
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2012-11-06
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Transformer
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2012-11-06
Spill Record Last Update:	2014-03-04
Spiller Name:	ERT
Spiller Company:	CONEDISON
Spiller Address:	4 IRVING PL
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-6763
DEC Memo:	"3/19/13 - Austin - Con Ed investigated and determined that this was not one of their transformers - it belonged to the Fort Wadsworth Federal facility on Staten Island - See EDocs files for further information - Assigned to DEC Patel for site investigation to determine of transformer spill was cleaned up - Sandy storm related - Spill kept open - end. 03/20/13-Hiralkumar Patel. 9:15 AM:- went to site. one pole found with overhead transformer. area under the pole found free of oily material. 3/4/14 - Austin - Through routine review of Con Ed spills that were still listed as open, found spills that had been reviewed and closed, but not confirmed in the Lead DEC and Spill closed fields - Edited to reflect that, as of today's date - end"
Remarks:	"Spill is to grass and soil. Clean up is pending crew arrival."

Material:

Site ID:	472411
Operable Unit ID:	1222270
Operable Unit:	01
Material ID:	2220960
Material Code:	0020A

POLE T-4 (Continued) **S112229458**

Material Name:	transformer oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	25.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

---

101 WNW 1/4-1/2 0.424 mi. 2240 ft.

600 HYLAN BLVD
600 HYLAN BLVD
STATEN ISLAND, NY

NY LTANKS **S102673275** **N/A**

Relative: Lower

Actual: 136 ft.

LTANKS:

Site ID:	309144
Spill Number/Closed Date:	9514740 / 2004-04-29
Spill Date:	1996-02-17
Spill Cause:	Tank Overfill
Spill Source:	Private Dwelling
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	ADZHITOM
Referred To:	Not reported
Reported to Dept:	1996-02-17
CID:	257
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1996-02-17
Spill Record Last Update:	2004-04-29
Spiller Name:	JOHN GOODWIN
Spiller Company:	MYSTIC BULK CARRIERS INC
Spiller Address:	19-01 STEINWAY
Spiller City,St,Zip:	ASTORIA, NY 11105-
Spiller County:	001
Spiller Contact:	NONE
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	249675
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ZHITOMIRSKY 04/29/2004: Closed by Rashid Ahmed. "
Remarks:	"cleanup up kens marine on the way to do clean up "

Material:

Site ID:	309144

600 HYLAN BLVD (Continued) **S102673275**

Operable Unit ID:	1029290
Operable Unit:	01
Material ID:	553673
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	60.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

T102 **U S NAVY FT WADSWORTH/S.I** **NY LTANKS** **S100145817**
NE **BAY STREET** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.427 mi.
2256 ft. **Site 1 of 4 in cluster T**

Relative:
Lower

Actual:
63 ft.

LTANKS:

Site ID:	156701
Spill Number/Closed Date:	8910121 / 1992-09-30
Spill Date:	1990-01-22
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	1992-09-30
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	BATTISTA
Referred To:	Not reported
Reported to Dept:	1990-01-22
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1990-01-25
Spill Record Last Update:	1994-05-12
Spiller Name:	Not reported
Spiller Company:	U S NAVY
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	276158
DEC Memo:	""
Remarks:	"3K TANK FAILED PETRO TITE 10GPH, TO EXCAVATE & DISCONNECT."

U S NAVY FT WADSWORTH/S.I (Continued) **S100145817**

Material:

Site ID:	156701
Operable Unit ID:	937140
Operable Unit:	01
Material ID:	443243
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Site ID:	156701
Spill Tank Test:	1536711
Tank Number:	Not reported
Tank Size:	0
Test Method:	00
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified:	Not reported
Test Method:	Unknown

---

103 **POLE TOP TRANSFORMER** **NY Spills** **S118951757**
North **717 TOMPKINS AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.428 mi.
2258 ft.

Relative:
Lower

Actual:
74 ft.

SPILLS:

Facility ID:	1606073
Facility Type:	ER
DER Facility ID:	486654
Site ID:	532665
DEC Region:	2
Spill Date:	2016-09-17
Spill Number/Closed Date:	1606073 / 2016-12-06
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2016-09-17
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Transformer
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False

POLE TOP TRANSFORMER (Continued) **S118951757**

UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2016-09-17
Spill Record Last Update:	2016-12-06
Spiller Name:	FELIX CANCEL
Spiller Company:	CON ED
Spiller Address:	717 TOMPKINS AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	999
Contact Name:	FELIX CANCEL
Contact Phone:	212-580-8383
DEC Memo:	"emis_251511 Emergency Ops reported Pole # 27562 - 20 Ounces Dielectric Spill from Denergized Capped Aerial Cable to Asphalt/Concrete. NO WR# was available at time of call, system was down at time of call. 12/6/16 - Austin- Con Ed contained and cleaned up the spill on pavement in private driveway - Leak was from an inactive aerial cable, and said cable was wrapped - See document files for further information - Spill closed - end"
Remarks:	"Clean up completed at 1620"

Material:

Site ID:	532665
Operable Unit ID:	1281411
Operable Unit:	01
Material ID:	2286686
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

104
South
1/4-1/2
0.428 mi.
2259 ft.

Relative:
Lower

Actual:
27 ft.

117 MILLS AVENUE **NY Spills** **S102150056**
117 MILLS AVENUE **N/A**
STATEN ISLAND, NY

SPILLS:

Facility ID:	9501446
Facility Type:	ER
DER Facility ID:	237286
Site ID:	293160
DEC Region:	2
Spill Date:	1995-05-04
Spill Number/Closed Date:	9501446 / 1995-05-04
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported

117 MILLS AVENUE (Continued) **S102150056**

Reported to Dept:	1995-05-04
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Local Agency
Cleanup Ceased:	1995-05-04
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-05-17
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	SIPCO
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG "
Remarks:	"APPROX. 2 OZ'S SPILLED & CLEANED BY SIPCO"

Material:

Site ID:	293160
Operable Unit ID:	1012338
Operable Unit:	01
Material ID:	370054
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

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105 NNW 1/4-1/2 0.430 mi. 2270 ft.

VAULT 8872
15 SCHUBERT ST
STATEN ISLAND, NY

NY Spills **S116554759**
N/A

Relative: Lower

Actual: 135 ft.

SPILLS:

Facility ID:	1400796
Facility Type:	ER
DER Facility ID:	448983
Site ID:	494046
DEC Region:	2
Spill Date:	2014-04-23
Spill Number/Closed Date:	1400796 / 2014-06-18
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response.

VAULT 8872 (Continued) **S116554759**

Willing Responsible Party. Corrective action taken.

SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2014-04-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2014-04-23
Spill Record Last Update:	2014-06-18
Spiller Name:	Not reported
Spiller Company:	CONN ED
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	212 580 8383
DEC Memo:	" 6/18/14 - Austin - 20 gals dielectric fluid atop 100 gals of water in vault, from defective transformer - Con Ed contained and cleaned up the spill, and replaced the transformer - See D2 files for futher information - Spill closed - end"
Remarks:	"Caller advised that aprx 20 gal spilled into a vault. No resources affected. Clean up is pending."

Material:

Site ID:	494046
Operable Unit ID:	1243579
Operable Unit:	01
Material ID:	2244270
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	20.00
Units:	Gallons
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

106
West
1/4-1/2
0.431 mi.
2275 ft.

PRIVATE RESIDENCE
128 BEVERLY RD
STATEN ISLAND, NY

NY Spills **S106125378**
N/A

Relative:
Lower

Actual:
81 ft.

SPILLS:

Facility ID:	0311684
Facility Type:	ER
DER Facility ID:	82898
Site ID:	92303
DEC Region:	2
Spill Date:	2004-01-16
Spill Number/Closed Date:	0311684 / 2004-01-20
Spill Cause:	Other
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	TJDEMEO
Referred To:	Not reported
Reported to Dept:	2004-01-16
CID:	27
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Affected Persons
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-01-16
Spill Record Last Update:	2004-01-20
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEMEO Sewage - not state regulated"
Remarks:	"Caller reports ongoing problem. Raw sewage is backing up into his residence from the street lines. Raw sewage is in his tub,sinks,basement floor. Twentyfive gallons is an estimate only."

Material:

Site ID:	92303
Operable Unit ID:	879299
Operable Unit:	01
Material ID:	496934
Material Code:	0062A
Material Name:	raw sewage
Case No.:	Not reported
Material FA:	Other
Quantity:	25.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported

PRIVATE RESIDENCE (Continued) **S106125378**

Oxygenate: Not reported

Tank Test:

T107 **SPILL NUMBER 0306567** **NY Spills** **S106018316**
NE **1532 BAY STREET** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.437 mi.
2308 ft. **Site 2 of 4 in cluster T**

Relative:
Lower

Actual:
63 ft.

SPILLS:

Facility ID:	0306567
Facility Type:	ER
DER Facility ID:	176908
Site ID:	213531
DEC Region:	2
Spill Date:	2003-09-20
Spill Number/Closed Date:	0306567 / 2003-10-15
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. No DEC Response. No corrective action required.
SWIS:	4301
Investigator:	AERODRIG
Referred To:	Not reported
Reported to Dept:	2003-09-20
CID:	266
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2003-09-20
Spill Record Last Update:	2003-10-27
Spiller Name:	Not reported
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	NEW YORK, NY 10003
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RODRIGUEZ E2MIS 150426 09/20/03 @ 1230 hrs A. Cubas Emp#27308 reports that pothead on pole T-85 is leaking on sidewalk, grass fence of 1532 Bay st. and 4 cars. No fire, smoke, sewers, waterways or wetlands effected. Approx 1 qt of fluid from pothead. Areas affected: sidewalk 30 ft X 5 ft grass 4 ft X 4 ft riser pipe of pole T-85 Plastic fence of 1532 Bay St. - 10 ft long 4 cars 1988 Cadi - BKV- 4342 2001 Dodge - AJB - 9607 2002 ford - AGC - 1067 1999 Saab - CCP - 2665 2:57 notified CIG L. Costa 14:25 A. Cubas reports potheads, riser pipe, tele wire and cable double washed with citrus and double rinsed with water. removed large rocked with oil stain and removed 1 1/2 ft X 1 1/2 ft X 3 in deep of soil and grass. Includes buffer. 4 cars with

SPILL NUMBER 0306567 (Continued) **S106018316**

random spots Double washed and rinsed. owners want cars compounded to remove stains. Fence and sidewalk double washed and rinsed but still stained. Area needs to bve power washed to remove stain. 1 bag of debris taken to VBSC for disposal as Hazardous Waste (50 - 499 ppm PCB) cleanup crew consisted of D.Olsen Emp # 07709, T. Clinton Emp # 48059. Crews dispatched to perform cleanup. 09/20/03 ... 1257 hrs. CIG notified. (Larry Costa) UPDATE 9/22/03 1000 Hrs. This report is being updated to provide the following information: 1) the finder was A. Cubas, employee #27308, Manager, Control Operations, 2) the cleanup crew was D. Olsen, employee #07709 and V. Aglio, employee #48370, 3) the sidewalk area affected was 13'x3' (not 30'x5' as originally reported) and the area double washed with citru clean and double rinsed with water was 15'x4', 4) no grass was affected as indicated above but a rock located on the grass had polyethylene compound on it which was removed by the cleanup crew and a 1 1/2'x1'x6 of grass and dirt where the rock was located was removed, 5) a 6 x2' curb area was also double washed with citru clean and double rinsed with water, 6) the fence area affected was 4'x8' and the area double washed with citru clean and double rinsed with water was 4'x10', 7) the four vehicles were double washed with citru clean and double rinsed with water, 8) this cable is 4KV and does not contain oil, the pothead is the only electrical equipment at this location and contains an insulating material which is a polyethylene compound (this compound does not contain PCBs), 9) the correct pole number is T-185, not T-85, 10) as per Construction Overhead the potheads were not removed, and 11) all waste was disposed of at VBSC as hazardous waste.....G. Triolo, #01868. 09/22/03 @ 0945 hrs A. Ip Emp# 71684 of EH&S reports pothead on pole T-185 leaking insulating material (polyethylene compound) on concrete curb in front of 1532 Bay St. 10 to 12 drops on 10 to 12 feet of curb No fire, smoke, sewers, waterways, or wetlands affected. F. Sardone on location to investigate problem. V. Minucci Emp# 16989 reports that actual cleanup size of curb is 10 feet long and 4 inches wide . Repair to pothead can be made now as per V. Minucci 09/22/03 @ 12 30 V. Minucci reports permanent repair to pothead made cleaned 10 ft X 4 inches speedy and citrus cleaner UPDATE 9/22/03 1235 Hrs. As per V. Minucci 1 bag of non-hazardous waste was disposed of at VBSC and the connections to the pothead were tightened which was causing the leak....G. Triolo, #01868."

Remarks: "POLE T-85. LEAK FROM POTHEAD. 1 QUART SPILLED ONTO CONCRETE, GRASS AND PRIVATE PROPERTY. NO PCB INFORMATION. POTHEAD BEING REPAIRED. BEING CLEANED UP. CON EDISON REFERENCE NUMBER 150426."

Material:

Site ID:	213531
Operable Unit ID:	873021
Operable Unit:	01
Material ID:	503781
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

SPILL NUMBER 0306567 (Continued) **S106018316**

Tank Test:

T108 **POLE #185 TRANSFORMER** **NY Spills** **S106383218**
NE **1532 DAY ST** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.446 mi.
2356 ft. **Site 3 of 4 in cluster T**

Relative:
Lower

Actual:
60 ft.

SPILLS:

Facility ID:	0313087
Facility Type:	ER
DER Facility ID:	94001
Site ID:	106804
DEC Region:	2
Spill Date:	2004-02-27
Spill Number/Closed Date:	0313087 / 2004-06-01
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2004-02-27
CID:	406
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-02-27
Spill Record Last Update:	2004-06-01
Spiller Name:	ERT DESK
Spiller Company:	POLE #185 TRANSFORMER
Spiller Address:	1532 DAY ST.
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL e2mis no. 152276: in front of 1532 Bay St an A phase 4kv pothead on pole T-185 is leaking insulating compound. Approximately 50 drops of the compound are spread over an area 8' x 8' on concrete, asphalt, a private vehicle and possibly the grass area between the sidewalk and curb. The troubleman has barricaded the area and is awaiting a supervisor from construction with a crew to make repairs. The material leaking from the pothead is G&W 254 Insulating compound and according to the MSDS it is a polyethylene compound and is non-hazardous. V.Minucci CDOH reports that the vehicle that was impacted by the compound was cleaned using polywaterwater type HP cleaner/degreaser and soft rags. THe vehicle was double washed and rinsed and the customer is satisfied with the cleanup. His crew then proceeded to clean an area approximately 15' x 6' of concrete and

POLE #185 TRANSFORMER (Continued) **S106383218**

asphalt by double washing and rinsing it using citrus cleaner and speedi-dri to absorb the liquid. They also removed an area of grass approximately 2 sq ft that has shown signs of the compound on it. All debris was placed in a doubled plastic bag and taken to the VBSC for disposal as non hazardous waste. The overhead crew also wiped down the pothead with the citrus cleaner and installed a plastic sleeve around the bottom. The debris from this portion of the clean up was also placed in the bag for disposal at the VBSC. The cleanup was completed at 1635 hr. As per V. Minucci the grass that was removed was 2 sq. ft. by 2 deep, the concrete area (sidewalk) was 15'x4', the curb area was 15'x and the asphalt area (street) was 15'x1' and the areas were double washed with citru clean and double rinsed with water. This report will be closed when the pothead has been replaced. As per Construction Overhead the pothead was replaced on 4/7/04."

Remarks: "g&W 254 Insulating compound(dielectric fluid) 50 drops were spilled. The transformer failed it probably got too hot and the goo insulation dripped out. Area has been baracaded and they are waiting for a crew to clean it up. This site has been listed as no hazardous. Effecting land only."

Material:

Site ID:	106804
Operable Unit ID:	880263
Operable Unit:	01
Material ID:	498252
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

U109 **191 BELAIR RD/S.I.** **NY Spills** **S102141067**
North **191 BELAIR ROAD** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.447 mi.
2358 ft. **Site 1 of 2 in cluster U**

Relative:
Lower

Actual:
86 ft.

SPILLS:

Facility ID:	9100917
Facility Type:	ER
DER Facility ID:	86540
Site ID:	97089
DEC Region:	2
Spill Date:	1991-04-23
Spill Number/Closed Date:	9100917 / 1991-04-24
Spill Cause:	Deliberate
Spill Class:	Not reported
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1991-04-23

191 BELAIR RD/S.I. (Continued) **S102141067**

CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Affected Persons
Cleanup Ceased:	1991-04-24
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1991-04-29
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	RICHARD SWEENEY
Spiller Address:	193 OR 195 BELAIR ROAD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE "
Remarks:	"DUMPS OIL ON HER LAWN,PAINT ON HER FENCE,FLY ASH ON LAWN,REFERRED TO ECO'S."

Material:

Site ID:	97089
Operable Unit ID:	954449
Operable Unit:	01
Material ID:	427084
Material Code:	0022
Material Name:	waste oil/used oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

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110 SSE 1/4-1/2 0.447 mi. 2362 ft.

Relative: Lower

Actual: 20 ft.

OCEAN AVE & FATHER CAPADDANO AVE STATEN ISLAND, NY **NY Spills** **S104193641 N/A**

SPILLS:

Facility ID:	9905406
Facility Type:	ER
DER Facility ID:	179734
Site ID:	217082
DEC Region:	2
Spill Date:	1999-08-04
Spill Number/Closed Date:	9905406 / 1999-08-27
Spill Cause:	Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response.

OCEAN AVE & FATHER (Continued) **S104193641**

	Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	O'DOWD
Referred To:	Not reported
Reported to Dept:	1999-08-04
CID:	388
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1999-08-04
Spill Record Last Update:	1999-08-27
Spiller Name:	Not reported
Spiller Company:	BASIC
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	(718) 354-4137
DEC Memo:	""
Remarks:	"caller repports truck parked at above address and has been leaking fluid since yesterday. nrc report #493812"

Material:

Site ID:	217082
Operable Unit ID:	1079845
Operable Unit:	01
Material ID:	301701
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

U111 **191 BELL AIRE ROAD** **NY Spills** **S102663008**
NNW **191 BELL AIRE ROAD** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.450 mi.
2378 ft. **Site 2 of 2 in cluster U**

Relative:
Lower

Actual:
89 ft.

SPILLS:

Facility ID:	9702080
Facility Type:	ER
DER Facility ID:	83828
Site ID:	93503
DEC Region:	2

191 BELL AIRE ROAD (Continued) **S102663008**

Spill Date:	1997-05-18
Spill Number/Closed Date:	9702080 / 2003-02-25
Spill Cause:	Deliberate
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	TOMASELLO
Referred To:	Not reported
Reported to Dept:	1997-05-18
CID:	322
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Federal Government
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1997-05-18
Spill Record Last Update:	2003-02-25
Spiller Name:	Not reported
Spiller Company:	SWEENY
Spiller Address:	193 BELL AIRE ROAD
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	PAULINE PERCOCO
Contact Phone:	(718) 447-5756
DEC Memo:	""
Remarks:	"ONGOING NEIGHBOR DISPUTE - NEIGHBOR DUMPS OIL ON FENCE AND ONTO PROPERTY "

Material:

Site ID:	93503
Operable Unit ID:	1048002
Operable Unit:	01
Material ID:	335015
Material Code:	0022
Material Name:	waste oil/used oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

V112 **NY AVE & SOUTH AVE** **NY LTANKS** **S102672163**
ENE **NY AVE & SOUTH AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.451 mi.
2382 ft. **Site 1 of 5 in cluster V**

Relative:
Lower

Actual:
77 ft.

LTANKS:

Site ID:	295009
Spill Number/Closed Date:	9301446 / 1993-04-30
Spill Date:	1993-04-29
Spill Cause:	Tank Overfill
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Unable/unwilling Responsible Party. Corrective action taken. (ISR)
Cleanup Ceased:	1993-04-30
Cleanup Meets Standard:	True
SWIS:	4301
Investigator:	CAMMISA
Referred To:	Not reported
Reported to Dept:	1993-04-30
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1993-04-30
Spill Record Last Update:	1993-07-20
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	238721
DEC Memo:	""
Remarks:	"SPILL CONTAINED ON PAVEMENT SORBENT APPLIED & PLU"

Material:

Site ID:	295009
Operable Unit ID:	980039
Operable Unit:	01
Material ID:	398627
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

T113 **CON EDISON VEHICLE 50727** **NY Spills** **S111011011**
NE **BAY ST AND WADSWORTH** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.455 mi.
2402 ft. **Site 4 of 4 in cluster T**

Relative:
Lower

Actual:
58 ft.

SPILLS:

Facility ID:	1100302
Facility Type:	ER
DER Facility ID:	402294
Site ID:	447699
DEC Region:	2
Spill Date:	2011-04-09
Spill Number/Closed Date:	1100302 / 2011-06-30
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2011-04-09
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2011-04-09
Spill Record Last Update:	2011-06-30
Spiller Name:	ERT
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	999
Contact Name:	ERT
Contact Phone:	(212) 580-8383
DEC Memo:	"4/11/11-Vought-Primary off hours responder. Spill assigned to DEC Feroze as part of routine minor Con Ed Spill portfolio review and possible closure. Initial EMIS report #225379 added to Cross Reference Field, downloaded into e-docs and deleted from proxy. 6/30/11 - Austin - Hrdraulic hose broke on Con Ed truck, spiling 8 gals. to pavement and grass - Con Ed contained and cleaned up the spill - See documents in eDocs for more info - Spill closed - end"
Remarks:	"7.5 Gallons to asphalt. 0.5 gallons to grass. Clean up is in progress."

Material:

Site ID:	447699
Operable Unit ID:	1197907
Operable Unit:	01
Material ID:	2194180
Material Code:	0010
Material Name:	hydraulic oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	8.00

CON EDISON VEHICLE 50727 (Continued) **S111011011**

Units: Gallons
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

114
NE
1/4-1/2
0.460 mi.
2430 ft.

Relative:
Lower

Actual:
52 ft.

AERIAL POTHEAD DRIPPING, POLE 34857 **NY Spills** **S108982170**
BAY STREET & SCHOOL ROAD **N/A**
STATEN ISLAND, NY

SPILLS:
Facility ID: 0710958
Facility Type: ER
DER Facility ID: 341951
Site ID: 392352
DEC Region: 2
Spill Date: 2008-01-16
Spill Number/Closed Date: 0710958 / 2008-05-12
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: gdbreen
Referred To: Not reported
Reported to Dept: 2008-01-16
CID: 444
Water Affected: Not reported
Spill Source: Commercial/Industrial
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: Not reported
Remediation Phase: 0
Date Entered In Computer: 2008-01-16
Spill Record Last Update: 2008-05-12
Spiller Name: ERTSDESK
Spiller Company: CON EDISON
Spiller Address: BAY STREET & SCHOOL ROAD
Spiller City,St,Zip: STATEN ISLAND, NY
Spiller Company: 999
Contact Name: ERTSDESK
Contact Phone: (212) 580-8383
DEC Memo: "05/12/08 - See eDocs for Con Ed report detailing cleanup and closure. 209500. see eDocs"
Remarks: "2 OUNCES ON STREET LITE CONED# 209500"

Material:
Site ID: 392352
Operable Unit ID: 1149361
Operable Unit: 01
Material ID: 2139886
Material Code: 0541A

AERIAL POTHEAD DRIPPING, POLE 34857 (Continued) **S108982170**

Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

V115 **MANHOLE 6502** **NY Spills** **S104789680**
NE **SOUTH AVENUE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.461 mi.
2433 ft. **Site 2 of 5 in cluster V**

Relative:
Lower

Actual:
73 ft.

SPILLS:

Facility ID:	0007192
Facility Type:	ER
DER Facility ID:	141014
Site ID:	215972
DEC Region:	2
Spill Date:	2000-09-19
Spill Number/Closed Date:	0007192 / 2001-11-27
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2000-09-19
CID:	382
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-09-19
Spill Record Last Update:	2001-11-27
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	JIMMY FOX
Contact Phone:	(212) 580-6763
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL Con Ed e2mis #133476 Notes: 9-19-00 2gal unknown liquid substance discovered in manhole 6502. Total of 400gal water and unknown substance was reported of shich 398gal is water and 2gal is an unknown brown substance. There is PILC cable in manhole but the

MANHOLE 6502 (Continued) **S104789680**

substance appears to be of a 3rd party spill. No odor detected. 10-4-00 PCB count <1ppm, flashpoint 143 deg F, and oil ID indicates presence of light fuel oil. 11-16-00 Cleanup completed by S&D contractors. 100gal lead contained sludge and 1300gal non-hazardous liquid to clean water. S&D removed contents. As per Ann Ip, 100gal lead contaminated sludge was shipped as hazardous waste to S&W and 1300gal non-hazardous liquid was shipped to Clean Water for disposal."
Not reported

Remarks: "OIL ON 398 GALS OF WATER CONTAINED IN MANHOLE. CLEAN UP PENDING RESULTS. CON ED 133-476"

Material:

Site ID:	215972
Operable Unit ID:	828063
Operable Unit:	01
Material ID:	548286
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

V116 **MARINERS HARBOR** **NY Spills** **S104952195**
NE **SOUTH AVENUE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.461 mi.
2433 ft. **Site 3 of 5 in cluster V**

Relative:
Lower

Actual:
73 ft.

SPILLS:

Facility ID:	0011308
Facility Type:	ER
DER Facility ID:	141014
Site ID:	215973
DEC Region:	2
Spill Date:	2001-01-15
Spill Number/Closed Date:	0011308 / 2003-09-15
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	2001-01-17
CID:	257
Water Affected:	KILLVAN KULL
Spill Source:	Vessel
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False

MARINERS HARBOR (Continued) **S104952195**

UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2001-01-17
Spill Record Last Update:	2003-09-15
Spiller Name:	Not reported
Spiller Company:	CLEAN WATER
Spiller Address:	3249 RICHMOND TR
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	BOB SALERNO
Contact Phone:	(718) 981-4600 12
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN 9/15/03 - AUSTIN - SURF. WATER SPILL - CLOSED INDATABSE - ORIG. ASSIGNED TO ROMMEL - END"
Remarks:	"caller noticed spill was reported back when it happened - it has been all cleaned up "

Material:

Site ID:	215973
Operable Unit ID:	832704
Operable Unit:	01
Material ID:	541628
Material Code:	0013
Material Name:	lube oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	60.00
Units:	Gallons
Recovered:	60.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

V117 **GOETHALS RD NORTH AND SOUTH AVENUE** **NY Spills** **S104510518**
NE **STATEN ISLAND, NY** **N/A**
1/4-1/2
0.461 mi.
2433 ft. **Site 4 of 5 in cluster V**

Relative:
Lower

Actual:
73 ft.

SPILLS:

Facility ID:	0401284
Facility Type:	ER
DER Facility ID:	141014
Site ID:	215974
DEC Region:	2
Spill Date:	2004-05-06
Spill Number/Closed Date:	0401284 / 2005-07-01
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2004-05-06
CID:	403
Water Affected:	Not reported

GOETHALS RD NORTH AND (Continued) **S104510518**

Spill Source:	Unknown
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-05-06
Spill Record Last Update:	2005-07-01
Spiller Name:	ERT DESK
Spiller Company:	Not reported
Spiller Address:	SOUTH AVE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL 5/6/04: Sent e-mail to Permits and to Marine Resources to make them aware of potential wetlands issues. (JHO) ~~~~~~~~~~~~~~~~ e2mis no. 153229: SIEH&S reported to the control center that 15' s/o tower M-11 on the RRROW 300' s/o South Ave 20' e/o the most easterly track in a wetlands adjacent area an insulating medium has leaked from an aerial joint into the soil. The affected area of soil is approximately 3'x4' and there is a residue of gooey material on the joint and messenger cable. The actual substance is unknown and the responding crews with treat the substance as 50-499 ppm PCBs. amount of liquid that leaked from the joint is estimated to be approximately 8 ounces. As per the Andrea Schmitz it should be noted that this location is in a permitted area. 5/6/04 AT 1600 hrs K.Toomey reports that the cleanup has been completed. Crews removed an area of soil 7'x7'x4 . The joint, associated cable and messenger, a length of approximately 5' was double washed and rinsed with citra clean and the joint was then diapered and wrapped with plastic until permanent repairs can be made. A total of three 55 gallon drums of waste were generated and will be transported to the VBSC under the one trip rule and will be placed in the hazardous waste holding area until sample results are received from the chem lab.. Crews also used dead native plants from the sight as mulch and put them into the excavation to prevent erosion.....GG 27365 UPDATE 5/11/04 0720 Hrs. The finder was K. Toomey, employee #84048, Sr. Specialist, Staten Island EH&S. No private property was affected. The correct First Reported time is 11:30 (not 11:33 as indicated above in the Detail Description). Lab #04-03488-001 dated 5/6/04 indicates <1 ppm PCB. The 3 drums of waste was taken to VBSC and disposed of as non-hazardous waste. This report will be closed when aerial joint has been permanently repaired....G. Triolo, #01868. UPDATE 1/13/05 0645 Hrs. As per Construction Overhead the aerial cable was permanently replaced on 7/16/04. Report submitted for DEC closure approval....G. Triolo, #01868"
Remarks:	"the spill hapened at south ave on railroad right of way,next to tower m11.about 8 ounces of cable oil spilled. leaked onto soil.spill hasnt been cleaned up yet. treat it as PCB "

Material:

Site ID:	215974
Operable Unit ID:	885347
Operable Unit:	01
Material ID:	492497

GOETHALS RD NORTH AND (Continued) **S104510518**

Material Code:	0020B
Material Name:	cable oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9913732
Facility Type:	ER
DER Facility ID:	141014
Site ID:	215975
DEC Region:	2
Spill Date:	2000-03-06
Spill Number/Closed Date:	9913732 / 2001-05-21
Spill Cause:	Deliberate
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Unknown Responsible Party. Corrective action taken. (ISR)
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	2000-03-06
CID:	270
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-03-06
Spill Record Last Update:	2001-05-21
Spiller Name:	ROBERT LAMBERT
Spiller Company:	ROBERT LAMBERT
Spiller Address:	118 ROBINSON AVENUE
Spiller City,St,Zip:	STATEN ISLAND, NY 10308-
Spiller Company:	001
Contact Name:	OFF APEN
Contact Phone:	(718) 876-8478
DEC Memo:	""
Remarks:	"Contaminated soil was illegally dumped by a man operating a stolen dump truck."

Material:

Site ID:	215975
Operable Unit ID:	1092166
Operable Unit:	01
Material ID:	563427
Material Code:	0009
Material Name:	gasoline

GOETHALS RD NORTH AND (Continued) **S104510518**

Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

V118 **RAILROAD TRACKS** **NY Spills** **S103273927**
NE **SOUTH AVENUE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.461 mi.
2433 ft. **Site 5 of 5 in cluster V**

Relative:
Lower

Actual:
73 ft.

SPILLS:

Facility ID:	9801217
Facility Type:	ER
DER Facility ID:	141014
Site ID:	167365
DEC Region:	2
Spill Date:	1998-04-28
Spill Number/Closed Date:	9801217 / 1998-05-15
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	1998-04-28
CID:	266
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1998-04-28
Spill Record Last Update:	2003-03-24
Spiller Name:	STEVE ROMERO
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	NEW YORK, NY 10003
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL Con Ed e2mis #116423: 4/28/98....1345 hrs....OH Const. Supervisor A.Muscarella reported that vehicle # 60382 broke a hydraulic hose and leaked approx. 3/4 gallon of hydraulic fluid onto soil along Staten Island Railroad right-of-way near South Ave. OH Const. employees D. See and D.Dawkins are cleaning spill up by

RAILROAD TRACKS (Continued) **S103273927**

shoveling out affected soil and using absorbent pads and speedy dry. Cleanup completed at 1445 hrs. by OH Const employees D.See and D.Dawkins. A.Muscarella was the Cleanup Supervisor. Affected soil was removed and transported to 4400 Victory Blvd. - S.I. Waste Storage site."

Remarks: "VEHICLE #60382. BROKEN HYDRAULIC LINE. ONTO SOIL. CLEANED UP."

Material:

Site ID:	167365
Operable Unit ID:	1061906
Operable Unit:	01
Material ID:	323155
Material Code:	0010
Material Name:	hydraulic oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

119
SSW
1/4-1/2
0.461 mi.
2433 ft.

CONSTRUCTION SITE
106/107 LINWOOD AVE
STATEN ISLAND, NY

NY Spills **S102238557**
N/A

Relative:
Lower

Actual:
17 ft.

SPILLS:

Facility ID:	9512000
Facility Type:	ER
DER Facility ID:	94164
Site ID:	107045
DEC Region:	2
Spill Date:	1995-12-22
Spill Number/Closed Date:	9512000 / 1995-12-22
Spill Cause:	Deliberate
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SMMARTIN
Referred To:	Not reported
Reported to Dept:	1995-12-22
CID:	323
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-12-22
Spill Record Last Update:	1996-01-29

CONSTRUCTION SITE (Continued) **S102238557**

Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	FDNY DISP 259
Contact Phone:	(718) 494-4296
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MARTINKAT "
Remarks:	"CONSTRUCTION COMPANY IS DUMPING PAINT AND PAINT THINNER IN THE CONSYTRUCTION AREA. MATERIAL IS IN THE CATCH BASIN AS WELL."

Material:

Site ID:	107045
Operable Unit ID:	1022680
Operable Unit:	01
Material ID:	359321
Material Code:	0055A
Material Name:	paint
Case No.:	Not reported
Material FA:	Other
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported
Site ID:	107045
Operable Unit ID:	1022680
Operable Unit:	01
Material ID:	359322
Material Code:	0056A
Material Name:	paint thinners
Case No.:	Not reported
Material FA:	Other
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W120 **FORT WADSWORTH** **NY Spills** **S102560362**
East **IN FRONT OF BLDG 437** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 1 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9613886
Facility Type:	ER
DER Facility ID:	228232
Site ID:	281050
DEC Region:	2
Spill Date:	1997-02-26
Spill Number/Closed Date:	9613886 / 1997-10-16
Spill Cause:	Deliberate

FORT WADSWORTH (Continued) **S102560362**

Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	WESTERLIND
Referred To:	Not reported
Reported to Dept:	1997-02-26
CID:	351
Water Affected:	Not reported
Spill Source:	Passenger Vehicle
Spill Notifier:	Citizen
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1997-02-26
Spill Record Last Update:	1997-10-21
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	WILLIAM SANKER
Contact Phone:	(718) 815-1858
DEC Memo:	""
Remarks:	"AN OLD CAR BATTERY WAS PLACED IN FRONT OF THE BUILDING - THE BATTERY DOES APPEAR TO BE LEAKING"

Material:

Site ID:	281050
Operable Unit ID:	1045301
Operable Unit:	01
Material ID:	338994
Material Code:	0044A
Material Name:	battery acid
Case No.:	Not reported
Material FA:	Other
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W121 **FT WADSWORTH/US NAVY HQ** **NY Spills** **S102143028**
East **FT WADSWORTH/US NAVY HQ** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 2 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9203479
Facility Type:	ER
DER Facility ID:	140513
Site ID:	166765

FT WADSWORTH/US NAVY HQ (Continued) **S102143028**

DEC Region:	2
Spill Date:	1992-06-23
Spill Number/Closed Date:	9203479 / 1992-06-23
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1992-06-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Affected Persons
Cleanup Ceased:	1992-06-23
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-06-29
Spill Record Last Update:	2003-01-15
Spiller Name:	Not reported
Spiller Company:	MANSHUL CONSTRUCTION CO
Spiller Address:	CROWN CRANE LTD
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG "
Remarks:	"CONTAMINATED SOIL EXCAVATED, PICKED UP, DRUMMED & DISPOSED."

Material:

Site ID:	166765
Operable Unit ID:	967285
Operable Unit:	01
Material ID:	411273
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	5.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W122 **BAY ST/FORT WADSWORTH** **NY Spills** **S102142920**
East **BAY ST/FORT WADSWORTH** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 3 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9202280
Facility Type:	ER
DER Facility ID:	195711
Site ID:	237616
DEC Region:	2
Spill Date:	1992-05-22
Spill Number/Closed Date:	9202280 / 1992-05-26
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1992-05-22
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Tank Truck
Spill Notifier:	Affected Persons
Cleanup Ceased:	1992-05-26
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-05-28
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	ARROCHAR FUEL OIL
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG "
Remarks:	"NYCDEP NOTIFIED; NYCFD RESPONDED, SPEEDY DRY APPLIED, PICKED UP & DISPOSED."

Material:

Site ID:	237616
Operable Unit ID:	969546
Operable Unit:	01
Material ID:	413537
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	20.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

BAY ST/FORT WADSWORTH (Continued) **S102142920**

Tank Test:

W123 **FORT WADSWORTH-TOMPKINS** **NY Spills** **S102148425**
East **FORT WADSWORTH-TOMPKINS** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 4 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9404301
Facility Type:	ER
DER Facility ID:	132965
Site ID:	157216
DEC Region:	2
Spill Date:	1994-06-28
Spill Number/Closed Date:	9404301 / 1994-06-28
Spill Cause:	Unknown
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. No DEC Response. No corrective action required.
SWIS:	4301
Investigator:	IXMUNTEA
Referred To:	Not reported
Reported to Dept:	1994-06-28
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Other
Cleanup Ceased:	1994-06-28
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-09-22
Spill Record Last Update:	2000-10-17
Spiller Name:	Not reported
Spiller Company:	FORT WADSWORTH BLDG #137
Spiller Address:	TOMPKINS AVENUE
Spiller City,St,Zip:	STATEN ISLAND, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MUNTEANU 10/10/95: This is additional information about material spilled from the translation of the old spill file: 14 TANK REMOVALS."
	Not reported
Remarks:	"WILL PUT OUT UNDERGROUND STORAGE TANKS NEXT- WAITING FOR RESULTS FROM LAB. WILL CONTAIN EVERYTHING & DISPOSE AFTER TEST RESULTS."

Material:

Site ID:	157216
Operable Unit ID:	1001378
Operable Unit:	01
Material ID:	380919
Material Code:	0001A
Material Name:	#2 fuel oil

FORT WADSWORTH-TOMPKINS (Continued) **S102148425**

Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W124 **NAVAL STA.-FT WADSWORTH** **NY Spills** **S103560566**
East **NAVAL STATION** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 5 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9405075
Facility Type:	ER
DER Facility ID:	63664
Site ID:	66508
DEC Region:	2
Spill Date:	1994-07-13
Spill Number/Closed Date:	9405075 / 1995-10-03
Spill Cause:	Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	O'DOWD
Referred To:	Not reported
Reported to Dept:	1994-07-13
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Federal Government
Cleanup Ceased:	1995-10-03
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-10-06
Spill Record Last Update:	1995-10-03
Spiller Name:	Not reported
Spiller Company:	NAVAL STATION
Spiller Address:	FORT WADSWORTH
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"EXCAVATE & DISPOSE"

Material:

Site ID:	66508
Operable Unit ID:	999339
Operable Unit:	01

NAVAL STA.-FT WADSWORTH (Continued) **S103560566**

Material ID:	381678
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W125 **FT. TOMPKINS - BLDG 137** **NY Spills** **S102240367**
East **FT WADSWORTH** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 6 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9604322
Facility Type:	ER
DER Facility ID:	188612
Site ID:	228761
DEC Region:	2
Spill Date:	1996-06-14
Spill Number/Closed Date:	9604322 / 2003-02-28
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	TOMASELLO
Referred To:	Not reported
Reported to Dept:	1996-07-01
CID:	275
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Federal Government
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1996-07-01
Spill Record Last Update:	2003-02-28
Spiller Name:	Not reported
Spiller Company:	UNKNOWN
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	EDWARD LORENZINI
Contact Phone:	(718) 448-5230
DEC Memo:	""
Remarks:	"contracto insatlling lights - was doing const. work and contaminated soil was found - caller spoke to randy austin in long island city

FT. TOMPKINS - BLDG 137 (Continued) **S102240367**

office - "

Material:

Site ID:	228761
Operable Unit ID:	1031976
Operable Unit:	01
Material ID:	350616
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W126 **FORT WADSWORTH** **NY Spills** **S102239771**
East **STATEN ISLAND** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 7 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9601054
Facility Type:	ER
DER Facility ID:	145341
Site ID:	172703
DEC Region:	2
Spill Date:	1996-04-22
Spill Number/Closed Date:	9601054 / 1996-04-22
Spill Cause:	Abandoned Drums
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1996-04-22
CID:	297
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Federal Government
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1996-04-22
Spill Record Last Update:	1996-05-06
Spiller Name:	UNKNOWN
Spiller Company:	Unknown
Spiller Address:	UNKNOWN
Spiller City,St,Zip:	UNKNOWN, NY
Spiller Company:	999

FORT WADSWORTH (Continued) **S102239771**

Contact Name:	PO RASENBERGER
Contact Phone:	(212) 668-7920
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG CALLED & CONFIRMED CLEAN-UP BY US COAST GUARD."
Remarks:	"a 55gal drum was found with some type of oily substance in it - drum has been federalized and will be disposed of properly"

Material:

Site ID:	172703
Operable Unit ID:	1032614
Operable Unit:	01
Material ID:	350879
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	55.00
Units:	Gallons
Recovered:	55.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W127 **FT WADSWORTH NAVAL BASE** **NY LTANKS** **S106703446**
East **FT WADSWORTH NAVAL BASE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 8 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

LTANKS:

Site ID:	113741
Spill Number/Closed Date:	9003865 / 1990-07-06
Spill Date:	1990-07-06
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Not reported
Cleanup Ceased:	1990-07-06
Cleanup Meets Standard:	True
SWIS:	4301
Investigator:	TOMASELLO
Referred To:	Not reported
Reported to Dept:	1990-07-06
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Federal Government
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1990-07-24
Spill Record Last Update:	2003-01-15
Spiller Name:	Not reported
Spiller Company:	FT WADSWORTH NAVAL BASE
Spiller Address:	Not reported
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller County:	001

FT WADSWORTH NAVAL BASE (Continued) **S106703446**

Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	99230
DEC Memo:	""
Remarks:	"TANK TEST FAILURE TRYING TO SEAL WITH METAL PUTTY, DEC GAVE LIST OF CONTRACTORS TO PUMP OUT TANK."

Material:

Site ID:	113741
Operable Unit ID:	944057
Operable Unit:	01
Material ID:	570640
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Site ID:	113741
Spill Tank Test:	1537274
Tank Number:	Not reported
Tank Size:	0
Test Method:	00
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified:	Not reported
Test Method:	Unknown

W128 **NAVY PIER** **NY Spills** **S102142907**
East **NAVY PIER** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 9 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9202117
Facility Type:	ER
DER Facility ID:	96122
Site ID:	109555
DEC Region:	2
Spill Date:	1992-05-20
Spill Number/Closed Date:	9202117 / 1992-05-20
Spill Cause:	Unknown
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE

NAVY PIER (Continued) **S102142907**

Referred To:	Not reported
Reported to Dept:	1992-05-20
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Federal Government
Cleanup Ceased:	1992-05-20
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-05-27
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE "
Remarks:	"MPC ON SCENE TO CLEAN UP."

Material:

Site ID:	109555
Operable Unit ID:	966202
Operable Unit:	01
Material ID:	413391
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	100.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W129 **FT WADSWORTH NAVAL STATIO** **NY Spills** **S102143119**
East **FT WADSWORTH/BAY ST** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.463 mi.
2442 ft. **Site 10 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	9204721
Facility Type:	ER
DER Facility ID:	196843
Site ID:	239326
DEC Region:	2
Spill Date:	1992-07-24
Spill Number/Closed Date:	9204721 / 1995-03-30
Spill Cause:	Human Error

FT WADSWORTH NAVAL STATIO (Continued) **S102143119**

Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1992-07-24
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Federal Government
Cleanup Ceased:	1995-03-30
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-07-28
Spill Record Last Update:	2003-01-15
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG "
Remarks:	"CONTRACTOR BROKE OLD GAS MAIN. BKLYN UNION GAS SHUT GAS LINE."

Material:

Site ID:	239326
Operable Unit ID:	972234
Operable Unit:	01
Material ID:	408978
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

W130 **FORT WADSWORTH-POLE#168/S** **NY Spills** **S102144677**
East **FT.WADSWAORTH/PL#168/S.RD** **N/A**
1/4-1/2 **NEW YORK CITY, NY**
0.463 mi.
2442 ft. **Site 11 of 12 in cluster W**

Relative:
Lower

Actual:
95 ft.

SPILLS:

Facility ID:	8703260
Facility Type:	ER
DER Facility ID:	133809
Site ID:	158315

FORT WADSWORTH-POLE#168/S (Continued) **S102144677**

DEC Region:	2
Spill Date:	1987-07-21
Spill Number/Closed Date:	8703260 / 1987-07-22
Spill Cause:	Equipment Failure
Spill Class:	Not reported
SWIS:	4301
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1987-07-21
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Responsible Party
Cleanup Ceased:	1987-07-22
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1987-07-27
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	DEPARTMENT OF THE ARMY
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was 10/10/95: This is additional information about material spilled from the translation of the old spill file: PCB TRANSFORMER OIL."
Remarks:	"GETTING HAZARDOUS WASTE CONTRACTOR TO CLEAN UP. AREA HAS BEEN CONTAINED AND ISOLATED."

Material:

Site ID:	158315
Operable Unit ID:	909787
Operable Unit:	01
Material ID:	469515
Material Code:	0017A
Material Name:	PCB oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	10.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

131
ESE
1/4-1/2
0.463 mi.
2445 ft.

HOUSING AREA COASTGUARD
USS MISSOURI LN/TENN AVE
FORT WADSWORTH, NY

NY Spills **S102402165**
N/A

Relative:
Lower

Actual:
78 ft.

SPILLS:

Facility ID:	9608850
Facility Type:	ER
DER Facility ID:	145768
Site ID:	173267
DEC Region:	2
Spill Date:	1996-10-16
Spill Number/Closed Date:	9608850 / 2004-02-02
Spill Cause:	Deliberate
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Unable/unwilling Responsible Party. Corrective action taken. (ISR)
SWIS:	4301
Investigator:	RWAUSTIN
Referred To:	Not reported
Reported to Dept:	1996-10-16
CID:	252
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Federal Government
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1996-10-16
Spill Record Last Update:	2004-02-02
Spiller Name:	UNKNOWN
Spiller Company:	PACIFIC MOVING & STORAGE
Spiller Address:	UNKNOWN
Spiller City,St,Zip:	UNKNOWN, ZZ
Spiller Company:	001
Contact Name:	KEVIN HENSON
Contact Phone:	(212) 668-7920
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN 2/2/04 - AUSTIN - SURF. SPILL AT FED. FACILITY - NFI - CLOSED - ORIG. ASSIGNED TO ENGELHARDT - END"
Remarks:	"intentional discharge of gasoline into storm sewer-us coast guard is req assistance in this matter-still under investigation req call back asap**********"

Material:

Site ID:	173267
Operable Unit ID:	1040061
Operable Unit:	01
Material ID:	344585
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported

HOUSING AREA COASTGUARD (Continued) **S102402165**

Oxygenate: Not reported

Tank Test:

W132 **FORT WADSWORTH** **NY Spills** **S103827899**
East **210 NEW YORK AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.466 mi.
2461 ft. **Site 12 of 12 in cluster W**

Relative:
Lower

Actual:
93 ft.

SPILLS:

Facility ID:	0006103
Facility Type:	ER
DER Facility ID:	107182
Site ID:	123672
DEC Region:	2
Spill Date:	2000-08-23
Spill Number/Closed Date:	0006103 / 2000-08-25
Spill Cause:	Traffic Accident
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	2000-08-23
CID:	246
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Federal Government
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-08-23
Spill Record Last Update:	2000-12-28
Spiller Name:	JOSEPHINE BROWN
Spiller Company:	NYCT
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE ACCORDING TO PARK RANGER, OIL STAIN STARTS IN ARMY RESERVE PARKING LOT. IT APPEARS THAT A RESERVE VEHICLE HAD A LEAKING OIL PAN WHEN IT LEFT THE LOT, LEAVING A STAIN IN THE STREET. NO PUDDLES OF OIL, ONLY A STAIN. SANITATION RESPONDED AND SANDED. 8/24/00 VISITED SITE. MET EDWARD LORENZINI (NATIONAL PARK SERVICE). HE TOLD ME THAT THE SITE MANAGER (MARTY O'TOOLE 718-354-4576) GOT ON A NYCT BUS AT OR AROUND 1730 HRS ON 8/22/00. THIS BUSES LEFT FORT WADSWORTH HEADING EAST ON BAY STREET. SEVERAL BLOCKS DOWN THE ROAD, THE BUS BROKE DOWN. MR. O'TOOLE NOTICED A PUDDLE OF OIL UNDER THE BUS. ON 8/23/00, THE PARK POLICE FOLLOWED THE STAIN AND IT LEAD TO THE SPOT THAT THE BUS BROKE DOWN. ON 8/24/00, NYCT WAS NOTIFIED THAT ONE OF THEIR BUSES HAD

FORT WADSWORTH (Continued) **S103827899**

CAUSED THIS SPILL. NYCT VERIFIED THE FACT AND CLEANED UP THE SAND AND OIL ON 8/25/00."

Remarks: "CALLER STATES OIL 5 INCH WIDE ON ROADWAY AND 2000 FEET LONG ON PARK PROPERTY. FIRE DEPT RESPONDED BUT TOOK NO ACTION SAYING THE SPILL WAS TOO LARGE"

Material:

Site ID:	123672
Operable Unit ID:	828919
Operable Unit:	01
Material ID:	547233
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9813498
Facility Type:	ER
DER Facility ID:	245459
Site ID:	303810
DEC Region:	2
Spill Date:	1999-02-04
Spill Number/Closed Date:	9813498 / 2012-05-04
Spill Cause:	Other
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	VXBREVDO
Referred To:	DREDGING PROJECT
Reported to Dept:	1999-02-04
CID:	205
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1999-02-04
Spill Record Last Update:	2012-05-04
Spiller Name:	KEN HANAKI
Spiller Company:	FORT WADSWORTH
Spiller Address:	210 NEW YORK AVENUE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	(908) 757-9700

FORT WADSWORTH (Continued) **S103827899**

DEC Memo: "04/12/04 TRANSFERRED FROM TIBBE TO FOLEY. 3/22/06 Transferred from Foley to Tang.(KMF) 05/04/2012 - Brevdo - The Department does not have any documents, reports, analytical data or any other information which would confirm presence of contamination at this site. Furthermore, the fact of spill occurence is neither established nor demonstrated and remains an allegation. Given the lack of any information which would confirm occurence of petroleum spill at this property, it is appropriate to close this spill case. Spill is closed effective May 4, 2012. Brevdo "

Remarks: "caller pulling old tank, found contamination. gas station on fort property."

Material:

Site ID:	303810
Operable Unit ID:	1073937
Operable Unit:	01
Material ID:	310215
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

133
NNW
1/4-1/2
0.469 mi.
2476 ft.

Relative:
Lower

Actual:
106 ft.

216 ST JOHNS AVENUE
216 ST JOHNS AVENUE
STATEN ISLAND, NY

NY Spills **S102150219**
N/A

SPILLS:

Facility ID:	9502586
Facility Type:	ER
DER Facility ID:	236669
Site ID:	292314
DEC Region:	2
Spill Date:	1995-05-31
Spill Number/Closed Date:	9502586 / 1995-05-31
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1995-05-31
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Responsible Party
Cleanup Ceased:	1995-05-31
Cleanup Meets Std:	True
Last Inspection:	Not reported

216 ST JOHNS AVENUE (Continued) **S102150219**

Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1995-06-07
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	SAME
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG "
Remarks:	"OIL FILTER CANISTER HAD LEAK - CANISTER IS BEING REPLACED NOW."

Material:

Site ID:	292314
Operable Unit ID:	1016996
Operable Unit:	01
Material ID:	367642
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

134
SSE
1/4-1/2
0.469 mi.
2478 ft.

Relative:
Lower

Actual:
8 ft.

KITCHEN DRAID / TRAP **NY Spills** **S111318167**
44 SEASIDE LANE **N/A**
STATAN ISLAND, NY

SPILLS:

Facility ID:	1109258
Facility Type:	ER
DER Facility ID:	411504
Site ID:	457017
DEC Region:	2
Spill Date:	2011-10-21
Spill Number/Closed Date:	1109258 / 2011-10-24
Spill Cause:	Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SFRAHMAN
Referred To:	Not reported
Reported to Dept:	2011-10-21
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling

KITCHEN DRAID / TRAP (Continued) **S111318167**

Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2011-10-21
Spill Record Last Update:	2011-10-24
Spiller Name:	ANGELA YAGUDAYEVA
Spiller Company:	UNKNOWN
Spiller Address:	44 SEASIDE LANE
Spiller City,St,Zip:	STATAN ISLAND, NY
Spiller Company:	999
Contact Name:	ANGELA YAGUDAYEVA
Contact Phone:	Not reported
DEC Memo:	"Spoke with Angela. She told me that she recovered the mercury balls and put into a plastic bag for disposal.She wanted DEC to investigate adjacent houses for potential mercury spill. I told her that she has to contact a private contractor to do that.Case closed.(sr)"
Remarks:	"3-4 -balls of mercury found in the trap of a sink under the kitchen sink"

Material:

Site ID:	457017
Operable Unit ID:	1207153
Operable Unit:	01
Material ID:	2204357
Material Code:	0031A
Material Name:	mercury
Case No.:	07439976
Material FA:	Hazardous Material
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

X135 **AERIAL CABLE** **NY Spills** **S106468833**
NNE **24 FINGERBOARD RD** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.471 mi.
2486 ft. **Site 1 of 2 in cluster X**

Relative:
Lower

Actual:
39 ft.

SPILLS:

Facility ID:	0401346
Facility Type:	ER
DER Facility ID:	58306
Site ID:	59574
DEC Region:	2
Spill Date:	2004-05-07
Spill Number/Closed Date:	0401346 / 2005-07-01
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

AERIAL CABLE (Continued) **S106468833**

SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2004-05-07
CID:	406
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-05-07
Spill Record Last Update:	2005-07-01
Spiller Name:	ERT DESK
Spiller Company:	CON EDISON
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	MANHATTAN, NY 10003
Spiller Company:	999
Contact Name:	ERT DESK
Contact Phone:	(212) 580-8383
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL e2mis no. 153250: Control Ops field supervisor reports that in front of 24 Fingerboard Rd approximately 30' w/o of pole 35113 oil is leaking from an aerial joint on a abandoned section of aerial cable. He estimates that approximately 1 pint of oil has leaked onto an area 15'x15' of concrete and asphalt and also onto a 1989 Ford Tauraus. The crew on site is treating the oil as 50-499 ppm pcbs for the cleanup. A sample has been taken and will sent to the chem lab for analysis. The joint will be diapered and bagged and CDOH will be notified to remove the section. 5/7/2004 R.Moloughney reports that at 17:55 Hrs. cleanup was complete. He reports that an area of 15 ft. by 15 ft was affected and that he cleaned an area of 20 ft. by 20 ft. He double washed the area with orange wash and double rinsed with water He generated 3 bags of waste being treated as 50-449 ppm pcb including diapers and speedy dry and brought the waste to Victory Blvd. service center. The courier was called at 17:30 to pick up sample of oil from the cable to be brought to Astoria for test. The vehicle was also double washed with orange wash and double rinsed with water. A waste tracking form was filled out and the waste was put in a 55 gallon drum for PCB waste in Victory Blvd. Pending results from the Astoria Lab 5/8/04 Results of Analysis Lab Sequence 04-03510-001. Chain of custody # AA07246. Less than 1.0 ppm. UPDATE 5/10/04 1105 Hrs. The finder R. Moloughney, employee #98618, Operating Supervisor, Control Operations. The name of the cleaner was Citri Clean (not orange wash as indicated above). The 3 bags of waste was disposed of as hazardous waste. The joint was bagged and this report will be closed when aerial cable has been removed.....G. Triolo, #01868. UPDATE 3/22/05 0800 Hrs. As per Construction Overhead (V. Minucci, Foreman) all cable was removed on 3/21/05 and disposed of at VBSC. This report is being submitted to the DEC for approval...G. Triolo, #01868."
Remarks:	"One Pint of material spilled on land when airial cable experienced a small leak. Clean up is in progress."

AERIAL CABLE (Continued) **S106468833**

Material:
Site ID: 59574
Operable Unit ID: 883185
Operable Unit: 01
Material ID: 492556
Material Code: 0020B
Material Name: cable oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: Pounds
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

Y136 **35 JEROME AVENUE** **NY Spills** **S102149655**
WSW **35 JEROME AVENUE** **N/A**
1/4-1/2 **SOUTH BEACH, NY**
0.478 mi.
2522 ft. **Site 1 of 2 in cluster Y**

Relative:
Lower

Actual:
37 ft.

SPILLS:
Facility ID: 9415426
Facility Type: ER
DER Facility ID: 155162
Site ID: 185529
DEC Region: 2
Spill Date: 1994-11-01
Spill Number/Closed Date: 9415426 / 1995-05-30
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: TOMASELLO
Referred To: Not reported
Reported to Dept: 1995-02-24
CID: Not reported
Water Affected: Not reported
Spill Source: Private Dwelling
Spill Notifier: Citizen
Cleanup Ceased: 1995-05-30
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1995-04-06
Spill Record Last Update: 1995-05-30
Spiller Name: Not reported
Spiller Company: UNKNOWN
Spiller Address: Not reported
Spiller City,St,Zip: ZZ
Spiller Company: 001
Contact Name: Not reported

35 JEROME AVENUE (Continued) **S102149655**

Contact Phone: Not reported
DEC Memo: ""
Remarks: "APPARANT LINE FAILURE, REQUIRE CONTACT FROM NYSDEC.WAS TIBBE SPILL. TOMASELLO RESPONDED. REMEDIATION PERFORMED BY SIPCO. SEE FIELD OFFICE FILE. CLOSED 5/30/95"

Material:
Site ID: 185529
Operable Unit ID: 1008880
Operable Unit: 01
Material ID: 370601
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: -1.00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:

Y137 **35 JEROME AVE** **NY Spills** **S102149622**
WSW **35 JEROME AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.478 mi.
2525 ft. **Site 2 of 2 in cluster Y**

Relative:
Lower

Actual:
37 ft.

SPILLS:
Facility ID: 9415208
Facility Type: ER
DER Facility ID: 116908
Site ID: 136624
DEC Region: 2
Spill Date: 1995-02-20
Spill Number/Closed Date: 9415208 / 2003-02-10
Spill Cause: Equipment Failure
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS: 4301
Investigator: TOMASELLO
Referred To: Not reported
Reported to Dept: 1995-02-20
CID: Not reported
Water Affected: Not reported
Spill Source: Private Dwelling
Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 1995-03-27
Spill Record Last Update: 2003-02-10
Spiller Name: Not reported

35 JEROME AVE (Continued) **S102149622**

Spiller Company:	MR FREO (PVT RES)
Spiller Address:	SAME
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"HOSE HAD A PIN HOLE LEAK. CAUSING SPILL"

Material:

Site ID:	136624
Operable Unit ID:	1012548
Operable Unit:	01
Material ID:	370390
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

X138 **SPILL NUMBER 9913077** **NY Spills** **S104652623**
NNE **10 FINGERBOARD RD** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.484 mi.
2553 ft. **Site 2 of 2 in cluster X**

Relative:
Lower

Actual:
38 ft.

SPILLS:

Facility ID:	0001688
Facility Type:	ER
DER Facility ID:	165970
Site ID:	199408
DEC Region:	2
Spill Date:	2000-05-09
Spill Number/Closed Date:	0001688 / 2004-03-24
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2000-05-09
CID:	270
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Affected Persons
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0

SPILL NUMBER 9913077 (Continued) **S104652623**

Date Entered In Computer:	2000-05-09
Spill Record Last Update:	2004-03-24
Spiller Name:	CALLER
Spiller Company:	CON ED
Spiller Address:	4 IRVING PLACE
Spiller City,St,Zip:	MANHATTAN, NY
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL e2mis no. 131330: approximately 50 drops of oil on the sidewalk/parking pad and 100 drops of oil in the street from a leaking aerial joint on feeder 33R13 at pole 10947. He estimates that the approximate amout of liquid lost from the cable is 2 ounces. None of the oil has entered any sewers or waterways. The spill is being treated as a 50-499 ppm PCB as a precaution. The troubleman on location reports that the source of the oil is an existing plastic bag over the cable and joint. 5/10/00 oil has been cleaned up using speedi-dri The affected areas have been double washed and rinsed using Citrus cleaner. The troubleman wrapped the affected joint/cable with diapers, plastic bags and tape to prevent any further leakage. As per Construction Underground joint/cable was repaired on 5/25/00."
Remarks:	"ariel cable leak . clean up in progress 50-499 ppm "

Material:

Site ID:	199408
Operable Unit ID:	823513
Operable Unit:	01
Material ID:	289904
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9913077
Facility Type:	ER
DER Facility ID:	165970
Site ID:	199409
DEC Region:	2
Spill Date:	2000-02-16
Spill Number/Closed Date:	9913077 / 2002-02-27
Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	JHOCONNE
Referred To:	Not reported
Reported to Dept:	2000-02-16
CID:	Not reported

SPILL NUMBER 9913077 (Continued) **S104652623**

Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2000-02-16
Spill Record Last Update:	2002-02-28
Spiller Name:	CALLER
Spiller Company:	CON ED
Spiller Address:	4 IRVING PL
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	CALLER
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL "
Remarks:	"overhead cable leak - 1 oz total - treated as 50-499 pcb sample impossible"

Material:

Site ID:	199409
Operable Unit ID:	1091788
Operable Unit:	01
Material ID:	294938
Material Code:	0541A
Material Name:	dielectric fluid
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

139
South
1/4-1/2
0.486 mi.
2564 ft.

Relative:
Lower

Actual:
17 ft.

SAND LANE & OLYMPIA BLVD
SAND LANE / OLYMPIA BLVD
STATEN ISLAND, NY

NY Spills **S102143415**
N/A

SPILLS:

Facility ID:	9208996
Facility Type:	ER
DER Facility ID:	257746
Site ID:	319905
DEC Region:	2
Spill Date:	1992-10-30
Spill Number/Closed Date:	9208996 / 2003-03-07
Spill Cause:	Unknown
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

SAND LANE & OLYMPIA BLVD (Continued) **S102143415**

SWIS:	4301
Investigator:	KSTANG
Referred To:	Not reported
Reported to Dept:	1992-11-04
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-11-04
Spill Record Last Update:	2003-03-07
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TANG 10/10/95: This Is Additional Information About Material Spilled From The Translation Of The Old Spill File: Odor Noticed.03/07/2003-Closed Due To The Nature / Extent Of The Spill Report."
Remarks:	"NOTICED ODOR IN SOIL BORING FOR SEWER LINE"

Material:

Site ID:	319905
Operable Unit ID:	972521
Operable Unit:	01
Material ID:	406064
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

140
NE
1/4-1/2
0.491 mi.
2592 ft.

1477 BAY ST
STATEN ISLAND, NY 10305

EDR Hist Cleaner **1014995100**
N/A

Relative:
Lower

Actual:
48 ft.

EDR Historical Cleaners:

Name:	LAUNDR PUP
Year:	2007
Address:	1477 BAY ST

Z141 **CHATEAU VILLA** **NY LTANKS** **S102555801**
NW **390-424 MARYLAND AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.491 mi.
2593 ft. **Site 1 of 2 in cluster Z**

Relative:
Higher

Actual:
145 ft.

LTANKS:

Site ID:	254167
Spill Number/Closed Date:	9612389 / 2012-08-29
Spill Date:	1997-01-16
Spill Cause:	Tank Test Failure
Spill Source:	Commercial/Industrial
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased:	Not reported
Cleanup Meets Standard:	False
SWIS:	4301
Investigator:	BKFALVEY
Referred To:	Not reported
Reported to Dept:	1997-01-16
CID:	211
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1997-01-16
Spill Record Last Update:	2012-08-29
Spiller Name:	Not reported
Spiller Company:	CHATEAU VILLA
Spiller Address:	390-424 MARYLAND AV
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	208179
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MULQUEEN 06/16/06: This spill is transferred from Mike Mulqueen to Mr. Koon Tang. 9/22/10 Transferred to b. falvey. 12/8/11 Received message from Joe Padalino, consultant for owner. office:(347)944-6299, (347)961-2389 cell:(917)821-8790 JPADALINO@AOL.COM He wants to close the case because bank is requiring the case closure prior to granting a loan. 12/12/11 Joe Padalino left a message at 854 AM. I returned his call. Hwe is not sure why tanks failed or even if tanks are still in the ground. I let him know that 2 Tanks are overdue for periodic tightness testing. i told him I will e-mail a letter to him regarding the requirements for the closure of the case. Sent ttf letter to: CV Management Corp. c/o Maxwell-Kates 9 East 38th Street New York, NY 10016 E-mailed letter to Mr. Padalino. bf 12/28/11 On 12/16/11, received letter, dated 12/15/11, and attachments: 6/29/05 letter from isaac Mungra of Eastmond stating that tank was cleaned and isolated. Several pinholes were found in the upper left secrtion of the tank shell. Sample results show no contamination as Mr. mungra also states in his letter. Tank passed ttt on 6/21/05. NFA. bf 8/29/12 After reviewing my open spill cases last week, I found this case whioch was meant to

CHATEAU VILLA (Continued) **S102555801**

be closed on 12/28/11. See entry above. NFA. bf"
Remarks: "CALLER DID TANK TEST WHICH FAILED / NO GROUND CONTAMINATION"

Material:
Site ID: 254167
Operable Unit ID: 1043891
Operable Unit: 01
Material ID: 341037
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: Gallons
Recovered: .00
Resource Affected: Not reported
Oxygenate: Not reported

Tank Test:
Site ID: 254167
Spill Tank Test: 1544965
Tank Number: Not reported
Tank Size: 5000
Test Method: 14
Leak Rate: .00
Gross Fail: F
Modified By: Spills
Last Modified: Not reported
Test Method: VacuTest

Z142 **APARTMENT BUILDING** **NY LTANKS** **S106124465**
NW **390 MARYLAND AVE** **N/A**
1/4-1/2 **STATEN ISLAND, NY**
0.491 mi.
2593 ft. **Site 2 of 2 in cluster Z**

Relative:
Higher

Actual:
145 ft.

LTANKS:
Site ID: 280830
Spill Number/Closed Date: 0310312 / 2006-10-13
Spill Date: 2003-12-04
Spill Cause: Tank Test Failure
Spill Source: Unknown
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
Cleanup Ceased: Not reported
Cleanup Meets Standard: False
SWIS: 4301
Investigator: DATROMP
Referred To: Not reported
Reported to Dept: 2003-12-04
CID: 402
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False

APARTMENT BUILDING (Continued) **S106124465**

UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2003-12-09
Spill Record Last Update:	2006-10-13
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller County:	001
Spiller Contact:	BOB RIVERS
Spiller Phone:	(718) 447-6359
Spiller Extention:	Not reported
DEC Region:	2
DER Facility ID:	228046
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIPPLE TTF letter sent 7/13/04 tipple sent documentation request to pbs & tax database addreses 7/22/04 received registration certificates for the pbs 11/1/05 - Transferred to Central Office Staff for review. Registration certificates were submitted. 10/13/06 - Spill closed. "
Remarks:	""

Material:

Tank Test:

143
NNE
1/4-1/2
0.497 mi.
2624 ft.

POND **NY Spills** **S106867959**
SHORE ACRES ROAD AND BAY **N/A**
STATEN ISLAND, NY

Relative:
Lower

Actual:
52 ft.

SPILLS:

Facility ID:	0500395
Facility Type:	ER
DER Facility ID:	289821
Site ID:	343348
DEC Region:	2
Spill Date:	2005-04-08
Spill Number/Closed Date:	0500395 / 2005-04-12
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SMSANGES
Referred To:	Not reported
Reported to Dept:	2005-04-08
CID:	408
Water Affected:	POND
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	Not reported
UST Trust:	Not reported

POND (Continued) **S106867959**

Remediation Phase:	0
Date Entered In Computer:	2005-04-08
Spill Record Last Update:	2005-04-12
Spiller Name:	KAREN DEVITO
Spiller Company:	POND
Spiller Address:	SHORE ACRES ROAD AND BAY
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	KAREN DEVITO
Contact Phone:	(718) 595-5343
DEC Memo:	"DEP called Sangesland to report a very minor spill of oil. Sheen has been absorbed with pads, site is now clean."
Remarks:	"A pond was flooding, a hydrolic pump was put in pond to take out water, there must have been residual oil on the pump from repairs made before putting it in the pond. It did not come of the engine. Region 2 has been contacted about this and it is negligable. Has been cleaned up."

Material:

Site ID:	343348
Operable Unit ID:	1102033
Operable Unit:	01
Material ID:	582264
Material Code:	0010
Material Name:	hydraulic oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Gallons
Recovered:	1.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

AA144 **SUN CHEMICAL CORPORATION** **NY BROWNFIELDS** **S109059143**
NNW **441-443 TOMPKINS AVENUE** **N/A**
1/2-1 **STATEN ISLAND, NY 10305**
0.883 mi.
4662 ft. **Site 1 of 3 in cluster AA**

Relative:
Lower

Actual:
40 ft.

BROWNFIELDS:

Program:	BCP
Site Code:	397639
Acres:	5.196
HW Code:	C243024
SWIS:	4301
Town:	New York City
Record Added Date:	05/12/2008
Record Updated Date:	05/04/2016
Update By:	JEBROWN
Site Description:	Location: The Sun Chemical Corporation site is located at 441-443 Tompkins Avenue and 83 Chestnut Avenue in an urban portion of the Rosebank section of Staten Island, Richmond County, New York. Site Features: The site consists of 5.196 acres. The site comprises two tax lots in Tax Block 2846, including: Lot 12, the majority of the property and the land on which manufacturing operations have

SUN CHEMICAL CORPORATION (Continued) **S109059143**

occurred; and Lot 54, formerly a portion of a passenger and freight railroad. The site is fenced and is bordered on the south by privately owned real property, on the north by Chestnut Avenue, on the west by Tompkins Avenue, and on the east by privately owned real property. All structures were previously demolished and the site is vacant with the exception of an occupied security guard shack located on the western property boundary. Current Zoning and Land Use: Lot 12 is currently zoned M3-l (manufacturing) and Lot 54 is zoned R3A (residential). The site is currently owned by SUN/DIC Acquisitions, Corp. and is vacant. The surrounding parcels are currently used for residential use. A church and the former affiliated parochial school are located to the west and southwest. A museum and neighborhood playground are located across Tompkins Avenue to the west. Past Use of the Site: The site formerly consisted of a multi-story two-wing manufacturing building, support buildings (offices, warehouse laboratory, maintenance shop), exterior aboveground storage tanks and perimeter parking areas. All manufacturing buildings have been demolished.Prior to 1908 the site was used for residential, lodging, and entertainment purposes. In 1908, the site was developed for industrial operations, for the production of various pigments for use in ink, plastics, coatings and cosmetics preparations, and operated in that capacity without material changes until 2008. The Lot 12 portion of the site has historically been used by G. Siegle & Co. Color Works, a pigment production facility (1907-1928), the Ansbacher-Siegle Corp., manufacturers of dry colors (1937-1962), Ansbacher Siegle Division of Sun Chemical Corp. Colors (1965) and Sun Chemical Corp. Pigments Department (1970-1979). The Lot 54 portion of the site has historically been used as a Staten Island Metro Transit railroad station (1898-1962) and was acquired by Sun Chemical Corp. in June 1984. Sun Chemical Corporation conducted pigment production operations at the site between 1987 and 2008.Prior Investigations/Actions:Several investigations/evaluations were completed at the site prior to the 2010-2015 Remedial Investigation (RI) as follows: 1988 Site Investigation by Sun Chemical to determine the extent of contamination in connection with a 1988 release of a caustic solution; 1994 Hazardous Substances Disposal Site Study by the Department; 2001 Preliminary Site Assessment Work Plan by Sun Chemical for investigation of the location of 1988 release of a caustic solution, and floors under the filter presses in the main production building (note, the work plan was on hold for several years while Sun Chemical was in various stages of negotiations with the Department to enter a cleanup program); and June 2008 Pre-Demolition Sub-slab Soil Evaluation by Sun Chemical. Based on those investigations/evaluations an initial remedial action was implemented, prior to execution of the Brownfield Cleanup Agreement and without Department oversight, to address contaminated soils exposed and/or disturbed during removal of the buildings and subsequent regrading.Site Geology and Hydrogeology: Based on soil collected by continuous sampling activities, unconsolidated soils were encountered to the maximum drilling depth of 35 feet. These soils consisted of clayey silt and sand, with minor coarser layers. Soils encountered during preliminary investigations were of the same consistency, with occasional boulders present. A peat layer was also encountered in the southeastern portion of the site. The presence of a peat layer and the associated perched water (8 feet below ground surface [bgs]) appears to be localized given that these conditions were not evident at nearby monitoring wells, completed at the same

SUN CHEMICAL CORPORATION (Continued) **S109059143**

topographic elevation approximately 130 feet to the west-northwest.The groundwater level within the overburden aquifer ranges from an elevation of approximately 5 feet bgs at the east boundary of the site to an elevation of approximately 35 feet bgs in the central portion of the site. Groundwater flow direction varies from easterly to northerly, largely following site topography. As such, the highest groundwater elevations are along the southern property boundary, with a component of flow to the north, and a component of flow to the east. The regional groundwater flow direction is generally to the east toward the Upper New York Bay.

Env Problem: Nature and Extent of Contamination: Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. The Remedial Investigation indicated that the primary contaminants of concern at the site include metals, polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and chlorinated volatile organic compounds (CVOCs). Previous environmental investigation on-site also revealed concentrations of metals, SVOCs, CVOCs and PCBs exceeding standards, criteria, and guidance values in the soil and groundwater.Soil: Based upon investigations to date, surface and sub-surface soils are contaminated with SVOCs (polyaromatic hydrocarbons [PAHs]), PCBs and some metals (e.g., arsenic, barium, cadmium, lead, and nickel) over restricted residential use soil cleanup objectives (RRSCOS) on Lot 12 and over residential use SCOs (RSCOs) on Lot 54 at varying depths. Lot 12: Maximum detections vs. applicable RRSCOs are as follows: arsenic at 559 parts per million (ppm) vs. 16 ppm, barium at 2,340 ppm vs. 400 ppm, cadmium at 53 ppm vs. 4.3 ppm, lead at 44,400 ppm vs. 400 ppm, PCBs at 49 ppm vs. 1 ppm, benzo(a)pyrene at 4.3 ppm vs. 1 ppm, benzo(k)anthracene at 4.3 ppm vs. 1 ppm and benzo(k)flouranthene at 4.8 ppm vs. 3.9 ppm.Lot 54: Maximum detections vs. applicable RSCOs are as follows: arsenic at 42 ppm vs. 16 ppm, barium 490 ppm vs. 350 ppm, lead 433 ppm vs. 400 ppm, nickel at 799 ppm vs. 140 ppm, PCBs at 2.1 ppm vs. 1 ppm, benzo(a)pyrene at 1.5 ppm vs. 1 ppm, benzo(k)anthracene at 1.5 ppm vs. 1 ppm and benzo(k)flouranthene at 1.6 ppm vs. 1 ppm.Data does not indicate any off-site impacts in soil related to this site.Groundwater: On Lot 12, groundwater sampling indicates one metal and CVOCs contamination above Class GA groundwater standards a localized area near MW-3 and MW-3D on-site. The groundwater samples were analyzed for metals, SVOCs, VOCs, PCBs and pesticides. Maximum groundwater detections vs. standards are as follows: trichloroethene at 16.7 parts per billion (ppb) vs. 5 ppb, 1,1,1-TCA at 7.35 ppb vs. 5 ppb, 1,1-dichloroethane at 314 ppb vs. 5 ppb, 1,1-dichloroethene at 576 ppb vs. 5 ppb, and nickel at 260 ppb vs. 100 ppb. On Lot 54, groundwater does not exceed standards. Data does not indicate off-site impacts in groundwater related to this site Soil Vapor: On Lot 12, elevated levels of tetrachloroethylene (PCE) were detected in soil vapor. Concentrations of PCE were detected in the southwestern portion of the site at the concentrations of 120 micrograms per cubic meter (ug/m3). The off-site soil vapor investigation was conducted at an adjacent property and it confirmed that PCE is not present in off-site soil vapor. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. On Lot 54, soil vapor results did not find any VOCs at levels of concern. Furthermore, environmental data does not indicate any off-site impacts in soil vapor related to this site.

SUN CHEMICAL CORPORATION (Continued) **S109059143**

Health Problem:	The site is fenced, which restricts public access. Groundwater at the site is not used for drinking or other purposes and the area is served by a public water supply that obtains its water from a different source. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into the overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling has indicated that soil vapor intrusion is not a concern for off-site buildings.
Dump:	False
Structure:	False
Lagoon:	False
Landfill:	False
Pond:	False
Disp Start:	Not reported
Disp Term:	Not reported
Lat/Long:	Not reported
Dell:	Not reported
Record Add:	10/15/2012 9:59:00 AM
Record Upd:	10/29/2013 11:27:00 AM
Updated By:	ldennist
Own Op:	Owner
Sub Type:	03
Owner Name:	Not reported
Owner Company:	SUN/DIC ACQUISITION CORP.
Owner Address:	35 WATERVIEW BOULEVARD
Owner Addr2:	Not reported
Owner City,St,Zip:	PARSIPPANY, NJ 07054-1285
Owner Country:	United States of America
Own Op:	Applicant/Requestor
Sub Type:	03
Owner Name:	WARREN W. FAURE
Owner Company:	SUN/DIC ACQUISITION CORP.
Owner Address:	35 WATERVIEW BOULEVARD
Owner Addr2:	Not reported
Owner City,St,Zip:	PARSIPPANY, NJ 07054-1285
Owner Country:	United States of America
Own Op:	On-Site Operator
Sub Type:	NNN
Owner Name:	Not reported
Owner Company:	SUN CHEMICAL CORPORATION
Owner Address:	35 WATERVIEW BOULEVARD
Owner Addr2:	Not reported
Owner City,St,Zip:	PARSIPPANY, NJ 07054-1285
Owner Country:	United States of America
Own Op:	Document Repository
Sub Type:	NNN
Owner Name:	Not reported
Owner Company:	St. George Library Center
Owner Address:	5 Central Avenue
Owner Addr2:	Not reported
Owner City,St,Zip:	Staten Island, NY 10301
Owner Country:	United States of America

SUN CHEMICAL CORPORATION (Continued) **S109059143**

Own Op:	Document Repository
Sub Type:	NNN
Owner Name:	Rosebank, Ft. Wadsworth and Shore
Owner Company:	Staten Island Community Board 1
Owner Address:	Acres Area Committee
Owner Addr2:	1 Edgewater Plaza, Suite 217
Owner City,St,Zip:	Staten Island, NY 10305
Owner Country:	United States of America
HW Code:	C243024
Waste Type:	1,1,1-TCA
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	cadmium
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	BARIUM
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	VINYLIDENE CHLORIDE
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	Dichloroethene (1,1-)
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	POLYCHLORINATED BIPHENYLS (PCB)
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	ARSENIC
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	TRICHLOROETHENE (TCE)
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	1,1,1 TCA
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	1,1-DICHLOROETHANE
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	Polycyclic Aromatic Hydrocarbons (PAHs), Total
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024
Waste Type:	NICKEL
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	C243024

SUN CHEMICAL CORPORATION (Continued) **S109059143**

Waste Type:	LEAD
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
Crossref ID:	243024
Cross Ref Type Code:	02
Cross Ref Type:	HW Site ID
Record Added Date:	5/12/2008 2:11:00 PM
Record Updated:	5/12/2008 2:11:00 PM
Updated By:	SRHEIGEL
Crossref ID:	v00629
Cross Ref Type Code:	04
Cross Ref Type:	VCP Site ID
Record Added Date:	5/12/2008 2:14:00 PM
Record Updated:	5/12/2008 2:14:00 PM
Updated By:	SRHEIGEL
Crossref ID:	2-000088
Cross Ref Type Code:	17
Cross Ref Type:	CBS No.
Record Added Date:	1/23/2009 1:02:00 PM
Record Updated:	1/23/2009 1:02:00 PM
Updated By:	MOBARRIE
Crossref ID:	A2-0614-0109
Cross Ref Type Code:	23
Cross Ref Type:	Agreement/Consent Order Number
Record Added Date:	3/25/2009 3:11:00 PM
Record Updated:	3/25/2009 3:11:00 PM
Updated By:	MOBARRIE

AA145 **SUN CHEMICAL CORPORATION** **RCRA-LQG** **1000106498**
NNW **441 TOMPKINS AVENUE** **NY CBS AST** **NYD041972761**
1/2-1 **STATEN ISLAND, NY 10305** **NY VCP**
0.883 mi. **FTTS**
4662 ft. **Site 2 of 3 in cluster AA** **NJ MANIFEST**

Relative:
Lower

Actual:
40 ft.

RCRA-LQG:

Date form received by agency:	05/02/2012
Facility name:	SUN CHEMICAL CORPORATION
Facility address:	441 TOMPKINS AVENUE STATEN ISLAND, NY 10305
EPA ID:	NYD041972761
Mailing address:	SITE VACANT - SEE #7 135 W. LAKE ST. NORTH LAKE, IL 60164
Contact:	GARY ANDRZEJEWSKI
Contact address:	WEST LAKE ST NORTH LAKE, IL 60164
Contact country:	US
Contact telephone:	(708) 236-3713
Contact email:	GARY.ANDRZEJEWSKI@SUNCHEMICAL.COM
EPA Region:	02
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely

SUN CHEMICAL CORPORATION (Continued) **1000106498**

hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: SUN/OK ACQUISITION CORP
Owner/operator address: WATERVIEW BLVD
PARSIPPANY, NJ 07054
Owner/operator country: US
Owner/operator telephone: (973) 404-6000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/31/1986
Owner/Op end date: Not reported

Owner/operator name: 8 SUN
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/31/1986
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 04/28/2010
Site name: SUN CHEMICAL
Classification: Large Quantity Generator

. Waste code: D008

SUN CHEMICAL CORPORATION (Continued) **1000106498**

. Waste name: LEAD

Date form received by agency: 01/01/2007
Site name: SUN CHEMICAL CORP PIGMENTS DIV
Classification: Small Quantity Generator

Date form received by agency: 01/01/2006
Site name: SUN CHEMICAL CORP PIGMENTS DIV
Classification: Small Quantity Generator

Date form received by agency: 07/14/1999
Site name: SUN CHEMICAL CORP PIGMENTS DIV
Classification: Small Quantity Generator

Date form received by agency: 11/19/1980
Site name: SUN CHEMICAL CORP PIGMENTS DIV
Classification: Not a generator, verified

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: U073
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO- (OR) 3,3'-DICHLOROBENZIDINE

Date form received by agency: 08/06/1980
Site name: SUN CHEMICAL CORP PIGMENTS DIV
Classification: Large Quantity Generator

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID,

SUN CHEMICAL CORPORATION (Continued) **1000106498**

AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U003
. Waste name: ACETONITRILE (I,T)

. Waste code: U019
. Waste name: BENZENE (I,T)

. Waste code: U044
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

. Waste code: U047
. Waste name: BETA-CHLORONAPHTHALENE (OR) NAPHTHALENE, 2-CHLORO-

. Waste code: U073
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO- (OR) 3,3'-DICHLOROBENZIDINE

. Waste code: U091
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHOXY- (OR) 3,3'-DIMETHOXYBENZIDINE

. Waste code: U181
. Waste name: 5-NITRO-O-TOLUIDINE (OR) BENZENAMINE, 2-METHYL-5-NITRO

. Waste code: U213
. Waste name: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:
Waste code: D008
Waste name: LEAD
Amount (Lbs): 616600

Facility Has Received Notices of Violations:
Regulation violated: SR - 374-3.2(e)(1)

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Area of violation: Generators - General
Date violation determined: 01/23/2004
Date achieved compliance: 01/30/2004
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/03/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 374-3.2(e)(5)
Area of violation: Generators - General
Date violation determined: 01/23/2004
Date achieved compliance: 01/30/2004
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/03/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 372.2(b)(2)(ii)
Area of violation: Generators - General
Date violation determined: 01/23/2004
Date achieved compliance: 01/30/2004
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/03/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 373-3.3(b),373-3.4(c)(1,5)
Area of violation: Generators - General
Date violation determined: 06/14/2002
Date achieved compliance: 09/19/2003
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 05/07/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1500
Paid penalty amount: 1500

Regulation violated: SR - 373-3.3(b),373-3.4(c)(1,5)
Area of violation: Generators - General

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date violation determined: 06/14/2002
Date achieved compliance: 09/19/2003
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 02/06/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 03/06/2000
Date achieved compliance: 01/29/2002
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/23/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 03/06/2000
Date achieved compliance: 01/29/2002
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/23/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 03/06/2000
Date achieved compliance: 01/29/2002
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 01/29/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 28500
Paid penalty amount: 28500

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 03/06/2000

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date achieved compliance: 01/29/2002
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 01/29/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 28500
Paid penalty amount: 28500

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 03/06/2000
Date achieved compliance: 01/29/2002
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 01/29/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 28500
Paid penalty amount: 28500

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 03/06/2000
Date achieved compliance: 01/29/2002
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 06/23/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/19/1991
Date achieved compliance: 12/11/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/19/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/06/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 01/23/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/30/2004
Evaluation lead agency: State

Evaluation date: 09/19/2003
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/03/2003
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/14/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/19/2003
Evaluation lead agency: State

Evaluation date: 01/29/2002
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/07/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/06/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/29/2002
Evaluation lead agency: State

Evaluation date: 03/06/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 01/29/2002
Evaluation lead agency: State

Evaluation date: 03/06/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 01/29/2002
Evaluation lead agency: State

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Evaluation date: 06/10/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/01/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/11/1992
Evaluation lead agency: State

Evaluation date: 08/26/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/26/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 07/19/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

CBS AST:
CBS Number: 2-000088
ICS Number: 2-126481
PBS Number: 2-034657
MOSF Number: Not reported
SPDES Number: Not reported
Facility Status: IN SERVICE
Facility Type: D
Telephone: (718) 981-1600
Facility Town: NEW YORK CITY
Region: STATE
Expiration Date: 07/07/2003
Total Capacity of All Active Tanks(gal): 58400
Operator: STAN COOK
Emergency Contact: STAN COOK
Emergency Phone: (718) 981-1600
Owner Name: SUN CHEMICAL CORP
Owner Address: 441 TOMPKINS AVE.
Owner City,St,Zip: STATEN ISLAND, NY 10305
Owner Telephone: (718) 981-1600
Owner Type: Corporate/Commercial
Owner Sub Type: Not reported
Mail Name: SUN CHEMICAL CORP
Mail Contact Addr: 441 TOMPKINS AVE.
Mail Contact Addr2: Not reported
Mail Contact Contact: STAN COOK
Mail Contact City,St,Zip: STATEN ISLAND, NY 10305
Mail Phone: (718) 981-1600

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Tank Id:	13
CAS Number:	1310732
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	07/91
Tank Closed:	Not reported
Capacity (Gal):	12800
Chemical:	Sodium hydroxide
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	08/11/1993
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Steel/Iron
Pipe Internal:	None
Pipe External:	Jacketed
Pipe Flag:	Jacketed
Leak Detection:	None
Overfill Protection:	High Level Alarm
Haz Percent:	25
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	12
CAS Number:	1310732
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	07/91
Tank Closed:	Not reported
Capacity (Gal):	12800
Chemical:	Sodium hydroxide
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date Entered:	08/08/1991
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Steel/Iron
Pipe Internal:	None
Pipe External:	Jacketed
Pipe Flag:	Jacketed
Leak Detection:	None
Overfill Protection:	High Level Alarm
Haz Percent:	25
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	11
CAS Number:	1310732
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	07/91
Tank Closed:	Not reported
Capacity (Gal):	12800
Chemical:	Sodium hydroxide
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	08/08/1991
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Steel/Iron
Pipe Internal:	None
Pipe External:	Jacketed
Pipe Flag:	Jacketed
Leak Detection:	None
Overfill Protection:	High Level Alarm
Haz Percent:	25
Last Test:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	1
CAS Number:	64197
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	07/84
Tank Closed:	03/94
Capacity (Gal):	3189
Chemical:	Acetic acid
Tank Location:	Indoors, Aboveground
Tank Type:	Stainless steel alloy
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	01
Tank Error Status:	No Missing Data
Date Entered:	07/07/1989
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	None
External Protection:	None
Pipe Location:	Aboveground
Pipe Type:	Cathodically Protected
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	56
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Tank Id:	4A
CAS Number:	7647010
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	05/89
Tank Closed:	03/94
Capacity (Gal):	5296
Chemical:	Hydrochloric acid
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	10
Tank Error Status:	No Missing Data
Date Entered:	07/07/1989
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	None
External Protection:	None,None
Pipe Location:	Aboveground
Pipe Type:	Cathodically Protected
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	37
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	6
CAS Number:	64197
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	05/89
Tank Closed:	03/94
Capacity (Gal):	6000
Chemical:	Acetic acid
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	10
Tank Error Status:	No Missing Data

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date Entered:	07/07/1989
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	None
External Protection:	None,None
Pipe Location:	Aboveground
Pipe Type:	Cathodically Protected
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	56
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	16
CAS Number:	7647010
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	01/93
Tank Closed:	Not reported
Capacity (Gal):	10000
Chemical:	Hydrochloric acid
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	08/11/1993
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Double Walled Fiberglass
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	High Level Alarm
Haz Percent:	32
Last Test:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	15
CAS Number:	64197
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	01/93
Tank Closed:	Not reported
Capacity (Gal):	10000
Chemical:	Acetic acid
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	08/11/1993
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Double Walled Fiberglass
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	High Level Alarm
Haz Percent:	56
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Tank Id:	8
CAS Number:	1310732
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	00/00
Tank Closed:	01/92
Capacity (Gal):	4000
Chemical:	Sodium hydroxide
Tank Location:	Indoors, Aboveground
Tank Type:	Steel/carbon steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	10
Tank Error Status:	No Missing Data
Date Entered:	07/07/1989
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	None
External Protection:	None,None
Pipe Location:	Aboveground
Pipe Type:	Cathodically Protected
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	50
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Tank Id:	9
CAS Number:	1310732
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	00/00
Tank Closed:	01/92
Capacity (Gal):	4000
Chemical:	Sodium hydroxide
Tank Location:	Indoors, Aboveground
Tank Type:	Steel/carbon steel
Total Tanks:	5
Tank Secret:	False
Tank Secondary Containment:	10
Tank Error Status:	No Missing Data

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date Entered:	07/07/1989
Certified Date:	05/09/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	None
External Protection:	None,None
Pipe Location:	Aboveground
Pipe Type:	Cathodically Protected
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	50
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	6401
Lat/Long:	40|36|58 / 74|04|27
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|36|58 / 74|04|27
Fiscal Amt for Registration Fee Correct:	40|36|58 / 74|04|27
Renewal Has Been Printed for Facility:	40|36|58 / 74|04|27
Pre-Printed Renewal App Last Printed:	40|36|58 / 74|04|27

Click this hyperlink while viewing on your computer to access
4 additional NY_AST_CBS: record(s) in the EDR Site Report.

VCP:

Program Type:	VCP
Site Code:	57146
HW Code:	V00629
Site Class:	N
SWIS:	4301
Region:	2
Town:	New York City
Acres:	5
Date Record Added:	12/18/2002
Date Record Updated:	03/31/2005
Updated By:	JAQUINN
Site Description:	See project #C243024
Env Problem:	Not reported
Health Problem:	Not reported
Dump:	Not reported
Structure:	Not reported
Lagoon:	Not reported
Landfill:	Not reported
Pond:	Not reported
Disp Start:	Not reported
Disp Term:	Not reported
Lat/Long:	Not reported
Dell:	Not reported
Record Add:	Not reported
Record Upd:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Updated By: Not reported
Own Op: Applicant/Requestor
Sub Type: ZZZ
Owner Name: Not reported
Owner Company: SUN CHEMICAL CORP.
Owner Address: 222 BRIDGE PLAZA SOUTH
Owner Addr2: Not reported
Owner City,St,Zip: FORT LEE, NJ 07024
Owner Country: United States of America
Own Op: On-Site Operator
Sub Type: ZZZ
Owner Name: Not reported
Owner Company: SUN CHEMICAL CORP.
Owner Address: 5020 SPRING GROVE AVENUE
Owner Addr2: Not reported
Owner City,St,Zip: CINCINNATI, OH 45232
Owner Country: United States of America
Own Op: Owner
Sub Type: ZZZ
Owner Name: Not reported
Owner Company: SUN CHEMICAL CORP.
Owner Address: 222 BRIDGE PLAZA SOUTH
Owner Addr2: Not reported
Owner City,St,Zip: FORT LEE, NJ 07024
Owner Country: United States of America
HW Code: Not reported
Waste Type: Not reported
Waste Quantity: Not reported
Waste Code: Not reported
Crossref ID: Not reported
Cross Ref Type Code: Not reported
Cross Ref Type: Not reported
Record Added Date: Not reported
Record Updated: Not reported
Updated By: Not reported

FTTS INSP:
Inspection Number: 2007040410341 1
Region: 02
Inspection Date: 04/04/07
Inspector: C. NORMAN, LP
Violation occurred: No
Investigation Type: Section 5 Inspections
Investigation Reason: For Cause, Associated
Legislation Code: TSCA
Facility Function: Manufacturer/Importer

Inspection Number: 2007040410341 3
Region: 02
Inspection Date: 04/04/07
Inspector: C. NORMAN, LP
Violation occurred: No
Investigation Type: Section 6 PCB Federal Conducted
Investigation Reason: For Cause, Associated
Legislation Code: TSCA
Facility Function: Manufacturer/Importer

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Inspection Number: 2002041010025 1
Region: 02
Inspection Date: 04/10/02
Inspector: M. BIOUS, DK
Violation occurred: No
Investigation Type: Section 6 PCB Federal Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA
Facility Function: Manufacturer/Importer

Inspection Number: 2007040410341 2
Region: 02
Inspection Date: 04/04/07
Inspector: C. NORMAN, LP
Violation occurred: No
Investigation Type: Section 8 Inventory Rule
Investigation Reason: For Cause, Associated
Legislation Code: TSCA
Facility Function: Manufacturer/Importer

NJ MANIFEST:
EPA Id: NYD041972761
Mail Address: Not reported
Mail City/State/Zip: Not reported
Facility Phone: Not reported
Emergency Phone: Not reported
Contact: Not reported
Comments: Not reported
SIC Code: Not reported
County: 00
Municipal: 00
Previous EPA Id: Not reported
Gen Flag: X
Trans Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported
Date Change: Not reported

Manifest:
Manifest Number: 006011587JJK
EPA ID: NYD041972761
Date Shipped: 03/19/2009
TSDF EPA ID: NJD045995693
Transporter EPA ID: NJR000029967
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 03/19/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	54720 P

Manifest Number:	006011574JJK
EPA ID:	NYD041972761
Date Shipped:	03/19/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJD000692061
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/19/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	46260 P

Manifest Number:	006011573JJK
EPA ID:	NYD041972761
Date Shipped:	03/19/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJD000692061
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/19/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Data Entry Number: Not reported
Was Load Rejected: No
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 50320 P

Manifest Number: 006011575JJK
EPA ID: NYD041972761
Date Shipped: 03/19/2009
TSDF EPA ID: NJD045995693
Transporter EPA ID: NJD000692061
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 03/19/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 03/19/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: No
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 48280 P

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Manifest Number:	006011583JJK
EPA ID:	NYD041972761
Date Shipped:	03/19/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJR000029967
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/19/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	54220 P

Manifest Number:	006011582JJK
EPA ID:	NYD041972761
Date Shipped:	03/20/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJD000692061
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/20/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/20/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	50800 P

Manifest Number:	006011586JJK
EPA ID:	NYD041972761
Date Shipped:	03/19/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJR000029967
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/19/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	53860 P

Manifest Number:	006011581JJK
EPA ID:	NYD041972761
Date Shipped:	03/20/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJD000692061
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/20/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/20/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	48740 P

Manifest Number:	006011585JJK
EPA ID:	NYD041972761
Date Shipped:	03/19/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJR000029967
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/19/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 53480 P

Manifest Number: 006011576JJK
EPA ID: NYD041972761
Date Shipped: 03/19/2009
TSDF EPA ID: NJD045995693
Transporter EPA ID: NJD000692061
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 03/19/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 03/19/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: No
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 37680 P

Manifest Number: 006011584JJK
EPA ID: NYD041972761

SUN CHEMICAL CORPORATION (Continued) **1000106498**

Date Shipped:	03/19/2009
TSDF EPA ID:	NJD045995693
Transporter EPA ID:	NJR000029967
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/19/2009
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/19/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D008
Hand Code:	H111
Quantity:	60140 P

AA146 **SUN CHEMICAL CORP** **NY SHWS** **U003074282**
NNW **441 TOMPKINS AVENUE** **NY CBS** **N/A**
1/2-1 **STATEN ISLAND, NY 10305** **NY AST**
0.883 mi. **NY Spills**
4662 ft. **Site 3 of 3 in cluster AA** **NY MANIFEST**

Relative:
Lower

Actual:
40 ft.

SHWS:

Program:	HW
Site Code:	55940
Classification:	N

SUN CHEMICAL CORP (Continued) **U003074282**

Region: 2
Acres: Not reported
HW Code: 243024
Record Add: 11/18/1999
Record Upd: 06/24/2008
Updated By: SRHEIGEL
Site Description: The Site is located on approximately 4.6 acres of property in a mixed industrial, commercial,and residential area of Staten Island. The facility has been operated since 1907 for the production of various pigments for use in ink, plastics, coatings and cosmetics preparations. See project C243024
Env Problem: Not reported
Health Problem: Not reported
Dump: Not reported
Structure: Not reported
Lagoon: Not reported
Landfill: Not reported
Pond: Not reported
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: Not reported
Record Upd: Not reported
Updated By: Not reported
Own Op: Not reported
Sub Type: Not reported
Owner Name: Not reported
Owner Company: Not reported
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: Not reported
Owner Country: Not reported
HW Code: Not reported
Waste Type: Not reported
Waste Quantity: Not reported
Waste Code: Not reported
Crossref ID: Not reported
Cross Ref Type Code: Not reported
Cross Ref Type: Not reported
Record Added Date: Not reported
Record Updated: Not reported
Updated By: Not reported

CBS:
CBS Number: 2-000088
Program Type: CBS
Facility Status: Unregulated/Closed
Expiration Date: Not reported
Dec Region: 2
UTMX: 578488.08029
UTMY: 4496461.60827

AST:
Region: STATE
DEC Region: 2

SUN CHEMICAL CORP (Continued) **U003074282**

Site Status: Unregulated/Closed
Facility Id: 2-034657
Program Type: PBS
UTM X: 578417.20303
UTM Y: 4496396.37023
Expiration Date: N/A
Site Type: Manufacturing (Other than Chemical)/Processing

Affiliation Records:

Site Id: 292
Affiliation Type: Mail Contact
Company Name: SUN CHEMICAL CORPORATION
Contact Type: Not reported
Contact Name: A.J. ARELLANO
Address1: 441 TOMPKINS AVENUE
Address2: Not reported
City: STATEN ISLAND
State: NY
Zip Code: 10305
Country Code: 001
Phone: (718) 981-1600
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2008-08-19

Site Id: 292
Affiliation Type: On-Site Operator
Company Name: SUN CHEMICAL CORPORATION
Contact Type: Not reported
Contact Name: SUN CHEMICAL
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001
Phone: (718) 981-1600
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2008-08-19

Site Id: 292
Affiliation Type: Emergency Contact
Company Name: SUN CHEMICAL CORPORATION
Contact Type: Not reported
Contact Name: A.J. ARELLANO
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 999
Phone: (718) 981-1600
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR

SUN CHEMICAL CORP (Continued) **U003074282**

Date Last Modified: 2008-08-19

Site Id: 292
Affiliation Type: Facility Owner
Company Name: SUN CHEMICAL CORPORATION
Contact Type: ENGINEERING MANAGER
Contact Name: A.J. ARELLANO
Address1: 441 TOMPKINS AVE
Address2: Not reported
City: STATEN ISLAND
State: NY
Zip Code: 10305
Country Code: 001
Phone: (718) 981-1600
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2008-08-19

Tank Info:

Tank Number: 1A
Tank Id: 46890
Material Code: 0001
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron
F01 - Pipe External Protection - Painted/Asphalt Coating
J02 - Dispenser - Suction Dispenser
L09 - Piping Leak Detection - Exempt Suction Piping
A01 - Tank Internal Protection - Epoxy Liner
B01 - Tank External Protection - Painted/Asphalt Coating
G01 - Tank Secondary Containment - Diking (Aboveground)
H00 - Tank Leak Detection - None
C01 - Pipe Location - Aboveground
I04 - Overfill - Product Level Gauge (A/G)

Tank Location: 3
Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 08/01/1993
Capacity Gallons: 10000
Tightness Test Method: NN
Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 08/01/2008
Register: True
Modified By: NRLOMBAR
Last Modified: 08/19/2008
Material Name: Not reported

SPILLS:
Facility ID: 9407686
Facility Type: ER
DER Facility ID: 87212

SUN CHEMICAL CORP (Continued) **U003074282**

Site ID:	165890
DEC Region:	2
Spill Date:	1994-09-06
Spill Number/Closed Date:	9407686 / 2003-02-10
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	TOMASELLO
Referred To:	Not reported
Reported to Dept:	1994-09-08
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1948-12-27
Spill Record Last Update:	2005-11-29
Spiller Name:	Not reported
Spiller Company:	SAME
Spiller Address:	Not reported
Spiller City,St,Zip:	NY
Spiller Company:	999
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	""

Material:

Site ID:	165890
Operable Unit ID:	1001925
Operable Unit:	01
Material ID:	380686
Material Code:	0271A
Material Name:	barium chloride
Case No.:	10361372
Material FA:	Other
Quantity:	500.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9400115
Facility Type:	ER
DER Facility ID:	87212
Site ID:	97972
DEC Region:	2
Spill Date:	1994-04-04

SUN CHEMICAL CORP (Continued) **U003074282**

Spill Number/Closed Date:	9400115 / 1994-04-04
Spill Cause:	Human Error
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	CAMMISA
Referred To:	Not reported
Reported to Dept:	1994-04-04
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	1994-04-04
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-04-05
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	SUN CHEM. CO.
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"COMPRESSOR BEING DISCARDED IN A DUMPSTER RAN OUT OF DUMPSTER - SPEEDY DRY USED / PUT IN WASTE CONTAIMENT."

Material:

Site ID:	97972
Operable Unit ID:	997653
Operable Unit:	01
Material ID:	387442
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-2.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9313081
Facility Type:	ER
DER Facility ID:	87212
Site ID:	97971
DEC Region:	2
Spill Date:	1994-02-04
Spill Number/Closed Date:	9313081 / 1994-02-07
Spill Cause:	Equipment Failure

SUN CHEMICAL CORP (Continued) **U003074282**

Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1994-02-04
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Tank Truck
Spill Notifier:	Affected Persons
Cleanup Ceased:	1994-02-07
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-02-07
Spill Record Last Update:	2002-09-26
Spiller Name:	Not reported
Spiller Company:	RICCI'S FUEL OIL CO.
Spiller Address:	Not reported
Spiller City,St,Zip:	ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE "
Remarks:	"SUSPECT AIR ELIMINATOR OR VENT CHECK VALVE FAILED - OIL TO PAVED AREA - IN SECONDARY CONTAIMENT AREA - SPEEDI DRI - SORBENT PADS APPLIED - PUMPED 3-4 GALS FREEPRODUCT TO DRUM - WILL COMPLETE CLEAN UP"

Material:

Site ID:	97971
Operable Unit ID:	991548
Operable Unit:	01
Material ID:	388474
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-5.00
Units:	Gallons
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9312643
Facility Type:	ER
DER Facility ID:	87212
Site ID:	97970
DEC Region:	2
Spill Date:	1994-01-27
Spill Number/Closed Date:	9312643 / 1994-01-28

SUN CHEMICAL CORP (Continued) **U003074282**

Spill Cause:	Equipment Failure
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1994-01-27
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Federal Government
Cleanup Ceased:	1994-01-28
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-01-28
Spill Record Last Update:	1994-02-01
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE "
Remarks:	"PORTABLE BOILER - WHEN LOADING/ AND EQUIP FAILURE - HAZMAT GOING OUT - K. TANG CALLED NO ANSWER, DEP WAS RESPONDED. NO SPILL - UNHAPPY LOCAL RESIDENT -"

Material:

Site ID:	97970
Operable Unit ID:	991297
Operable Unit:	01
Material ID:	388063
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9307641
Facility Type:	ER
DER Facility ID:	87212
Site ID:	97969
DEC Region:	2
Spill Date:	1993-09-23
Spill Number/Closed Date:	9307641 / 1994-01-07

SUN CHEMICAL CORP (Continued) **U003074282**

Spill Cause:	Other
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1993-09-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	1994-01-07
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1993-09-23
Spill Record Last Update:	2002-09-26
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE 10/10/95: This is additional information about material spilled from the translation of the old spill file: TANK REMOVAL."
Remarks:	"UNDERGR. FUEL OIL TANK. WILL EXCAV. - STOCKPILING - PULLING TANKS - MARK TIBBE REG 2 - CONTAC PERSON."

Material:

Site ID:	97969
Operable Unit ID:	986168
Operable Unit:	01
Material ID:	393895
Material Code:	0003A
Material Name:	#6 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9304205
Facility Type:	ER
DER Facility ID:	87212
Site ID:	175548
DEC Region:	2
Spill Date:	1993-07-02
Spill Number/Closed Date:	9304205 / 1994-01-07

SUN CHEMICAL CORP (Continued) **U003074282**

Spill Cause:	Housekeeping
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	MCTIBBE
Referred To:	Not reported
Reported to Dept:	1993-07-02
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	1994-01-07
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1993-07-02
Spill Record Last Update:	1994-01-12
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was TIBBE 10/10/95: This is additional information about material spilled from the translation of the old spill file: WEATHERED PRODUCT."
Remarks:	"DISCOVERED SOIL ON EXCAVATION FOR NEW CONCRETE PAD - EXCAVATION IS NOW COVERED WITH TARP - WOULD LIKE CALL BACK"

Material:

Site ID:	175548
Operable Unit ID:	985883
Operable Unit:	01
Material ID:	397719
Material Code:	0003A
Material Name:	#6 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	9204539
Facility Type:	ER
DER Facility ID:	87212
Site ID:	319918
DEC Region:	2
Spill Date:	1992-07-20
Spill Number/Closed Date:	9204539 / 1992-07-20

SUN CHEMICAL CORP (Continued) **U003074282**

Spill Cause:	Deliberate
Spill Class:	Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
SWIS:	4301
Investigator:	SIGONA
Referred To:	Not reported
Reported to Dept:	1992-07-20
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Citizen
Cleanup Ceased:	1992-07-20
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-07-27
Spill Record Last Update:	2005-11-29
Spiller Name:	Not reported
Spiller Company:	Not reported
Spiller Address:	Not reported
Spiller City,St,Zip:	***Update***, ZZ
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	""
Remarks:	"NYC DEP HAZ MAT NOTIFIED. REFERRED TO DEC AIR UNIT."

Material:

Site ID:	319918
Operable Unit ID:	968218
Operable Unit:	01
Material ID:	412249
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	-1.00
Units:	Not reported
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

Facility ID:	8709696
Facility Type:	ER
DER Facility ID:	87212
Site ID:	97968
DEC Region:	2
Spill Date:	1988-02-17
Spill Number/Closed Date:	8709696 / 1988-02-18
Spill Cause:	Equipment Failure
Spill Class:	Not reported

SUN CHEMICAL CORP (Continued) **U003074282**

SWIS:	4301
Investigator:	JCGRATHW
Referred To:	Not reported
Reported to Dept:	1988-02-17
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	1988-02-18
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1988-02-23
Spill Record Last Update:	2003-08-01
Spiller Name:	Not reported
Spiller Company:	SUN CHEMICAL CORPORATION
Spiller Address:	441 TOMPKINS AVENUE
Spiller City,St,Zip:	STATEN ISLAND, NY
Spiller Company:	001
Contact Name:	Not reported
Contact Phone:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was GRATHWOL "
Remarks:	"SPILL GREATER THAN 1,000 LBS./ PIPE FAILED OVERFLOW DIKE AREA FROM RAIN WATER ONTO BLACKTOP AND SOME TO SOIL ADJACENT TO BLACKTOP."

Material:

Site ID:	97968
Operable Unit ID:	915109
Operable Unit:	01
Material ID:	461490
Material Code:	0038E
Material Name:	white caustic
Case No.:	01310732
Material FA:	Hazardous Material
Quantity:	100.00
Units:	Pounds
Recovered:	.00
Resource Affected:	Not reported
Oxygenate:	Not reported

Tank Test:

NY MANIFEST:

Country:	USA
EPA ID:	NYD041972761
Facility Status:	Not reported
Location Address 1:	441 TOMPKINS AVENUE
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	STATEN ISLAND
Location State:	NY
Location Zip:	10305

SUN CHEMICAL CORP (Continued) **U003074282**

Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYD041972761
Mailing Name:	SUN CHEMICAL CORP
Mailing Contact:	BILL KRAFT
Mailing Address 1:	5020 SPRING GROVE AVE
Mailing Address 2:	Not reported
Mailing City:	CINCINNATI
Mailing State:	OH
Mailing Zip:	45232
Mailing Zip 4:	1988
Mailing Country:	USA
Mailing Phone:	7189811600

NY MANIFEST:

Document ID:	ARA1490269
Manifest Status:	Not reported
seq:	Not reported
Year:	2004
Trans1 State ID:	NJNYH3347
Trans2 State ID:	Not reported
Generator Ship Date:	08/03/2004
Trans1 Recv Date:	08/03/2004
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	08/07/2004
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	NJD986607380
Trans2 EPA ID:	Not reported
TSDF ID 1:	ARD981057
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D005 - BARIUM 100.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	01173
Units:	P - Pounds
Number of Containers:	001
Container Type:	CF - Fiber or plastic boxes, cartons
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

SUN CHEMICAL CORP (Continued) **U003074282**

Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00906
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Document ID:	ARA1521204
Manifest Status:	Not reported
seq:	Not reported
Year:	2004
Trans1 State ID:	JA334H778
Trans2 State ID:	Not reported
Generator Ship Date:	12/06/2004
Trans1 Recv Date:	12/06/2004
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	12/10/2004
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	NJD986607380
Trans2 EPA ID:	Not reported
TSDF ID 1:	ARD981057
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F003 - UNKNOWN
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00711
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Document ID:	NYG1914156
Manifest Status:	Not reported
seq:	Not reported

SUN CHEMICAL CORP (Continued) **U003074282**

Year:	2004
Trans1 State ID:	NYMA006
Trans2 State ID:	Not reported
Generator Ship Date:	01/26/2004
Trans1 Recv Date:	01/26/2004
Trans2 Recv Date:	01/27/2004
TSD Site Recv Date:	01/29/2004
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	MAD039322250
Trans2 EPA ID:	Not reported
TSDF ID 1:	OHD000816
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00930
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00
Document ID:	MDC0857395
Manifest Status:	Not reported
seq:	01
Year:	2000
Trans1 State ID:	Not reported
Trans2 State ID:	HWH00A276
Generator Ship Date:	07/31/2000
Trans1 Recv Date:	07/31/2000
Trans2 Recv Date:	08/01/2000
TSD Site Recv Date:	08/04/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	SCR000074591
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported

SUN CHEMICAL CORP (Continued) **U003074282**

Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	B007 - OTHER MISCELLANEOUS PCB WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00075
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00
Waste Code:	F003 - UNKNOWN
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	01300
Units:	P - Pounds
Number of Containers:	004
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Document ID:	MDC0857404
Manifest Status:	Not reported
seq:	01
Year:	2000
Trans1 State ID:	Not reported
Trans2 State ID:	HWH16700A
Generator Ship Date:	06/26/2000
Trans1 Recv Date:	06/26/2000
Trans2 Recv Date:	06/26/2000
TSD Site Recv Date:	06/27/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	NJD054126164
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported

SUN CHEMICAL CORP (Continued) **U003074282**

Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	B007 - OTHER MISCELLANEOUS PCB WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00250
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00

Document ID:	MDC0857455
Manifest Status:	Not reported
seq:	01
Year:	2000
Trans1 State ID:	HWH32300A
Trans2 State ID:	Not reported
Generator Ship Date:	05/16/2000
Trans1 Recv Date:	05/16/2000
Trans2 Recv Date:	05/19/2000
TSD Site Recv Date:	05/19/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	NJD054126164
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00030
Units:	P - Pounds

SUN CHEMICAL CORP (Continued) **U003074282**

Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Document ID:	MDC0857455
Manifest Status:	Not reported
seq:	02
Year:	2000
Trans1 State ID:	HWH32300A
Trans2 State ID:	Not reported
Generator Ship Date:	05/16/2000
Trans1 Recv Date:	05/16/2000
Trans2 Recv Date:	05/19/2000
TSD Site Recv Date:	05/19/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	NJD054126164
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported

SUN CHEMICAL CORP (Continued) **U003074282**

Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	U353 - 4-AMINO-1-METHYLBENZENE P-TOLUDINE
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D008 - LEAD 5.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D005 - BARIUM 100.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00300
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Document ID:	MDC0857455

SUN CHEMICAL CORP (Continued) **U003074282**

Manifest Status:	Not reported
seq:	03
Year:	2000
Trans1 State ID:	HWH32300A
Trans2 State ID:	Not reported
Generator Ship Date:	05/16/2000
Trans1 Recv Date:	05/16/2000
Trans2 Recv Date:	05/19/2000
TSD Site Recv Date:	05/19/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	NJD054126164
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F003 - UNKNOWN
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00900
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	F003 - UNKNOWN
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00175
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	U170 - P-NITROPHENOL
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00030

SUN CHEMICAL CORP (Continued) **U003074282**

Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Document ID:	MDC0857476
Manifest Status:	Not reported
seq:	01
Year:	2000
Trans1 State ID:	Not reported
Trans2 State ID:	HWH41900A
Generator Ship Date:	06/08/2000
Trans1 Recv Date:	06/08/2000
Trans2 Recv Date:	06/14/2000
TSD Site Recv Date:	06/15/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	NYD980769947
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	F003 - UNKNOWN
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00150
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.

SUN CHEMICAL CORP (Continued) **U003074282**

Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00750
Units:	P - Pounds
Number of Containers:	005
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	F003 - UNKNOWN
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00150
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Document ID:	MDC0857476
Manifest Status:	Not reported
seq:	02
Year:	2000
Trans1 State ID:	Not reported
Trans2 State ID:	HWH41900A
Generator Ship Date:	06/08/2000
Trans1 Recv Date:	06/08/2000
Trans2 Recv Date:	06/14/2000
TSD Site Recv Date:	06/15/2000
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYD041972761
Trans1 EPA ID:	SCR000074591
Trans2 EPA ID:	NYD980769947
TSDF ID 1:	MDD980554653
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported

SUN CHEMICAL CORP (Continued) **U003074282**

Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	P077 - P-NITROANILINE
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00002
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00050
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00
Waste Code:	P015 - BERYLLIUM DUST
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Click this hyperlink while viewing on your computer to access
456 additional NY_MANIFEST: record(s) in the EDR Site Report.

147
North
1/2-1
0.914 mi.
4824 ft.

NARROWS METERING AND REGULATING FACILITY
41 WYMAN PLACE
STATEN ISLAND, NY 10305

NY VCP **S113922079**
N/A

Relative:
Lower

Actual:
37 ft.

VCP:

Program Type:	VCP
Site Code:	57065
HW Code:	V00513
Site Class:	N
SWIS:	4301
Region:	2
Town:	New York City
Acres:	0.5
Date Record Added:	10/31/2001
Date Record Updated:	05/15/2002
Updated By:	REEVANS
Site Description:	The site is a 1/2 acre natural gas measuring and regulation station located in a residential neighborhood in northeast Staten Island, approx. one block from the Upper New York Bay. Past activities have resulted in a release of mercury onto site soils and there is a possibility of SVOC, PAH,and PCB contamination. The cause of the mercury release is thought to be breakage and maintenance of pressure measuring devices known as manometers. The site has been owned and operated by the volunteer as a natural gas metering facility for 49 years, and it is their intent to continue to operate it as such following remediation.
Env Problem:	Not reported
Health Problem:	Not reported
Dump:	Not reported
Structure:	Not reported
Lagoon:	Not reported
Landfill:	Not reported
Pond:	Not reported
Disp Start:	Not reported
Disp Term:	Not reported
Lat/Long:	Not reported
Dell:	Not reported
Record Add:	Not reported
Record Upd:	Not reported
Updated By:	Not reported
Own Op:	Owner
Sub Type:	ZZZ
Owner Name:	Not reported
Owner Company:	TRANSCONTINENTAL GAS PIPE LINE CORP.
Owner Address:	2800 POST OAK BLVD. P.O.BOX 1396
Owner Addr2:	Not reported
Owner City,St,Zip:	HOUSTON, TX 77251-1396
Owner Country:	United States of America
Own Op:	Applicant/Requestor
Sub Type:	03
Owner Name:	Not reported
Owner Company:	TRANSCONTINENTAL GAS PIPE LINE CORP.
Owner Address:	2800 POST OAK BLVD. P.O.BOX 1396
Owner Addr2:	Not reported
Owner City,St,Zip:	HOUSTON, TX 77251-1396
Owner Country:	United States of America
HW Code:	Not reported

NARROWS METERING AND REGULATING FACILITY (Continued) **S113922079**

Waste Type:	Not reported
Waste Quantity:	Not reported
Waste Code:	Not reported
Crossref ID:	Not reported
Cross Ref Type Code:	Not reported
Cross Ref Type:	Not reported
Record Added Date:	Not reported
Record Updated:	Not reported
Updated By:	Not reported

Count: 6 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
STATEN ISLAND	S106703854	OUTER BRIDGE CROSSING	ARTHUR KILL ROAD		NY LTANKS
STATEN ISLAND	S106971343	NYC DEP FACILITY	MAYFLOWER AVE & ARTHUR KILL		NY LTANKS
STATEN ISLAND	S105135023	SPILL NUMBER 0104248	NEW YORK HARBOR		NY LTANKS
STATEN ISLAND	S111836583	ARDEN WOODS ESTATES INC.	NORTH OF MOSELY AVENUE BTWN AR		NY VAPOR REOPENED
STATEN ISLAND	1007444985	BROOKFIELD LANDFILL	OFF ARTHUR KILL ROAD		ODI
STATEN ISLAND	S103238968	STAPLETON ANCHORAGE	UPPER NEW YORK BAY		NY LTANKS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/10/2016
Date Data Arrived at EDR: 10/20/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 78

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/10/2016
Date Data Arrived at EDR: 10/20/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 78

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/13/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Annually

VAPOR REOPENED: Vapor Intrustion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 06/01/2016
Date Data Arrived at EDR: 08/19/2016
Date Made Active in Reports: 01/05/2017
Number of Days to Update: 139

Source: Department of Environmenal Conservation
Telephone: 518-402-9814
Last EDR Contact: 02/17/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/10/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-457-2051
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/24/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/06/2017
Date Made Active in Reports: 02/08/2017
Number of Days to Update: 2

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 10/24/2005
Next Scheduled EDR Contact: 01/23/2006
Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: No Update Planned

CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/26/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/24/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Semi-Annually

TANKS: Storage Tank Faciliy Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 47

Source: Department of Environmental Conservation
Telephone: 518-402-9543
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

RES DECL: Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/18/2010
Date Data Arrived at EDR: 06/30/2014
Date Made Active in Reports: 07/21/2014
Number of Days to Update: 21

Source: NYC Department of City Planning
Telephone: 212-720-3401
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Varies

ENV RES DECL: Environmental Restrictive Declarations

The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 11/23/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 54

Source: New York City Department of City Planning
Telephone: 212-720-3300
Last EDR Contact: 03/23/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Varies

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/05/2017
Number of Days to Update: 50

Source: Department of Environmental Conservation
Telephone: 518-402-9711
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Semi-Annually

ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a $200 million Environmental Restoration or Brownfields Fund as part of the $1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/10/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8705
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

SWTIRE: Registered Waste Tire Storage & Facility List

A listing of facilities registered to accept waste tires.

Date of Government Version: 08/01/2006
Date Data Arrived at EDR: 11/15/2006
Date Made Active in Reports: 11/30/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8694
Last EDR Contact: 03/17/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/16/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Annually

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 12/05/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 67

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: Varies

HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 12/29/2016
Date Data Arrived at EDR: 12/30/2016
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 45

Source: Office of the State Comptroller
Telephone: 518-474-9034
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/24/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/06/2017
Date Made Active in Reports: 02/08/2017
Number of Days to Update: 2

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 02/06/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Varies

HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/11/2016
Date Data Arrived at EDR: 11/16/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/15/2017
Next Scheduled EDR Contact: 05/29/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/10/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/13/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/10/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/17/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/17/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/29/2016
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/06/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/01/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/22/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 02/03/2017
Next Scheduled EDR Contact: 05/22/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/21/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/03/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/03/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 65

Source: EPA
Telephone: (212) 637-3000
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 01/20/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Varies

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 11/09/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/04/2017
Number of Days to Update: 47

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/10/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 31

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 10/27/2016
Date Data Arrived at EDR: 01/10/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 31

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

E DESIGNATION: E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 11/08/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 48

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 40

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/01/2015
Date Data Arrived at EDR: 12/29/2015
Date Made Active in Reports: 02/11/2016
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-8712
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003
Date Data Arrived at EDR: 10/20/2006
Date Made Active in Reports: 11/30/2006
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-9564
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/01/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Annually

SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 02/22/2017
Number of Days to Update: 19

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 01/23/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: No Update Planned

UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 12/08/2016
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 67

Source: Department of Environmental Conservation
Telephone: 518-402-8056
Last EDR Contact: 03/08/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/11/2016
Date Data Arrived at EDR: 12/20/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 73

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/22/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

CORTLAND COUNTY:

Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 11/25/2016
Date Data Arrived at EDR: 12/02/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 70

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 11/25/2016
Date Data Arrived at EDR: 12/02/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 70

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Quarterly

NASSAU COUNTY:

Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 35

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: No Update Planned

Storage Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 03/29/2011
Number of Days to Update: 34
Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Registered Tank Database in Nassau County
A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 35
Source: Nassau County Department of Health
Telephone: 516-227-9691
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

Registered Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 35
Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: No Update Planned

Storage Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 03/29/2011
Number of Days to Update: 34
Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

ROCKLAND COUNTY:

Petroleum Bulk Storage Database
A listing of aboveground storage tank sites located in Rockland County.

Date of Government Version: 12/20/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 51
Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

Petroleum Bulk Storage Database
A listing of underground storage tank sites located in Rockland County.

Date of Government Version: 12/20/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 51
Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

SUFFOLK COUNTY:

Storage Tank Database
A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/23/2015
Number of Days to Update: 13
Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: No Update Planned

Storage Tank Database
A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/23/2015
Number of Days to Update: 13
Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 01/30/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

Listing of Storage Tanks
A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 26
Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 01/18/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

Listing of Storage Tanks
A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 26
Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 01/18/2017
Next Scheduled EDR Contact: 05/08/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 01/03/2017
Number of Days to Update: 96

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/12/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/21/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/06/2017
Number of Days to Update: 49

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 01/17/2017
Next Scheduled EDR Contact: 05/01/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers
Source: Department of Health
Telephone: 212-676-2444

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ST JOHN VILLA
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

TARGET PROPERTY COORDINATES

Latitude (North):	40.60164 - 40° 36' 5.90''
Longitude (West):	74.067845 - 74° 4' 4.24''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	578868.4
UTM Y (Meters):	4494743.0
Elevation:	137 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5939335 THE NARROWS, NY
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

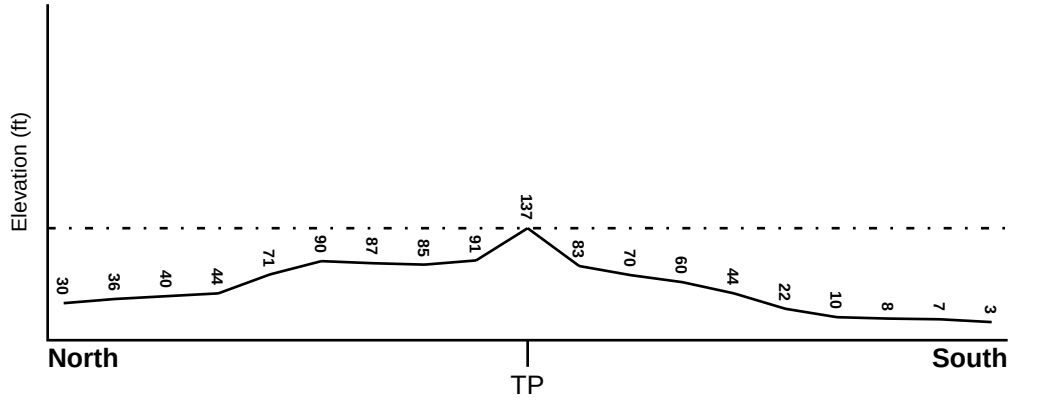
TOPOGRAPHIC INFORMATION

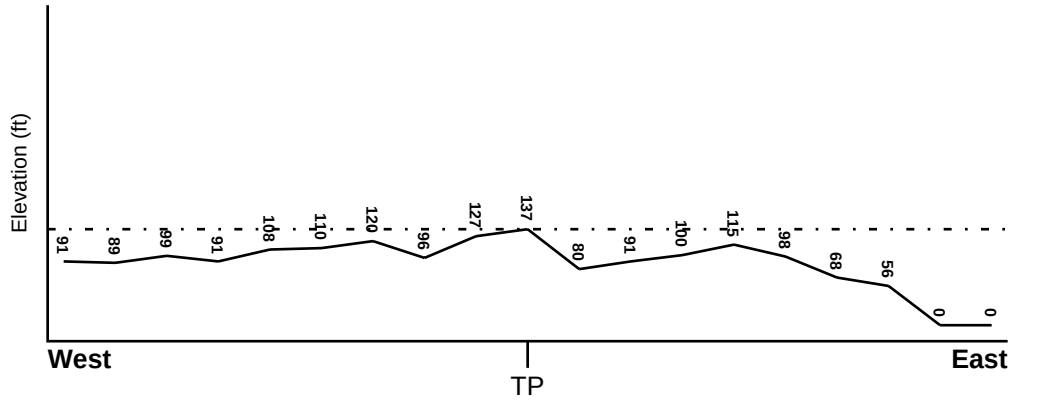
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 137 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
3604970327F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
3604970331F	FEMA FIRM Flood data
3604970329F	FEMA FIRM Flood data
3604970333F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
THE NARROWS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Mesozoic
System:	Cretaceous
Series:	Upper Cretaceous
Code:	uK *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BERNARDSTON
Soil Surface Texture:	gravelly - silt loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	gravelly - silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
2	6 inches	20 inches	channery - silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
3	20 inches	65 inches	channery - silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.20 Min: 0.06	Max: 6.00 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: channery - silt loam
very stony - silt loam
silt loam
unweathered bedrock

Surficial Soil Types: channery - silt loam
very stony - silt loam
silt loam
unweathered bedrock

Shallow Soil Types: channery - fine sandy loam
very channery - silt loam

Deeper Soil Types: channery - loam
unweathered bedrock
loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000826076	1/4 - 1/2 Mile WNW
2	USGS40000826117	1/2 - 1 Mile NNE
3	USGS40000826094	1/2 - 1 Mile NE
A4	USGS40000826131	1/2 - 1 Mile North
A5	USGS40000826133	1/2 - 1 Mile North
6	USGS40000826103	1/2 - 1 Mile NE
7	USGS40000826072	1/2 - 1 Mile West
8	USGS40000826139	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

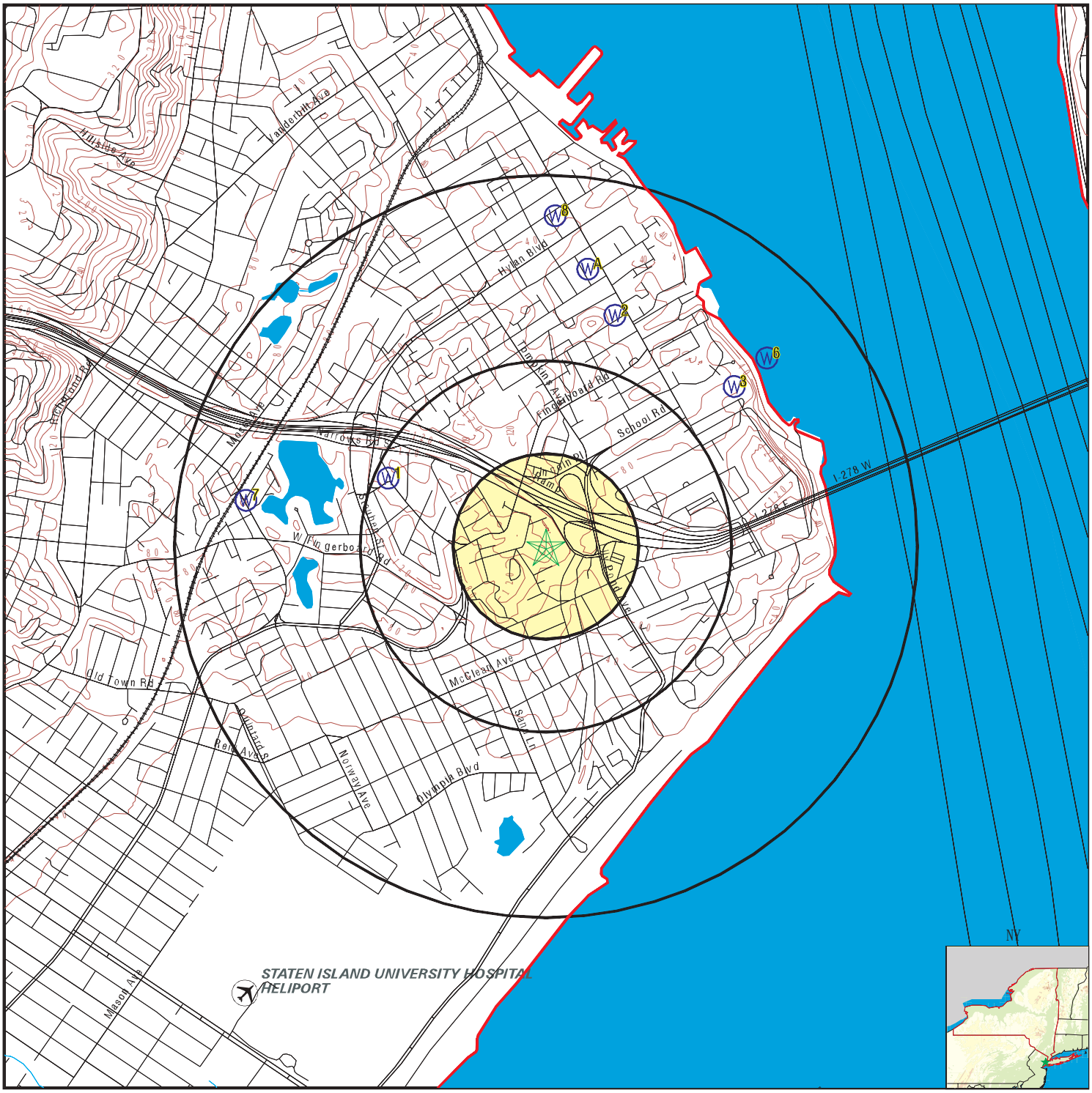
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4908989.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	St John Villa	CLIENT:	AKRF, Inc.
ADDRESS:	57-61 Cleveland Place Staten Island NY 10305	CONTACT:	Elizabeth Patricia Matamoros
LAT/LONG:	40.60164 / 74.067845	INQUIRY #:	4908989.2s
		DATE:	April 17, 2017 8:30 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
WNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000826076**

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403615074043301		
Monloc name:	R 124. 1		
Monloc type:	Well		
Monloc desc:	Olga Place and Hylan Blvd., S.I., N.Y		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6043056
Longitude:	-74.0759167	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from Digital Map		
Horiz coord refsys:	NAD83	Vert measure val:	137
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Reported		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Northern Atlantic Coastal Plain aquifer system		
Formation type:	Harbor Hill Ground Moraine		
Aquifer type:	Not Reported		
Construction date:	20040622	Welldepth:	89.5
Welldepth units:	ft	Wellholedepth:	90
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

2
NNE
1/2 - 1 Mile
Lower

FED USGS **USGS40000826117**

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403638074035301		
Monloc name:	R 95. 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6106599
Longitude:	-74.0643076	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	35.0
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	68
Welldepth units:	ft	Wellholedepth:	68
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

3
NE **FED USGS** **USGS40000826094**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403628074033101		
Monloc name:	R 98. 1		
Monloc type:	Well: Test hole not completed as a well		
Monloc desc:	Not Reported		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6078822
Longitude:	-74.0581963	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	55.0
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	143
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A4
North **FED USGS** **USGS40000826131**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403643074035701		
Monloc name:	R 94. 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6120487
Longitude:	-74.0654188	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.0
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	59
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A5
North **FED USGS** **USGS40000826133**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403646074035901		
Monloc name:	R 93. 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6128821
Longitude:	-74.0659743	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.0
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	52
Welldepth units:	ft	Wellholedepth:	52
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

6
NE **FED USGS** **USGS40000826103**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403632074032501		
Monloc name:	R 99. 1		
Monloc type:	Well		
Monloc desc:	PLOTS CORRECTLY IN RIVER		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6089933
Longitude:	-74.0565296	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	114
Welldepth units:	ft	Wellholedepth:	114
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

7
West **FED USGS** **USGS40000826072**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403612074050101		
Monloc name:	R 101		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6034377
Longitude:	-74.083197	Sourcemap scale:	24000
Horiz Acc measure:	3	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	100
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	150
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

8
North **FED USGS** **USGS40000826139**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-NY		
Formal name:	USGS New York Water Science Center		
Monloc Identifier:	USGS-403652074040401		
Monloc name:	R 91. 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02030104	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.6145487
Longitude:	-74.0673633	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.0
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Pleistocene Series		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	40
Welldepth units:	ft	Wellholedepth:	40
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for RICHMOND County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RICHMOND COUNTY, NY

Number of sites tested: 61

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.670 pCi/L	98%	2%	0%
Basement	1.250 pCi/L	84%	15%	2%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

New York Public Water Wells
Source: New York Department of Health
Telephone: 518-458-6731

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database
Department of Environmental Conservation
Telephone: 518-402-8072
These files contain records, in the database, of wells that have been drilled.

RADON

State Database: NY Radon
Source: Department of Health
Telephone: 518-402-7556
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX J

PRIOR REPORTS/SUPPORTING DOCUMENTATION

St John Villa
57-61 Cleveland Place
Staten Island, NY 10305

Inquiry Number: 4908989.8
April 17, 2017

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILD FAX PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of AKRF, Inc. on Apr 17, 2017.

TARGET PROPERTY

57-61 Cleveland Place
Staten Island, NY 10305

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

P//New York City, NY

Year	*Source*	*TP*	*Adjoining*
2017	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2016	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2015	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2014	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2013	New York City, Department of Buildings	X	
2012	New York City, Department of Buildings	X	
2011	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2010	New York City, Department of Buildings	X	
2009	New York City, Department of Buildings		X
2008	New York City, Department of Buildings		X
2007	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2006	New York City, Department of Buildings		X
2005	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2004	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2003	New York City, Department of Buildings		X
2002	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
2001	New York City, Department of Buildings		X
2000	New York City, Department of Buildings		X
1999	New York City, Department of Buildings		X

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1999	New York City, Department of Buildings	X	
1998	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
1997	New York City, Department of Buildings		X
1996	New York City, Department of Buildings		X
1995	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
1994	New York City, Department of Buildings		X
1993	New York City, Department of Buildings		X
1992	New York City, Department of Buildings		X
1991	New York City, Department of Buildings		X
1990	New York City, Department of Buildings		X
1989	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
1988	New York City, Department of Buildings	X	
1987	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
1986	New York City, Department of Buildings		X
	New York City, Department of Buildings	X	
1985	New York City, Department of Buildings		X
1984	New York City, Department of Buildings		X
1983	New York City, Department of Buildings		
1982	New York City, Department of Buildings		
1981	New York City, Department of Buildings		
1980	New York City, Department of Buildings		
1979	New York City, Department of Buildings		X
1978	New York City, Department of Buildings		
1977	New York City, Department of Buildings		
1976	New York City, Department of Buildings		
1975	New York City, Department of Buildings		
1974	New York City, Department of Buildings		
1973	New York City, Department of Buildings		
1972	New York City, Department of Buildings		
1971	New York City, Department of Buildings		

BUILDING DEPARTMENT RECORDS SEARCHED

Name: P//New York City, NY
Years: 1971-2017
Source: New York City, Department of Buildings, New York City, NY
Phone: (212) 566-5000

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

57-61 Cleveland Place
Staten Island, NY 10305

57 CLEVELAND PL

Date:	**2/27/2017**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 3 - ANTENNA REPLACEMENT OF EXISTING TELECOMMUNICATION ANTENNAS AND RELATED RRH UNITS ON ROOF.RETROFIT EXISTING CABINET IN THE EXISTING EQUIPMENT SHELTER ON GRADE. ALL WORK IN COMPLIANCE WITH TPPN 5/98. NO CHANGE TO OCCUPANCY, USE, OR EGRESS.**
Permit Description:	**ALTERATION**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	
Permit Number:	520283568-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THOMAS E SMITH

Date:	**3/28/2016**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 3 - ANTENNA REPLACEMENT OF EXISTING TELECOMMUNICATIONS ANTENNA WITH INSTALLATION OF RELATED RRH UNIT ON ROOF. RETROFIT OF EXISTING CABINET IN EXISTING TELECOMMUNICATIONS COMPOUND ON GRADE. ALL WORK IN COMPLIANCE WITH TPPN 5/98. NO CHANGE TO OCCUPANCY, USE, OR EGRESS.**
Permit Description:	**ALTERATION**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	
Permit Number:	520265445-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THOMAS E SMITH

TARGET PROPERTY FINDINGS

Date:	**9/24/2015**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	CLOSED
Proposed Use:	
Permit Number:	R145797
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/29/2014**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR. INSTALL NEW NON-BEARING PARTITIONS AND TW0(2) DOORS. NO CHANGE IN OCCUPANCY ,USE OR EGRESS. ALL AS PER PLANS HEREWITH FILED**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520216588-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

TARGET PROPERTY FINDINGS

Date:	**11/17/2014**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **INSTALL NEW WATER BOOSTER PUMP IN SUB-CELLAR OF THE EXISTING BUILDING.NO CHANGE** **IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH SUBMITTED**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520213180-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RICHARD MANTELLO

Date:	**11/5/2014**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR.** **REPLACE EXISTING WINDOWS AND EXTERIOR DOORS, FACADE REPAIR. INSTALL NEW ROOFING** **NO CHANGE IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH SUBMITTED**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520211690-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

TARGET PROPERTY FINDINGS

Date:	**5/6/2014**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 3 - CONSTRUCTION EQUIPMENT - SIDEWALK-SHED PROPOSED INSTALLATION OF 400 LINEAR FEET OF HEAVY DUTY SIDEWALK SHED FOR REMEDIAL REPAIRS. SIDEWALK SHED SHALL COMPLY WITH LL 33/91 & TPPN 9/1999. NO CHANGE IN USE, OCCUPANCY OR EGRESS UNDER THIS APPLICATION. LIVE LOAD 300 PSF.**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	SIDEWALK SHED
Permit Number:	510013619-01-EQ-SH
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	IRRAIN REDZA

Date:	**7/12/2013**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE BOILER AND GAS BURNER**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	520146173-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL A MANISCOLCO

TARGET PROPERTY FINDINGS

Date:	**7/12/2013**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REPLACE BOILER AND GAS BURNER**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520146173-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL A MANISCOLCO

Date:	**7/19/2012**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR.** **CONVERT EXISTING CLASSROOMS TO ADMINISTRATIVE OFFICES.ALL AS PER PLANS HEREWITH** **SUBMITTED . NO CHANGE TO USE ,EGRESS OR OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520106046-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

TARGET PROPERTY FINDINGS

Date:	**7/18/2012**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REMOVE EXISTING TOILET FIXTURES AND REPLACE WITH NEW. CREATE NEW STAFF** **TOILET.INSTALL NEW TILE . NO CHANGE IN USE, OCCUPANCY OR EGRESS ALL AS PER PLANS** **HEREWITH SUBMITTED.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520103931-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RICHARD MANTELLO

Date:	**7/2/2012**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **INSTALL BACKFLOW PREVENTION DEVICE AT THE ABOVE LOCATION. NO CHANGE IN USE,** **OCCUPANCY OR EGRESS. ALL HAS PER PLANS HEREWITH FILED**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520103922-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LOUIS J BUTTERMARK

TARGET PROPERTY FINDINGS

Date:	**6/26/2012**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE BOILER AND REINSTALL OIL BURNER (NYC BOILER NO. 82207-03). THIS APPLICATION IS FILED IN CONJUNCTION WITH LAA NO. 510087095.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	520104404-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	VINCENT SICILIANO

Date:	**6/26/2012**
Permit Type:	**EW**
Description:	
Permit Description:	**EQUIPMENT WORK**
Work Class:	
Proposed Use:	FUEL BURNING
Permit Number:	520104404-01-EW-FB
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**6/21/2012**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR. REMOVE EXISTING TOILET FIXTURES AND REPLACE WITH NEW. CREATE NEW STAFF TOILET.INSTALL NEW TILE . NO CHANGE IN USE, OCCUPANCY OR EGRESS ALL AS PER PLANS HEREWITH SUBMITTED.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520103931-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

Date:	**11/11/2011**
Permit Type:	
Description:	
Permit Description:	**ELECTRICAL**
Work Class:	
Proposed Use:	
Permit Number:	R129740
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WALSH ELEC'L CONTR'G, INC KEVIN WALSH

TARGET PROPERTY FINDINGS

Date:	**8/24/2011**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 3 - ANTENNA INSTALLATION OF ADDITIONAL TELECOMMUNICATIONS CABINET ON EXISTING CONCRETE PAD ON GRADE. INSTALLATION OF RELATED ANTENNAS ON ROOF. INITIAL INSTALLATION APPRO VED UNDER APPLICATION #500350345 ALL WORK IN COMPLIANCE WITH TPPN 5/98. NO CHANGE TO OCCUPANCY, USE, OR EGRESS.**
Permit Description:	**ALTERATION**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	
Permit Number:	520070324-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL FATTAL

Date:	**6/24/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FACADE REPAIR REPLACE EXISTING WINDOWS AND EXTERIOR DOORS, REPLACE SKYLIGHTS. INSTALL NEW RO OFING, MASONRY RESTORATION, NOCHANGE IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH FILED.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520039798-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

TARGET PROPERTY FINDINGS

Date:	**6/24/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - STRUCTURAL REPAIR EXISTING MASONRY FACIA AND PARAPET, REPLACE EXISTING LINTALS, ALL AS PER PLANS HEREWITH SUBMITTED. NO CHANGE IN USE, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520039798-02-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

Date:	**6/18/2010**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 3 - CONSTRUCTION EQUIPMENT - SCAFFOLD INSTALLATION OF SCAFFOLD STAIR TOWER AS PER DRAWINGS. SCAFFOLD STAIR TOWER SHALL COMPLY WITH CHAPTER #33 OF THE 2008 CODE. NO CHANGE IN USE, OCCUPANCY OR EGRESS UNDER THIS APPLICATION.**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	SCAFFOLD
Permit Number:	520039823-01-EQ-SF
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN BRION

TARGET PROPERTY FINDINGS

Date:	**5/10/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GC REPLACE EXISTING WINDOWS AND EXTERIOR DOORS, REPLACE SKYLIGHTS. INSTALL NEW RO OFING. NO CHANGE IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH FILED**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520002639-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

Date:	**5/10/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - STRUCTURAL REPAIR EXISTING MASONRY FACIA AND PARAPET, REPLACE EXISTING LINTALS, ALL AS PE R PLANS HEREWITH SUBMITTED. NO CHANGE IN USE, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520002639-02-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

TARGET PROPERTY FINDINGS

Date: **8/21/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R119122
Status: AWAITING INSPECTION REQUEST
Valuation: $0.00
Contractor Company:
Contractor Name: MARI ELEC. CONTR'S INC. JOHN MARI, JR.

Date: **7/20/2005**
Permit Type: **EW**
Description: **ALTERATION TYPE 2 - BOILER**
REPLACE BOILER AND OIL BURNER. NO CHANGE IN EGRESS, OCCUPANCY OR USE UND
ER THIS APPLICATION.

Permit Description: **EQUIPMENT WORK**
Work Class: A2 - ALTERATION TYPE 2
Proposed Use: BOILER
Permit Number: 500787197-01-EW-BL
Status: ISSUED
Valuation: $0.00
Contractor Company:
Contractor Name: KENNETH REED

Date: **7/20/2005**
Permit Type: **EW**
Description:

Permit Description: **EQUIPMENT WORK**
Work Class:
Proposed Use: FUEL BURNING
Permit Number: 500787197-01-EW-FB
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date:	**2/15/2005**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER** **REPLACE BOILER AND OIL BURNER. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER** **THIS APPLICATION.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	500737580-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KENNETH REED

Date:	**2/15/2005**
Permit Type:	**EW**
Description:	
Permit Description:	**EQUIPMENT WORK**
Work Class:	
Proposed Use:	FUEL BURNING
Permit Number:	500737580-01-EW-FB
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**1/22/2005**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R109132
Status:	CLOSED/CANCELLED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SURE ELEC'L CONTR'G CORP. MICHAEL DISCENZA

TARGET PROPERTY FINDINGS

Date:	**9/27/2004**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R106740
Status:	AWAITING INSPECTION REQUEST
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WINKLER ELECTRICIANS INC. RUDOLPH WINKLER

Date:	**1/30/2002**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FIRE SUPPRESSION** **INSTALL FIRE SUPPRESSION SSYSTEM ONLY. NO CHANGE IN USE, EGRESS OR OCC** **UPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	FIRE SUPPRESSION
Permit Number:	500515980-01-EW-FP
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JAMES MEYER

TARGET PROPERTY FINDINGS

Date:	**1/17/2002**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION INSTALL ADDITIONAL CABINETS ON GRADE.ADD NEW ANTENNA ON ROOF. ALL WORK IN COMPLIANCE WITH TPPN#5/98. INITIAL -- WORK APPROVED UNDER APPL.# 500350345. N CHANGE IN USE, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500513125-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GEROGE FIGLIOLIA

Date:	**5/26/1999**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION PROPOSED INSTALLATION OF AN UNMANNED --- TELECOMMUNICATIONS EQUIPMENT - CABINET AT GRADE LEVEL WITH AN ANTENNA - AND CABLE ON ROOF (NON-PENETRATED). -- THERE IS NO CHANGE IN USE, EGRESS OR --- OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500350345-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT HOGOPIAN

TARGET PROPERTY FINDINGS

Date:	**9/4/1998**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REFURBISH 2 EXISTING SCIENCE CLASSROOMS AND 1 PREPROOM.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	500277755-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CARMINE SPRIO

Date:	**8/13/1998**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION** **REFURBISH 2 EXISTING SCIENCE CLASSROOMS AND 1 PREPROOM.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500277755-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AARON J KEMBLE

TARGET PROPERTY FINDINGS

Date:	**8/6/1998**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION ELEMENTARY SCHOOL FIRST & SECOND FLOORS: REARRANGE AND RELOCATE --NONBEA RING PARTITIONS: REMOVE & REARRANGE AND ADD TOILET FIXTURES TO COMPLY WITH A.D. NO CHANGE TO OCCUPANCY, ZONING, EGRESS OF THE EXISTING CERTIFICATE OF OCCUPANCY**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500275766-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETER GARGIULO

Date:	**8/6/1998**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2 ELEMENTARY SCHOOL FIRST & SECOND FLOORS: REARRANGE AND RELOCATE --NONBEA RING PARTITIONS: REMOVE & REARRANGE AND ADD TOILET FIXTURES TO COMPLY WITH A.D. NO CHANGE TO OCCUPANCY, ZONING, EGRESS OF THE EXISTING CERTIFICATE OF OCCUPANCY**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	500275766-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT MULHOLLAND

TARGET PROPERTY FINDINGS

Date:	**10/10/1995**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE TWO BOILERS, TWO OIL BURNERS AND CHANGE GRADE OF FUEL OIL FROM #4 TO #2. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER THIS APPLICATION.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	500164859-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HERBERT STOLLERMAN

Date:	**10/10/1995**
Permit Type:	**EW**
Description:	
Permit Description:	**EQUIPMENT WORK**
Work Class:	
Proposed Use:	FUEL BURNING
Permit Number:	500164859-01-EW-FB
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**10/10/1995**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FUEL STORAGE REPLACE TWO BOILERS, TWO OIL BURNERS AND CHANGE GRADE OF FUEL OIL FROM #4 TO #2. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER THIS APPLICATION.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	FUEL STORAGE
Permit Number:	500164859-01-EW-FS
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HERBERT STOLLERMAN

Date:	**7/7/1989**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R018448
Status:	CLOSED/CANCELLED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

Date:	**4/27/1988**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R012555
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

TARGET PROPERTY FINDINGS

Date: **1/22/1987**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R005545
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: BERNARD PASQUALE, INC. B PASQUALE

Date: **1/15/1987**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R005435
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

Date: **9/22/1986**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R003610
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

TARGET PROPERTY FINDINGS

57-61 CLEVELAND PLACE

Date:	**2/27/2017**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 3 - ANTENNA REPLACEMENT OF EXISTING TELECOMMUNICATION ANTENNAS AND RELATED RRH UNITS ON ROOF.RETROFIT EXISTING CABINET IN THE EXISTING EQUIPMENT SHELTER ON GRADE. ALL WORK IN COMPLIANCE WITH TPPN 5/98. NO CHANGE TO OCCUPANCY, USE, OR EGRESS.**
Permit Description:	**ALTERATION**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	
Permit Number:	520283568-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THOMAS E SMITH

Date:	**3/28/2016**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 3 - ANTENNA REPLACEMENT OF EXISTING TELECOMMUNICATIONS ANTENNA WITH INSTALLATION OF RELATED RRH UNIT ON ROOF. RETROFIT OF EXISTING CABINET IN EXISTING TELECOMMUNICATIONS COMPOUND ON GRADE. ALL WORK IN COMPLIANCE WITH TPPN 5/98. NO CHANGE TO OCCUPANCY, USE, OR EGRESS.**
Permit Description:	**ALTERATION**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	
Permit Number:	520265445-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THOMAS E SMITH

TARGET PROPERTY FINDINGS

Date:	**9/24/2015**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	CLOSED
Proposed Use:	
Permit Number:	R145797
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**12/29/2014**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR. INSTALL NEW NON-BEARING PARTITIONS AND TW0(2) DOORS. NO CHANGE IN OCCUPANCY ,USE OR EGRESS. ALL AS PER PLANS HEREWITH FILED**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520216588-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

TARGET PROPERTY FINDINGS

Date:	**11/17/2014**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **INSTALL NEW WATER BOOSTER PUMP IN SUB-CELLAR OF THE EXISTING BUILDING.NO CHANGE** **IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH SUBMITTED**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520213180-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RICHARD MANTELLO

Date:	**11/5/2014**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR.** **REPLACE EXISTING WINDOWS AND EXTERIOR DOORS, FACADE REPAIR. INSTALL NEW ROOFING** **NO CHANGE IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH SUBMITTED**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520211690-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

TARGET PROPERTY FINDINGS

Date:	**5/6/2014**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 3 - CONSTRUCTION EQUIPMENT - SIDEWALK-SHED PROPOSED INSTALLATION OF 400 LINEAR FEET OF HEAVY DUTY SIDEWALK SHED FOR REMEDIAL REPAIRS. SIDEWALK SHED SHALL COMPLY WITH LL 33/91 & TPPN 9/1999. NO CHANGE IN USE, OCCUPANCY OR EGRESS UNDER THIS APPLICATION. LIVE LOAD 300 PSF.**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	SIDEWALK SHED
Permit Number:	510013619-01-EQ-SH
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	IRRAIN REDZA

Date:	**7/12/2013**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE BOILER AND GAS BURNER**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	520146173-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL A MANISCOLCO

TARGET PROPERTY FINDINGS

Date:	**7/12/2013**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REPLACE BOILER AND GAS BURNER**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520146173-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL A MANISCOLCO

Date:	**7/19/2012**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR.** **CONVERT EXISTING CLASSROOMS TO ADMINISTRATIVE OFFICES.ALL AS PER PLANS HEREWITH** **SUBMITTED . NO CHANGE TO USE ,EGRESS OR OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520106046-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

TARGET PROPERTY FINDINGS

Date:	**7/18/2012**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REMOVE EXISTING TOILET FIXTURES AND REPLACE WITH NEW. CREATE NEW STAFF** **TOILET.INSTALL NEW TILE . NO CHANGE IN USE, OCCUPANCY OR EGRESS ALL AS PER PLANS** **HEREWITH SUBMITTED.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520103931-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RICHARD MANTELLO

Date:	**7/2/2012**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **INSTALL BACKFLOW PREVENTION DEVICE AT THE ABOVE LOCATION. NO CHANGE IN USE,** **OCCUPANCY OR EGRESS. ALL HAS PER PLANS HEREWITH FILED**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520103922-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LOUIS J BUTTERMARK

TARGET PROPERTY FINDINGS

Date:	**6/26/2012**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE BOILER AND REINSTALL OIL BURNER (NYC BOILER NO. 82207-03). THIS APPLICATION IS FILED IN CONJUNCTION WITH LAA NO. 510087095.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	520104404-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	VINCENT SICILIANO

Date:	**6/26/2012**
Permit Type:	**EW**
Description:	
Permit Description:	**EQUIPMENT WORK**
Work Class:	
Proposed Use:	FUEL BURNING
Permit Number:	520104404-01-EW-FB
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**6/21/2012**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR. REMOVE EXISTING TOILET FIXTURES AND REPLACE WITH NEW. CREATE NEW STAFF TOILET.INSTALL NEW TILE . NO CHANGE IN USE, OCCUPANCY OR EGRESS ALL AS PER PLANS HEREWITH SUBMITTED.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520103931-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

Date:	**11/11/2011**
Permit Type:	
Description:	
Permit Description:	**ELECTRICAL**
Work Class:	
Proposed Use:	
Permit Number:	R129740
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WALSH ELEC'L CONTR'G, INC KEVIN WALSH

TARGET PROPERTY FINDINGS

Date:	**8/24/2011**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 3 - ANTENNA INSTALLATION OF ADDITIONAL TELECOMMUNICATIONS CABINET ON EXISTING CONCRETE PAD ON GRADE. INSTALLATION OF RELATED ANTENNAS ON ROOF. INITIAL INSTALLATION APPRO VED UNDER APPLICATION #500350345 ALL WORK IN COMPLIANCE WITH TPPN 5/98. NO CHANGE TO OCCUPANCY, USE, OR EGRESS.**
Permit Description:	**ALTERATION**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	
Permit Number:	520070324-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL FATTAL

Date:	**6/24/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FACADE REPAIR REPLACE EXISTING WINDOWS AND EXTERIOR DOORS, REPLACE SKYLIGHTS. INSTALL NEW RO OFING, MASONRY RESTORATION, NOCHANGE IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH FILED.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520039798-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

TARGET PROPERTY FINDINGS

Date:	**6/24/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - STRUCTURAL REPAIR EXISTING MASONRY FACIA AND PARAPET, REPLACE EXISTING LINTALS, ALL AS PER PLANS HEREWITH SUBMITTED. NO CHANGE IN USE, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520039798-02-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

Date:	**6/18/2010**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 3 - CONSTRUCTION EQUIPMENT - SCAFFOLD INSTALLATION OF SCAFFOLD STAIR TOWER AS PER DRAWINGS. SCAFFOLD STAIR TOWER SHALL COMPLY WITH CHAPTER #33 OF THE 2008 CODE. NO CHANGE IN USE, OCCUPANCY OR EGRESS UNDER THIS APPLICATION.**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	SCAFFOLD
Permit Number:	520039823-01-EQ-SF
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN BRION

TARGET PROPERTY FINDINGS

Date:	**5/10/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GC REPLACE EXISTING WINDOWS AND EXTERIOR DOORS, REPLACE SKYLIGHTS. INSTALL NEW RO OFING. NO CHANGE IN USE, OCCUPANCY OR EGRESS. ALL AS PER PLANS HEREWITH FILED**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520002639-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

Date:	**5/10/2010**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - STRUCTURAL REPAIR EXISTING MASONRY FACIA AND PARAPET, REPLACE EXISTING LINTALS, ALL AS PE R PLANS HEREWITH SUBMITTED. NO CHANGE IN USE, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520002639-02-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRISTOPHER CANGEMI

TARGET PROPERTY FINDINGS

Date: **8/21/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R119122
Status: AWAITING INSPECTION REQUEST
Valuation: $0.00
Contractor Company:
Contractor Name: MARI ELEC. CONTR'S INC. JOHN MARI, JR.

Date: **7/20/2005**
Permit Type: **EW**
Description: **ALTERATION TYPE 2 - BOILER**
REPLACE BOILER AND OIL BURNER. NO CHANGE IN EGRESS, OCCUPANCY OR USE UND
ER THIS APPLICATION.

Permit Description: **EQUIPMENT WORK**
Work Class: A2 - ALTERATION TYPE 2
Proposed Use: BOILER
Permit Number: 500787197-01-EW-BL
Status: ISSUED
Valuation: $0.00
Contractor Company:
Contractor Name: KENNETH REED

Date: **7/20/2005**
Permit Type: **EW**
Description:

Permit Description: **EQUIPMENT WORK**
Work Class:
Proposed Use: FUEL BURNING
Permit Number: 500787197-01-EW-FB
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

TARGET PROPERTY FINDINGS

Date:	**2/15/2005**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER** **REPLACE BOILER AND OIL BURNER. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER** **THIS APPLICATION.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	500737580-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KENNETH REED

Date:	**2/15/2005**
Permit Type:	**EW**
Description:	
Permit Description:	**EQUIPMENT WORK**
Work Class:	
Proposed Use:	FUEL BURNING
Permit Number:	500737580-01-EW-FB
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**1/22/2005**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R109132
Status:	CLOSED/CANCELLED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SURE ELEC'L CONTR'G CORP. MICHAEL DISCENZA

TARGET PROPERTY FINDINGS

Date:	**9/27/2004**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R106740
Status:	AWAITING INSPECTION REQUEST
Valuation:	$0.00
Contractor Company:	
Contractor Name:	WINKLER ELECTRICIANS INC. RUDOLPH WINKLER

Date:	**1/30/2002**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FIRE SUPPRESSION** **INSTALL FIRE SUPPRESSION SSYSTEM ONLY. NO CHANGE IN USE, EGRESS OR OCC** **UPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	FIRE SUPPRESSION
Permit Number:	500515980-01-EW-FP
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JAMES MEYER

TARGET PROPERTY FINDINGS

Date:	**1/17/2002**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION INSTALL ADDITIONAL CABINETS ON GRADE.ADD NEW ANTENNA ON ROOF. ALL WORK IN COMPLIANCE WITH TPPN#5/98. INITIAL -- WORK APPROVED UNDER APPL.# 500350345. N CHANGE IN USE, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500513125-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GEROGE FIGLIOLIA

Date:	**5/26/1999**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION PROPOSED INSTALLATION OF AN UNMANNED --- TELECOMMUNICATIONS EQUIPMENT - CABINET AT GRADE LEVEL WITH AN ANTENNA - AND CABLE ON ROOF (NON-PENETRATED). -- THERE IS NO CHANGE IN USE, EGRESS OR --- OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500350345-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT HOGOPIAN

TARGET PROPERTY FINDINGS

Date:	**9/4/1998**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REFURBISH 2 EXISTING SCIENCE CLASSROOMS AND 1 PREPROOM.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	500277755-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CARMINE SPRIO

Date:	**8/13/1998**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION** **REFURBISH 2 EXISTING SCIENCE CLASSROOMS AND 1 PREPROOM.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500277755-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AARON J KEMBLE

TARGET PROPERTY FINDINGS

Date:	**8/6/1998**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION ELEMENTARY SCHOOL FIRST & SECOND FLOORS: REARRANGE AND RELOCATE --NONBEA RING PARTITIONS: REMOVE & REARRANGE AND ADD TOILET FIXTURES TO COMPLY WITH A.D. NO CHANGE TO OCCUPANCY, ZONING, EGRESS OF THE EXISTING CERTIFICATE OF OCCUPANCY**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500275766-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETER GARGIULO

Date:	**8/6/1998**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2 ELEMENTARY SCHOOL FIRST & SECOND FLOORS: REARRANGE AND RELOCATE --NONBEA RING PARTITIONS: REMOVE & REARRANGE AND ADD TOILET FIXTURES TO COMPLY WITH A.D. NO CHANGE TO OCCUPANCY, ZONING, EGRESS OF THE EXISTING CERTIFICATE OF OCCUPANCY**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	500275766-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT MULHOLLAND

TARGET PROPERTY FINDINGS

Date:	**10/10/1995**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE TWO BOILERS, TWO OIL BURNERS AND CHANGE GRADE OF FUEL OIL FROM #4 TO #2. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER THIS APPLICATION.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	500164859-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HERBERT STOLLERMAN

Date:	**10/10/1995**
Permit Type:	**EW**
Description:	
Permit Description:	**EQUIPMENT WORK**
Work Class:	
Proposed Use:	FUEL BURNING
Permit Number:	500164859-01-EW-FB
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

TARGET PROPERTY FINDINGS

Date:	**10/10/1995**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FUEL STORAGE REPLACE TWO BOILERS, TWO OIL BURNERS AND CHANGE GRADE OF FUEL OIL FROM #4 TO #2. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER THIS APPLICATION.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	FUEL STORAGE
Permit Number:	500164859-01-EW-FS
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HERBERT STOLLERMAN

Date:	**7/7/1989**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R018448
Status:	CLOSED/CANCELLED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

Date:	**4/27/1988**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R012555
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

TARGET PROPERTY FINDINGS

Date: **1/22/1987**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R005545
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: BERNARD PASQUALE, INC. B PASQUALE

Date: **1/15/1987**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R005435
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

Date: **9/22/1986**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R003610
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CHICAGO AVE

77 CHICAGO AVE

Date:	**4/27/2015**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2 AT THE 1ST FLOOR RENOVATION OF 2 ROOMS; RELOCATION OF A BATHROOM;ADDITION OF A BATHROOM; ENLARGING AN EXTERIOR WINDOW OPENING; AND PROVIDING AN EXTERIOR ACCESSIBLE RAMP. NO CHANGE IN OCCUPANCY, USE OR EGRESS.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	520240187-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	STEVEN WASSERMAN

Date:	**4/1/2015**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - INT & EXT.RENO. AT THE 1ST FLOOR RENOVATION OF 2 ROOMS; RELOCATION OF A BATHROOM;ADDITION OF A BATHROOM; ENLARGING AN EXTERIOR WINDOW OPENING; AND PROVIDING AN EXTERIOR ACCESSIBLE RAMP. NO CHANGE IN OCCUPANCY, USE OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520240187-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ZULIQUARNAIN CHOUDHRY

ADJOINING PROPERTY FINDINGS

Date:	**6/1/2009**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R123860
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HIGH BEAM ELECTRIC CORP. VITO LOPA

Date:	**3/31/2009**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - BOILER REPLACE BOILER (NYC BOILER # 90027-01) AND REINSTALL EXISTING GAS/OIL BURNER.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	BOILER
Permit Number:	510072332-01-EW-BL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT B TRAKTMAN

ADJOINING PROPERTY FINDINGS

Date:	**3/18/2009**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **REPLACE BOILER (NYC BOILER # 90027-01) AND REINSTALL EXISTING GAS/OIL BURNER.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	510072332-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HENRY W TRAKTMAN

Date:	**2/4/2009**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R123106
Status:	ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date:	**10/8/2008**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - SPRINKLER GENERAL CONSTRUCTION: MINOR PARTITIONS, DOORS, SUSP. CEILING. MECHANICAL: INSTALLATION OF CHILLER, PIPING, PUMPS, FAN COIL UNITS AND CONTROLS TO AIR CONDITION THE BUILDING. SPRINKLER: CHANGE IN SPRINKER HEAD COUNT. NO CHANGE TO USE, EGRESS, OR OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	SPRINKLER
Permit Number:	510049939-01-EW-SP
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THOMAS PRICE

Date:	**8/18/2008**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R122019
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ILLUMINATIONS UNLMTD ELEC ARTHUR DREYFUS

ADJOINING PROPERTY FINDINGS

Date:	**8/13/2008**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - MECH/HVAC** **GENERAL CONSTRUCTION: MINOR PARTITIONS, DOORS, SUSP. CEILING.** **MECHANICAL:** **INSTALLATION OF CHILLER, PIPING, PUMPS, FAN COIL UNITS AND CONTROLS TO AIR** **CONDITION THE BUILDING. SPRINKLER: CHANGE IN SPRINKER HEAD COUNT. NO CHANGE** **TO USE, EGRESS, OR OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	MECHANICAL/HVAC
Permit Number:	510049939-01-EW-MH
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT HOHMAN

Date:	**8/13/2008**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR** **GENERAL CONSTRUCTION: MINOR PARTITIONS, DOORS, SUSP. CEILING.** **MECHANICAL:** **INSTALLATION OF CHILLER, PIPING, PUMPS, FAN COIL UNITS AND CONTROLS TO AIR** **CONDITION THE BUILDING. SPRINKLER: CHANGE IN SPRINKER HEAD COUNT. NO CHANGE** **TO USE, EGRESS, OR OCCUPANCY.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	510049939-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROBERT HOHMAN

ADJOINING PROPERTY FINDINGS

Date: **7/10/2008**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R121687
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **5/16/2008**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R121231
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **5/15/2008**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R121213
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **10/18/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R119618
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **10/3/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R119500
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **7/13/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R118816
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **5/10/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R118182
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **4/18/2007**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R117936
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date:	**3/1/2007**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R117528
Status:	ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date:	**1/5/2007**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - FIRE SUPPRESSION INSTALL FIRE SUPPRESSION SYSTEM ONLY. FOR NURSING HOME. NO CHANGE IN USE , EGRESS OR OCCUPANCY**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	FIRE SUPPRESSION
Permit Number:	500860151-01-EW-FP
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL KERR

ADJOINING PROPERTY FINDINGS

Date: **8/23/2006**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R115982
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **5/11/2005**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R110827
Status: AWAITING INSPECTION REQUEST
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **11/5/2004**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R108099
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **10/12/2004**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R107634
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **9/23/2004**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R107258
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **7/12/2004**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R106004
Status: AWAITING INSPECTION REQUEST
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **2/11/2004**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R103387
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **12/29/2003**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R102814
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **12/13/2000**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R082992
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **5/19/2000**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R079483
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **2/18/1999**
Permit Type: **EW**
Description:

Permit Description: **EQUIPMENT WORK**
Work Class:
Proposed Use: BOILER
Permit Number: 500333294-01-EW-BL
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **2/18/1999**
Permit Type: **EW**
Description:

Permit Description: **EQUIPMENT WORK**
Work Class:
Proposed Use: FUEL BURNING
Permit Number: 500333294-01-EW-FB
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **1/14/1999**
Permit Type: **PL**
Description:

Permit Description: **PLUMBING**
Work Class:
Proposed Use:
Permit Number: 500333294-01-PL
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **11/25/1998**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R070680
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **1/15/1998**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R065579
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **10/13/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R064274
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **7/9/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R062481
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **4/25/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R061333
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **2/16/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R060406
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **2/9/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R064827
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **7/13/1996**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R057253
Status: ADMINISTRATIVELY CLOSED (MINOR WORK)
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **6/27/1996**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R056968
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **11/7/1994**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R048788
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **9/20/1994**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R047947
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **9/2/1993**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R042393
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **8/31/1992**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R035769
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **10/3/1991**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R031217
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **9/26/1991**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R031096
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **9/13/1991**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R030933
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **3/28/1991**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R028343
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **4/30/1990**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R023142
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **9/13/1989**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R019474
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **11/23/1987**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R010547
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **3/5/1987**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R006089
Status: CLOSED/CANCELLED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date: **1/9/1986**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: S09869
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

Date: **3/6/1985**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: S05097
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

ADJOINING PROPERTY FINDINGS

Date:	**11/20/1984**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	S04011
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAMBAR ELECTRIC CORP. SAMUEL EISENSTEIN, SAMBAR ELECTRIC CORP. L EISENSTEIN

CLEVELAND PL

15 CLEVELAND PL

Date:	**12/22/2009**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **NEW HORIZONTAL ONE STORY ADITION TO REAR OF BUILD FOR NEW BATH AND KITC** **EN ENLARGEMENT WITH GARAWL SPACE BELOW.N EW GROSS FA=150SQ.FT.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	500577351-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FRANK M TROMBETTA

ADJOINING PROPERTY FINDINGS

Date:	**12/18/2009**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - ENLARGEMENT NEW HORIZONTAL ONE STORY ADITION TO REAR OF BUILD FOR NEW BATH AND KITC EN ENLARGEMENT WITH GARAWL SPACE BELOW.N EW GROSS FA=150SQ.FT.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500577351-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MICHAEL P TROMBETTA

31 CLEVELAND PL

Date:	**12/17/2005**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R113514
Status:	VIOLATN PENDING AT CONTRACTOR
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GRAND ELECTRIC , INC. GEORGE GRANDVILLE

ADJOINING PROPERTY FINDINGS

HASTINGS ST

11 HASTINGS ST

Date:	**6/8/1999**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	B190408
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DYNASTY ELECTRIC, INC. ?OWARD SCHALK

Date:	**5/24/1999**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GC PROPOSED TO REPLACE PART OF EXISTING DAMAGED EXTERIOR WALLS AS PER PLAN. NO CHAN GE IN USE GROUP, OCCUPANCY OR EGRESS.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	300861627-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DIMITRIOS LEKANIDES

ADJOINING PROPERTY FINDINGS

Date: **7/24/1985**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: S07203
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: PETER C. FOLINO PETER FOLINO

19 HASTINGS ST

Date: **12/30/2016**
Permit Type: **PL**
Description: **PLUMBING - NEW BUILDING**
PROPOSED NEW ONE FAMILY DWELLING.

Permit Description: **PLUMBING**
Work Class: NB - NEW BUILDING
Proposed Use:
Permit Number: 321080049-01-PL
Status: ISSUED
Valuation: $0.00
Contractor Company:
Contractor Name: NIKOLAY PATSKEVICH

ADJOINING PROPERTY FINDINGS

Date:	**11/23/2016**
Permit Type:	**NB**
Description:	**NEW BUILDING - PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**NEW BUILDING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080030-01-NB
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**11/23/2016**
Permit Type:	**NB**
Description:	**NEW BUILDING - PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**NEW BUILDING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080049-01-NB
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

ADJOINING PROPERTY FINDINGS

Date:	**11/23/2016**
Permit Type:	**NB**
Description:	**NEW BUILDING - PROPOSED NEW ACESSORY ONE (1) CAR GARAGE**
Permit Description:	**NEW BUILDING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321096023-01-NB
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**11/23/2016**
Permit Type:	**NB**
Description:	**NEW BUILDING - PROPOSED NEW ACCESSORY ONE (1) CAR GARAGE**
Permit Description:	**NEW BUILDING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321096032-01-NB
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

ADJOINING PROPERTY FINDINGS

Date:	**10/25/2016**
Permit Type:	**PL**
Description:	**PLUMBING - NEW BUILDING** **PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**PLUMBING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080030-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NIKOLAY PATSKEVICH

Date:	**3/10/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - FOUNDATION/EARTHWORK** **PROPOSED NEW ACESSORY ONE (1) CAR GARAGE**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321096023-01-FO
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

ADJOINING PROPERTY FINDINGS

Date:	**3/10/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - EARTHWORK** **PROPOSED NEW ACESSORY ONE (1) CAR GARAGE**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321096023-01-FO-EA
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**3/10/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - FOUNDATION/EARTHWORK** **PROPOSED NEW ACCESSORY ONE (1) CAR GARAGE**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321096032-01-FO
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

ADJOINING PROPERTY FINDINGS

Date:	**3/10/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - EARTHWORK** **PROPOSED NEW ACCESSORY ONE (1) CAR GARAGE**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321096032-01-FO-EA
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**1/27/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - FOUNDATION/EARTHWORK** **PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080030-01-FO
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

ADJOINING PROPERTY FINDINGS

Date:	**1/22/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - EARTHWORK** **PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080030-01-FO-EA
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**1/21/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - FOUNDATION/EARTHWORK** **PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080049-01-FO
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

ADJOINING PROPERTY FINDINGS

Date:	**1/21/2016**
Permit Type:	**FO**
Description:	**NEW BUILDING - EARTHWORK** **PROPOSED NEW ONE FAMILY DWELLING.**
Permit Description:	**FOUNDATION/EARTHWORK**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	321080049-01-FO-EA
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**1/12/2016**
Permit Type:	**DM**
Description:	**FULL DEMOLITION -** **PROPOSED DEMOLITION OF EXISTING ONE FAMILY DWELLING.**
Permit Description:	**DEMOLITION & REMOVAL**
Work Class:	DM - FULL DEMOLITION
Proposed Use:	
Permit Number:	321171682-01-DM
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MOHAMED A GOUDA

ADJOINING PROPERTY FINDINGS

Date:	**10/15/2015**
Permit Type:	**DM**
Description:	**FULL DEMOLITION -** **PROPOSED DEMOLITION OF EXISTING GARAGE.**
Permit Description:	**DEMOLITION & REMOVAL**
Work Class:	DM - FULL DEMOLITION
Proposed Use:	
Permit Number:	321087417-01-DM
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BLANCHE PESSOLANO

Date:	**11/10/2014**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	REHABILITATION
Proposed Use:	
Permit Number:	B388544
Status:	Open
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KINGS ELECTRIC CO., INC. MIKHAIL RABINOVICH

ADJOINING PROPERTY FINDINGS

Date:	**9/10/2014**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 3 - CONSTRUCTION EQUIPMENT - FENCE PROPOSED FILING FOR 8'-0" CONSTRUCTION FENCE TO PROTECT SITE DURING THE DEMOLITION OF EXISTING BUILDINGS AND THE CONSTRUCTION OF NEW BUILDINGS. NO CHANGE TO USE, EGRESS OR OCCUPANCY PROPOSED UNDER THIS APPLICATION.**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A3 - ALTERATION TYPE 3
Proposed Use:	FENCE
Permit Number:	320972499-01-EQ-FN
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MIKE MERMELSHTAYN

Date:	**6/10/1992**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R034438
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETER C. FOLINO PETER FOLINO

ADJOINING PROPERTY FINDINGS

24 HASTINGS ST

Date:	**9/26/1984**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	S03294
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	A. J. CARUSO ELECTRICAL I ANGELO CARUSO, A. J. CARUSO ELECTRICAL I WILLIAM D'ALOISI

34 HASTINGS ST

Date:	**10/11/2002**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 1 CONSTRUCT A 3 STY. ADDITION AT REAR OF - EXISTING ONE FAMILY RESIDENCE.**
Permit Description:	**PLUMBING**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	
Permit Number:	500502798-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOSEPH FERDINANDO

ADJOINING PROPERTY FINDINGS

Date:	**9/27/2002**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R093922
Status:	VIOLATN PENDING AT CONTRACTOR
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NEW GRAND ELECTRIC, INC. RAFAEL SEPULVEDA, NEW GRAND ELECTRIC, INC. CHRISTOPHER BISHUNDAT

Date:	**6/25/2002**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 1 - CONSTRUCT A 3 STY. ADDITION AT REAR OF - EXISTING ONE FAMILY RESIDENCE.**
Permit Description:	**ALTERATION**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	
Permit Number:	500502798-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ONG LEONG LEE

ADJOINING PROPERTY FINDINGS

38 HASTINGS ST

Date:	**2/7/1995**
Permit Type:	**PL**
Description:	**PLUMBING - NEW BUILDING**
Permit Description:	**PLUMBING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	500045701-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAL CULOTTA

Date:	**10/30/1994**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R049136
Status:	CLOSED/CANCELLED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SUPER CHARGED ELEC. INC. VINCENT VERDEROSA

Date:	**3/24/1994**
Permit Type:	**PL**
Description:	**PLUMBING - NEW BUILDING**
Permit Description:	**PLUMBING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	500045694-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FRANK CIOLLO

ADJOINING PROPERTY FINDINGS

Date: **11/4/1993**
Permit Type: **NB**
Description: **NEW BUILDING -**

Permit Description: **NEW BUILDING**
Work Class: NB - NEW BUILDING
Proposed Use:
Permit Number: 500045694-01-NB
Status: ISSUED
Valuation: $0.00
Contractor Company:
Contractor Name: THOMAS FLACCAVENTO

Date: **8/30/1993**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R042025
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SUPER CHARGED ELEC. INC. VINCENT VERDEROSA

Date: **11/10/1992**
Permit Type: **NB**
Description: **NEW BUILDING -**

Permit Description: **NEW BUILDING**
Work Class: NB - NEW BUILDING
Proposed Use:
Permit Number: 500045701-01-NB
Status: ISSUED
Valuation: $0.00
Contractor Company:
Contractor Name: THOMAS FLACCAVENTO

ADJOINING PROPERTY FINDINGS

40 HASTINGS ST

Date:	**1/18/2017**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 1 - (2) STORY EXTENSION AT FRON AND REAR IN EXISTING ONE FAMILY RESIDENCE WITH ATTACHED TWO CAR GARAGE IN BASEMENT**
Permit Description:	**ALTERATION**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	
Permit Number:	520280419-01-AL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OMAR EID

Date:	**1/18/2017**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 1 - CONSTRUCTION EQUIPMENT - FENCE (2) STORY EXTENSION AT FRON AND REAR IN EXISTING ONE FAMILY RESIDENCE WITH ATTACHED TWO CAR GARAGE IN BASEMENT**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	FENCE
Permit Number:	520280419-01-EQ-FN
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OMAR EID

ADJOINING PROPERTY FINDINGS

Date: **6/19/1979**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: S01997F
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: WALSH ELEC'L CONTR'G, INC KEVIN WALSH

45 HASTINGS ST

Date: **7/6/1996**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R057176
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: BORNA & SONS, INC. H BORNA, BORNA & SONS, INC. H BORNA II

ADJOINING PROPERTY FINDINGS

KNAUTH PL

15 KNAUTH PL

Date:	**2/1/2001**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R083382
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	A. J. CARUSO ELECTRICAL I ANGELO CARUSO, A. J. CARUSO ELECTRICAL I WILLIAM D'ALOISI

Date:	**10/2/2000**
Permit Type:	**PL**
Description:	**PLUMBING - NEW BUILDING**
Permit Description:	**PLUMBING**
Work Class:	NB - NEW BUILDING
Proposed Use:	
Permit Number:	500266669-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THOMAS SARDINELLI

ADJOINING PROPERTY FINDINGS

Date:	**5/17/2000**
Permit Type:	**EQ**
Description:	**NEW BUILDING - CONSTRUCTION EQUIPMENT - FENCE REVISED PW-1 ADDING EQ WORK TYPE SECTION 15 DESCRIPTION REVISED SCHELULE A & B**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	NB - NEW BUILDING
Proposed Use:	FENCE
Permit Number:	500266669-02-EQ-FN
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	YOUNG HEE KIM

20 KNAUTH PL

Date:	**10/10/2014**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	REHABILITATION
Proposed Use:	
Permit Number:	R141952
Status:	Closed
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KVA ELECTRICAL CO. INC ANDREW VASS

ADJOINING PROPERTY FINDINGS

Date:	**10/8/2014**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - SOLAR** **FLUSH MOUNT ROOF TOP SOLAR ARRAY**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	540060609-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	TOM PETERSEN REGISTERED ARCHITECT

Date:	**8/7/2002**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GC** **PROPOSED GREENHOUSE AT REAR OF EXISTING DWELLING.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500565328-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARK LIPTON

ADJOINING PROPERTY FINDINGS

Date: **2/17/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R060141
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: A. J. CARUSO ELECTRICAL I ANGELO CARUSO, A. J. CARUSO ELECTRICAL I WILLIAM D'ALOISI

30 KNAUTH PL

Date: **3/12/2004**
Permit Type: **AL**
Description: **ALTERATION TYPE 3 - GC**
NEW WOOD DECK

Permit Description: **ALTERATION**
Work Class: A3 - ALTERATION TYPE 3
Proposed Use:
Permit Number: 500667691-01-AL
Status: ISSUED
Valuation: $0.00
Contractor Company:
Contractor Name: LOU GUTTMAN

ADJOINING PROPERTY FINDINGS

Date: **9/12/1997**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R063228
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: A. J. CARUSO ELECTRICAL I ANGELO CARUSO, A. J. CARUSO ELECTRICAL I WILLIAM D'ALOISI

40 KNAUTH PL

Date: **6/9/1999**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R073723
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: A. J. CARUSO ELECTRICAL I ANGELO CARUSO, A. J. CARUSO ELECTRICAL I WILLIAM D'ALOISI

ADJOINING PROPERTY FINDINGS

LANDIS AVE

25 LANDIS AVE

Date:	**11/7/2011**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - GEN. CONSTR. ERECT NEW NON-BEARING PARTITIONS. REPLACE EXISTING HUNG CEILING WITH NEW. NO CHANGE IN USE, OCCUPANCY OR EGRESS.ALL AS PER PLANS HEREWITH SUBMITTED.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	520083034-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN MAZZA

Date:	**3/16/2006**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 1 PLANS AND WORK TYPES FILED HEREWITH FOR A HORIZONTAL AND VERTICAL ENLARGEMENT, THREE STORY ANNEX TO ST. JO HN VILLA ACADEMY Limited scope of work: PLUMBING-EXTERIOR - EJECTOR PUMP ONLY**
Permit Description:	**PLUMBING**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	PLUMBING
Permit Number:	5PL007683-01-PL-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FRANK LIQUORI

ADJOINING PROPERTY FINDINGS

Date:	**1/18/2006**
Permit Type:	**EQ**
Description:	**ALTERATION TYPE 1 - CONSTRUCTION EQUIPMENT - FENCE PLANS AND WORK TYPES FILED HEREWITH FOR A HORIZONTAL AND VERTICAL ENLARGEMENT, THREE STORY ANNEX TO ST. JO HN VILLA ACADEMY**
Permit Description:	**CONSTRUCTION EQUIPMENT**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	FENCE
Permit Number:	500692324-01-EQ-FN
Status:	REISSUED, ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHN HOLDER

Date:	**1/18/2006**
Permit Type:	**AL**
Description:	**ALTERATION TYPE 1 - PLANS AND WORK TYPES FILED HEREWITH FOR A HORIZONTAL AND VERTICAL ENLARGEMENT, THREE STORY ANNEX TO ST. JO HN VILLA ACADEMY**
Permit Description:	**ALTERATION**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	
Permit Number:	500692324-01-AL
Status:	REISSUED, ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DREW HOLDER

ADJOINING PROPERTY FINDINGS

Date:	**1/1/2006**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R113535
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OTIS ELEVATOR COMPANY GERALD OTTEN

Date:	**2/16/2005**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 1** **PLANS AND WORK TYPES FILED HEREWITH FOR A HORIZONTAL AND VERTICAL ENLARGEMENT, THREE STORY ANNEX TO ST. JO HN VILLA ACADEMY** **Limited scope of work: INTERIOR ONLY**
Permit Description:	**PLUMBING**
Work Class:	A1 - ALTERATION TYPE 1
Proposed Use:	
Permit Number:	500692324-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LOUIS J BUTTERMARK

ADJOINING PROPERTY FINDINGS

Date: **1/10/2005**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R109004
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: SURE ELEC'L CONTR'G CORP. MICHAEL DISCENZA

Date: **7/18/1989**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R019363
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

Date: **7/5/1989**
Permit Type: **ELECTRICAL**
Description:

Permit Description:
Work Class:
Proposed Use:
Permit Number: R018472
Status: COMPLETED
Valuation: $0.00
Contractor Company:
Contractor Name: ROBERT MAGOOLAGHAN INC. ROBERT MAGOOLAGHAN

ADJOINING PROPERTY FINDINGS

64 LANDIS AVE

Date:	**12/18/2000**
Permit Type:	**ELECTRICAL**
Description:	
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	R082798
Status:	COMPLETED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	TANACHION ELEC'L CONT'G I FRED TANACHION

Date:	**12/5/2000**
Permit Type:	**PL**
Description:	**PLUMBING - ALTERATION TYPE 2** **HORIZONTAL ENLARGEMENT @ 1ST FLOOR TO ACCOMODATE LARGE KITCHEN.** **REMOVE** **PORTION OF WOOD DECK @ REAR.**
Permit Description:	**PLUMBING**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	
Permit Number:	500417499-01-PL
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ANDREW ALISEO

ADJOINING PROPERTY FINDINGS

Date:	**9/15/2000**
Permit Type:	**EW**
Description:	**ALTERATION TYPE 2 - CONSTRUCTION HORIZONTAL ENLARGEMENT @ 1ST FLOOR TO ACCOMODATE LARGE KITCHEN. REMOVE PORTION OF WOOD DECK @ REAR.**
Permit Description:	**EQUIPMENT WORK**
Work Class:	A2 - ALTERATION TYPE 2
Proposed Use:	OTHER CONSTRUCTION EQUIPMENT
Permit Number:	500417499-01-EW-OT
Status:	ISSUED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JEFFREY TROOST

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

ST JOHN VILLA
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

INQUIRY NUMBER: 4908989.14
APRIL 19, 2017

The EDR 1940 Chain of Title

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Chain of Title

The EDR Chain of Title Report tracks a line of successive owners from the present back to 1940 of a particular parcel of property, linked together by recorded transactions which pass title. Available nationwide, this report provides a summary of a property's ownership history and is a valuable source for determining the prior uses of a property.

A network of professional abstractors following established procedures, uses client supplied address information to locate:

- Historical Chain of Title research
- Leases and Miscellaneous

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Chain of Title

TARGET PROPERTY INFORMATION

ADDRESS

ST JOHN VILLA
57-61 CLEVELAND PLACE
STATEN ISLAND, NY 10305

RESEARCH SOURCE

SOURCE 1:	STATEN ISLAND COUNTY RECORDER OF DEEDS
SOURCE 2:	STATEN ISLAND COUNTY ASSESSOR
EXAMINER'S NOTE:	PUBLIC RECORDS OF STATEN ISLAND COUNTY, NY WERE SEARCHED FROM JANUARY 1, 1940 TO APRIL 19, 2017, AND NO OTHER DEEDS VESTING TITLE IN THE SUBJECT PROPERTY WERE FOUND OF RECORD DURING THE PERIOD SEARCHED.

PROPERTY DESCRIPTION

CURRENT OWNER:	SISTERS OF ST. JOHN THE BAPTIST INC
LEGAL DESCRIPTION:	AS RECORDED IN THE DEED BELOW
PROPERTY IDENTIFIERS:	03087-0001
GENERAL COMMENTS:	

HISTORICAL CHAIN OF TITLE

SEE EXHIBIT "A"

LEASES AND MISCELLANEOUS

SEE EXHIBIT "B"

CHAIN OF TITLE

EXHIBIT "A"

EDR Chain of Title

HISTORICAL CHAIN OF TITLE

PARCEL 03087-0001

CHAIN 1

TYPE OF DEED:	THIS INDENTURE
TITLE IS VESTED IN:	SISTERS OF ST. JOHN THE BAPTIST INC
TITLE RECEIVED FROM:	MARY BRUNETTA PAOLICELLI AND GIACENTA POALICELLI
DATE EXECUTED:	07/27/1938
DATE RECORDED:	07/28/1938
BOOK(BOOK):	806
PAGE:	501
VOLUME:	NA
INSTRUMENT #:	NA
DOCKET:	NA
LAND RECORD COMMENTS:	

EDR Chain of Title

LEASES AND MISCELLANEOUS

EXHIBIT "B"

EDR Chain of Title

LEASES AND MISCELLANEOUS

1. TYPE OF INSTRUMENT NONE IDENTIFIED
   FIRST PARTY
   SECOND PARTY
   RECORDED
   BOOK
   PAGE
   DOCUMENT NO.
   COMMENTS

KD'

(No. 45100 FEE $4.00) (No Stamps)

THIS INDENTURE, made the 27th day of July, nineteen hundred and thirty-eight, BETWEEN MARY BRUNETTA PAOLICELLI AND GIACENTA PAOLICELLI, residing at 35 Landis Avenue, Arrochar, Staten Island, N.Y., parties of the first part, and SISTERS OF ST. JOHN THE BAPTIST INC., (a domestic membership corporation) with an office and principal place of business at Cleveland Place, Arrochar, in the Borough and County of Richmond, City and State of New York, party of the second part; WITNESSETH, that the party of the first part, in consideration of TEN AND MORE ($10.00) dollars, lawful money of the United States, paid by the party of the second part, does hereby remise, release and quitclaim unto the party of the second part, its successors and assigns forever,

ALL the right, title and interest of the parties of the first part in and to that portion of Elma Avenue, formerly Glen Avenue, in the Borough of Richmond, County of Richmond, City of New York and State of New York, bounded and described as follows: NORTHWESTERLY by a line in continuation of the southeasterly side of Cleveland Place; southeasterly by a line parallel to

the northwesterly side of Knauth Place and intersecting the southwesterly side of Elma Avenue at a point distant seventy-five feet northwesterly from the corner formed by the intersection of the southwesterly side of Elma Avenue and the northwesterly side of Knauth Place; northeasterly by the northeasterly side of Elma Avenue, formerly Glen Avenue; and southwesterly by the southwesterly side of said Elma Avenue. IT being the intention of the parties of the first part to divest themselves of all right, title and interest in and to the bed of Elma Avenue as above described. The grantor, in compliance with Section 13 of the Lien Law, covenants that the grantor will receive the consideration for this conveyance as a trust fund to be applied first for the purpose of paying the cost of the improvement and that the grantor will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

TOGETHER with the appurtenances and all the estate and rights of the parties of the first part in and to said premises, TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, its successors and assigns forever.

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hand_ and seal_ the day and year first above written.

IN PRESENCE OF: MARY B.PAOLICELLI (L.S.)

MICHAEL H.GRAE GIACINTA PAOLICELLI (L.S.)

State of New York, County of Richmond SS.: On the 27th day of July, nineteen hundred and thirty-eight, before me came MARY BRUNETTA PAOLICELLI and GIACINTA PAOLICELLI, to me known to be the individuals described in, and who executed, the foregoing instrument, and acknowledged that they executed the same. MICHAEL H.GRAE, Notary Public, Richmond County. - - - The land affected by the within instrument lies in Section 4 in Blocks 3085,3087,3088,3089, on the land map of the County of Richmond. Recorded July 28,1938 at 1.48 P.M. Vincent K. Drury, Clerk (For TITLE GUARANTEE TRUST COMPANY, BAY ST., ST. GEORGE, STATEN ISLAND)(ER)

St John Villa
57-61 Cleveland Place
Staten Island, NY 10305

Inquiry Number: 4908989.5
April 17, 2017

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1928 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2014	EDR Digital Archive	-	X	X	-
	EDR Digital Archive	X	X	X	-
2010	EDR Digital Archive	-	X	X	-
	EDR Digital Archive	X	X	X	-
2005	Hill-Donnelly Information Services	-	X	X	-
	Hill-Donnelly Information Services	X	X	X	-
2000	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
1995	NYNEX	-	X	X	-
	NYNEX	X	X	X	-
1990	NYNEX Information Resource Company	-	X	X	-
1984	New York Telephone	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1979	New York Telephone	-	X	X	-
1975	New York Telephone Company	-	X	X	-
1970	New York Telephone	-	X	X	-
1965	New York Telephone Company	-	X	X	-
1960	New York Telephone Company	-	X	X	-
1934	R. L. Polk & Co.	-	X	X	-
1928	New York Telephone	-	X	X	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

Address	*Type*	*Findings*
8 Narrows Road South	Client Entered	
25 Landis Avenue	Client Entered	

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

57-61 Cleveland Place
Staten Island, NY 10305

FINDINGS DETAIL

Target Property research detail.

Cleveland Pl

57 Cleveland Pl

Year	Uses	Source
2014	SISTERS OF ST JOHN BAPTIST INC	EDR Digital Archive
2010	SISTERS OF ST JOHN BAPTIST INC	EDR Digital Archive

CLEVELAND PL

57 CLEVELAND PL

Year	Uses	Source
2005	HSale 3 M AO	Hill-Donnelly Information Services
	Mcloughlin E M AV	Hill-Donnelly Information Services
	St John Villa Academy Elem SCH	Hill-Donnelly Information Services
2000	St John Vil Acdmy	Cole Information Services
1995	Convent	NYNEX
	Elementary School	NYNEX
	Saint John Villa Academy	NYNEX

Landis Avenue

25 Landis Avenue

Year	Uses	Source

Narrows Road South

8 Narrows Road South

Year	Uses	Source

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CHEISEA

24 CHEISEA

Year	Uses	Source
1995	GRECO Barbara	NYNEX

CHICAGO AVE

45 CHICAGO AVE

Year	Uses	Source
2005	H Hysler Courtney AA	Hill-Donnelly Information Services
	Hysler Lorin	Hill-Donnelly Information Services
	Card Cynthia AV	Hill-Donnelly Information Services
2000	Wayne Hysler	Cole Information Services
	Cynthia Card	Cole Information Services
1995	CARD Cynthia	NYNEX
	HYSTER Wayne	NYNEX
1990	CARD CYNTHIA	NYNEX Information Resource Company
	HYSLER WAYNE	NYNEX Information Resource Company
1984	CARD CYNTHIA	New York Telephone
	HYSLER WAYNE	New York Telephone
1979	ROBBY NATHAN	New York Telephone
	ROBBY MICHAEL	New York Telephone
1975	ROBBY MICHAEL	New York Telephone Company
	ROBBY NATHAN	New York Telephone Company
1934	Marino Salvatore Sadie barber h	R. L. Polk & Co.
	Bonano Gustave plstr r	R. L. Polk & Co.
	Bonano John plstr r	R. L. Polk & Co.
	Bonano Jos plstr r	R. L. Polk & Co.
	Bonano Josephine wid Antonio h	R. L. Polk & Co.
	Bonano Sebastian Josephine furn plshr h	R. L. Polk & Co.
1928	BONANNO M DECRTR	New York Telephone

FINDINGS

Chicago Ave

77 Chicago Ave

Year	Uses	Source
2014	HAWTHORNE-CEDAR KNOLLS UNION	EDR Digital Archive
	JEWISH BOARD OF FAMILY AND CHI	EDR Digital Archive
	HAWTHORNE-CEDAR KNOLLS UNION	EDR Digital Archive
	JEWISH BOARD OF FAMILY AND CHI	EDR Digital Archive
2010	HAWTHORNE-CEDAR KNOLLS UNION	EDR Digital Archive
	JEWISH BOARD OF FAMILY AND CHI	EDR Digital Archive
	HAWTHORNE-CEDAR KNOLLS UNION	EDR Digital Archive
	JEWISH BOARD OF FAMILY AND CHI	EDR Digital Archive

CHICAGO AVE

77 CHICAGO AVE

Year	Uses	Source
2005	Jewish Board Family & Children	Hill-Donnelly Information Services
	Hawthorne Cedar Knolls Ufsd	Hill-Donnelly Information Services
	Geller House 20 a	Hill-Donnelly Information Services
	Board Of Family & Child Jewish	Hill-Donnelly Information Services
2000	Jewish Finly & Child	Cole Information Services
	Geller House	Cole Information Services
	Hwthrn Cedr Knlls	Cole Information Services
	Jew Finly & Chld Hse	Cole Information Services
1995	Geller House	NYNEX
	Jewish Board Of Family & Childrens Svces Geles House	NYNEX
1990	GELLER HOUSE	NYNEX Information Resource Company
	JEWISH BOARD OF FAMILY & CHILDRENS SVCES GELLER HOUSE	NYNEX Information Resource Company
1984	GELLER HOUSE	New York Telephone
	JEWISH BOARD OF FAMILY & CHILDREN S SVCES	New York Telephone
	JEWISH BD OF GUARDIANS-GELLER HOUSE	New York Telephone
1979	GELLER HOUSE OF JEWISH BD OF GUARDIANS	New York Telephone
	JEWISH BD OF GUARDIANS-GELLER HOUSE	New York Telephone
1975	GELLER HOUSE OF JEWISH BD OF GUARDIANS	New York Telephone Company

FINDINGS

Year	Uses	Source
1975	JEWISH BD OF GUARDIANS GELLER HOUSE	New York Telephone Company
1934	Bernstein Clara Mrs nurse The Lakeview Home r	R. L. Polk & Co.
	Donnelly Margt nurse The Lakeview Home r	R. L. Polk & Co.
	Edlin Sarah V Mrs dlr in chge The Lakeview Home r	R. L. Polk & Co.
	Gluck Betty step The Lakeview Home h	R. L. Polk & Co.
	Lakeview Home The Mrs Henry Blumenthal chmn Mrs Percy R Iseman sec Mrs Louis G Kaempfer treas Mrs Jas H Abraham rec sec	R. L. Polk & Co.
	Lemoine Albert Margt Janitor The Lakeview Home r	R. L. Polk & Co.
	Lemoine Margt Mrs janitress The Lakeview Home r	R. L. Polk & Co.
	Mayerson Ida Mrs dietitian The Laxeview Home r	R. L. Polk & Co.
	OBrian Nora nurse r	R. L. Polk & Co.
	Polin Fanya Mrs matron The Lakeview Home r	R. L. Polk & Co.

CHICGO AVE

77 CHICGO AVE

Year	Uses	Source
1965	EDLIN SARA B	New York Telephone Company
	LAKEVIEW HOME	New York Telephone Company
1960	LAKEVIEW HOME	New York Telephone Company
	EDLIN SARA B	New York Telephone Company

CLEVELAND

80 CLEVELAND

Year	Uses	Source
1928	BULAN M R	New York Telephone

81 CLEVELAND

Year	Uses	Source
1960	BUCZYNSKI CHESTER	New York Telephone Company

FINDINGS

CLEVELAND PL

11 CLEVELAND PL

Year	Uses	Source
2005	M Rabin Gary 3 J	Hill-Donnelly Information Services
	Mahoney Anna A	Hill-Donnelly Information Services
2000	Gary J Rabin	Cole Information Services
1995	TOWNSEND L	NYNEX
	MARCANO Nelly	NYNEX
1975	REYDEL A J	New York Telephone Company
1970	REYDEL A J	New York Telephone
1965	REYDEL A J	New York Telephone Company
1960	REYDEL A J	New York Telephone Company
1934	Gouerin Jas S Rose techr Curtis HS h	R. L. Polk & Co.
	Gueria Vincenzo sweeper r	R. L. Polk & Co.

15 CLEVELAND PL

Year	Uses	Source
2005	HTrombetta 3 T vo	Hill-Donnelly Information Services
2000	19 NP	Cole Information Services
1975	BRUNS J W	New York Telephone Company
1970	BRUNS J W	New York Telephone
1965	BRUNS J W	New York Telephone Company
1960	BRUNS J W	New York Telephone Company
1934	Kreuder Carrie wid Herman r	R. L. Polk & Co.
	Reydel Adam J Helen police h	R. L. Polk & Co.
1928	REYDEL A J R	New York Telephone

19 CLEVELAND PL

Year	Uses	Source
2005	H Fausak DL	Hill-Donnelly Information Services
1975	MEDWAY A E	New York Telephone Company
1970	MEDWAY A E	New York Telephone
1965	MEDWAY A E	New York Telephone Company
1960	MEDWAY A E	New York Telephone Company
1934	Medway Albert E Laura mgr Lawyer Title & Guar Co Inc h	R. L. Polk & Co.
1928	MEDWAY A E R	New York Telephone

FINDINGS

Cleveland Pl

25 Cleveland Pl

Year	Uses	Source
2010	DORI HARASEK ADMIN ASSISTANT	EDR Digital Archive
	DORI HARASEK ADMIN ASSISTANT	EDR Digital Archive

CLEVELAND PL

25 CLEVELAND PL

Year	Uses	Source
2005	Harasek Dori	Hill-Donnelly Information Services
	H Fornninio 0 M AO	Hill-Donnelly Information Services

31 CLEVELAND PL

Year	Uses	Source
2005	M Sanacore Jonice AV	Hill-Donnelly Information Services
2000	Jenice Sanacore	Cole Information Services
1995	SANACORE Charles	NYNEX
1975	SANACORE CHARLES	New York Telephone Company
1934	Winter Chas firenm B & ORR Co r	R. L. Polk & Co.
	Winter Alice elk r	R. L. Polk & Co.

51 CLEVELAND PL

Year	Uses	Source
1934	Saulo Sister Benedetta mother superior St Johns Villa Academy r	R. L. Polk & Co.
	St Johns Villa Academy Sister Benedetta Sauio mother superior	R. L. Polk & Co.
	ST GEORGE HOTEL John Kirschner Mgr	R. L. Polk & Co.
	Sisters of St John the Baptist Batistine Sisters Sister Bendetta Saulo mother superior	R. L. Polk & Co.

CLEVELAND ST

63 CLEVELAND ST

Year	Uses	Source
1934	Barnes Henry T Anna A plmbr	R. L. Polk & Co.

72 CLEVELAND ST

Year	Uses	Source
1934	Harris Mary Mrs matron NB r	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1934	Harris Gordon Mary sheet metal wkr h	R. L. Polk & Co.
	Evelyn Bridgman Dav Nursery The Mrs Thos W Harris pres Mrs Harry J Wood sec treas Dir Mrs Herman Witte and E B Daniels day nursery	R. L. Polk & Co.

76 CLEVELAND ST

Year	Uses	Source
1934	Pearson Freshburg F Mary R lab h	R. L. Polk & Co.
	Swain Covin lab r	R. L. Polk & Co.

77 CLEVELAND ST

Year	Uses	Source
1934	OHara Frank H Dahlia deckhnd dept P & S h	R. L. Polk & Co.

78 CLEVELAND ST

Year	Uses	Source
1934	Stubbs Wilfred Sarah cook h	R. L. Polk & Co.

80 CLEVELAND ST

Year	Uses	Source
1934	James Saveira dom r	R. L. Polk & Co.
	Barbey Cora wid Dudley dom r	R. L. Polk & Co.
	Calahan Mathilda dom h	R. L. Polk & Co.
	Quarles Harriet wid Henry dom h	R. L. Polk & Co.

81 CLEVELAND ST

Year	Uses	Source
1934	Buczynsid Hermen Filomena lab h	R. L. Polk & Co.

82 CLEVELAND ST

Year	Uses	Source
1934	Rickrs Harriet P wid John drsmkr	R. L. Polk & Co.
	Wroblenski Alex Viola lab h	R. L. Polk & Co.
	Pinn Wm A clk h	R. L. Polk & Co.

84 CLEVELAND ST

Year	Uses	Source
1934	Maleski Stanley Camille lab h	R. L. Polk & Co.

FINDINGS

86 CLEVELAND ST

Year	Uses	Source
1934	Burke Jas C Sarah lab h	R. L. Polk & Co.

CLEVELAND STREET PL

31 CLEVELAND STREET PL

Year	Uses	Source
1970	WINTER CHARLES	New York Telephone
1965	WINTTER CHAS	New York Telephone Company
1960	WINTER CHAS	New York Telephone Company

CLEVLND PL

11 CLEVLND PL

Year	Uses	Source
1990	PRYBYS L	NYNEX Information Resource Company
1984	PRYBYS L	New York Telephone
1979	TOWNSEND ROBERT W	New York Telephone

31 CLEVLND PL

Year	Uses	Source
1990	SANACORE CHARLES	NYNEX Information Resource Company
1979	SANACORA CHARLES	New York Telephone

DOGWOOD LN

80 DOGWOOD LN

Year	Uses	Source
2005	H Brybag Errol AC	Hill-Donnelly Information Services
2000	Stephanie Brybag	Cole Information Services

81 DOGWOOD LN

Year	Uses	Source
2005	h Bellon S & 3 v	Hill-Donnelly Information Services
2000	S Bellon	Cole Information Services
1995	CHOI Jae Moo	NYNEX

82 DOGWOOD LN

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
1990	COLEFLNAN	NYNEX Information Resource Company

Year	Uses	Source
1984	TERENZIO PHILIP	New York Telephone

83 DOGWOOD LN

Year	Uses	Source
2005	Kushelev E	Hill-Donnelly Information Services
2000	E Kushelev	Cole Information Services

84 DOGWOOD LN

Year	Uses	Source
2005	H Rafalscy William A	Hill-Donnelly Information Services
2000	William Rafalsky	Cole Information Services
1995	RAFALSKY William	NYNEX
1990	RAFALSKY WILLIAM	NYNEX Information Resource Company

85 DOGWOOD LN

Year	Uses	Source
2005	H Mitnik I Ia	Hill-Donnelly Information Services
	HBerger	Hill-Donnelly Information Services
2000	Inna Berger	Cole Information Services
1995	BERGER Lnna	NYNEX

86 DOGWOOD LN

Year	Uses	Source
2005	Kirmanl gor C	Hill-Donnelly Information Services
2000	87 NP	Cole Information Services
1995	GHARNIT Halm	NYNEX

87 DOGWOOD LN

Year	Uses	Source
2005	H Bonventre K A o	Hill-Donnelly Information Services

88 DOGWOOD LN

Year	Uses	Source
2005	H Darconte F A	Hill-Donnelly Information Services
2000	V A Cusick	Cole Information Services
1995	ASCOLESE S	NYNEX

89 DOGWOOD LN

Year	Uses	Source
2005	Ayala Virginia AV	Hill-Donnelly Information Services
	H Mcdaniel G	Hill-Donnelly Information Services

FINDINGS

FINGENBD RD

312 FINGENBD RD

Year	Uses	Source
1934	Pelliconi Rudolph E Margt inspr h	R. L. Polk & Co.

FINGERBOARD RD

306 FINGERBOARD RD

Year	Uses	Source
1934	Keegan Wm carp r	R. L. Polk & Co.
	Sloan Adeline wid Geo h	R. L. Polk & Co.

307 FINGERBOARD RD

Year	Uses	Source
1934	Cieri Salvatore printer h	R. L. Polk & Co.
	Cieri Louise sten r	R. L. Polk & Co.
	Trivelli Matthews Anna teller r	R. L. Polk & Co.
	Cieri Jennie r	R. L. Polk & Co.

308 FINGERBOARD RD

Year	Uses	Source
1934	Radeweski Stella maid r	R. L. Polk & Co.
	Brady Patk J Delia elev starter h	R. L. Polk & Co.

311 FINGERBOARD RD

Year	Uses	Source
1934	Van Vliet Rutherford Edna genl supt NY & Rich Gas Co h	R. L. Polk & Co.

312 FINGERBOARD RD

Year	Uses	Source
1928	GEMRE A MRS R	New York Telephone

315 FINGERBOARD RD

Year	Uses	Source
2005	H Piraino J F AO	Hill-Donnelly Information Services
1934	Tirelli Jennie clk r	R. L. Polk & Co.
	Tirelli Angelo Eliz h	R. L. Polk & Co.
	Tirelli Louis agt h	R. L. Polk & Co.

FINDINGS

Fingerboard Rd

316 Fingerboard Rd

Year	Uses	Source
2010	TASTE PALACE II INC	EDR Digital Archive
	TASTE PALACE II INC	EDR Digital Archive

FINGERBOARD RD

316 FINGERBOARD RD

Year	Uses	Source
2005	1 Borslll Darlene v	Hill-Donnelly Information Services
1995	LOPES Cecil	NYNEX
1934	Vail Jas L Rose county clk County Clk Rich County h	R. L. Polk & Co.

317 FINGERBOARD RD

Year	Uses	Source
2005	H Vargas R AO 00oo	Hill-Donnelly Information Services
	HDejesus E +A	Hill-Donnelly Information Services
2000	Atec Contracting	Cole Information Services
1990	DALTON NANCY	NYNEX Information Resource Company
	NATIVO JOE	NYNEX Information Resource Company
1934	Ludlow Oliva W nurse	R. L. Polk & Co.

319 FINGERBOARD RD

Year	Uses	Source
2000	David Mills	Cole Information Services
	CLEVELAND PL INTS	Cole Information Services
1934	Scheffel Wm Edith train dispr h	R. L. Polk & Co.

321 FINGERBOARD RD

Year	Uses	Source
2000	G Prato	Cole Information Services
1990	PRATO MICHAEL	NYNEX Information Resource Company
1984	PRATO M	New York Telephone
1934	h	R. L. Polk & Co.
	LEVEE BEN Sarah S Pres Treas Staten Island Linen Supply Inc	R. L. Polk & Co.

FINDINGS

322 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
1934	Pauli Paul r	R. L. Polk & Co.
	Pauli Karl Gabriele Importer h	R. L. Polk & Co.

323 FINGERBOARD RD

Year	Uses	Source
1928	GEIGER IK R	New York Telephone

325 FINGERBOARD RD

Year	Uses	Source
1934	Holls Martin T Minnie pastor Bethlehem Orphan Home h	R. L. Polk & Co.
	Holls Ottilie cook r	R. L. Polk & Co.
	Holls Emil clk	R. L. Polk & Co.
	Holls Ella nurse r	R. L. Polk & Co.

326 FINGERBOARD RD

Year	Uses	Source
2005	H Shields Elaine AA	Hill-Donnelly Information Services
2000	Gerald Shields	Cole Information Services
1995	SHIELDS Gerald	NYNEX
1934	Berg Carl G clk r	R. L. Polk & Co.
	Rice Philip Borghild artist	R. L. Polk & Co.
	Rice Lilian r	R. L. Polk & Co.

Fingerboard Rd

327 Fingerboard Rd

Year	Uses	Source
2014	TROMBETTA FRANK	EDR Digital Archive
	TROMBETTA FRANK	EDR Digital Archive
2010	TROMBETTA FRANK	EDR Digital Archive
	TROMBETTA FRANK	EDR Digital Archive

FINGERBOARD RD

327 FINGERBOARD RD

Year	Uses	Source
2005	Trombetta Peter	Hill-Donnelly Information Services

FINDINGS

Year	Uses	Source
2005	Trombetta Frank	Hill-Donnelly Information Services
	Trombetta Michael o	Hill-Donnelly Information Services
2000	Daniel Gee	Cole Information Services
	Frank Trombetta	Cole Information Services
	Jenna Trombetta	Cole Information Services
	P Trombetta	Cole Information Services
	Peter Trombetta	Cole Information Services
1995	TROMBETTA Frank	NYNEX
	TROMBETTA Peter	NYNEX
1990	TROMBETTA PETER	NYNEX Information Resource Company
1934	Brown Sarah h	R. L. Polk & Co.
	Kemp John Ada engr h	R. L. Polk & Co.
	Wrba Otto H Frieda mer h	R. L. Polk & Co.
1928	WRBA OTTO H R	New York Telephone

330 FINGERBOARD RD

Year	Uses	Source
2005	H Jawad AA o 8e	Hill-Donnelly Information Services

338 FINGERBOARD RD

Year	Uses	Source
2005	H Mazzola C AO	Hill-Donnelly Information Services
2000	Gene Baratta	Cole Information Services
	Ronald Mazzola	Cole Information Services
1995	MAZZOLA Ronald	NYNEX
1934	Tirelli Angela wid Louis r	R. L. Polk & Co.
	Tirelli Chas r	R. L. Polk & Co.
	Tirelli Henry Edith amusement carousel h	R. L. Polk & Co.
	Tirelli Mae F clk h	R. L. Polk & Co.

Fingerboard Rd

348 Fingerboard Rd

Year	Uses	Source
2014	FRANK TRMBETTA SONS CNSTR CORP	EDR Digital Archive
	FRANK TRMBETTA SONS CNSTR CORP	EDR Digital Archive
2010	FRANK TRMBETTA SONS CNSTR CORP	EDR Digital Archive

Year	Uses	Source
2010	FRANK TRMBETTA SONS CNSTR CORP	EDR Digital Archive

FINGERBOARD RD

348 FINGERBOARD RD

Year	Uses	Source
2005	H Kwlatkowski CT o	Hill-Donnelly Information Services
1990	HANLEY JAMES	NYNEX Information Resource Company
	JABLON MARIANNE	NYNEX Information Resource Company
	KWIATKOWSKI CARRIE	NYNEX Information Resource Company
1934	Mildren Allen Mary paymstr h	R. L. Polk & Co.
	Smith lloyd Dorothy USA h	R. L. Polk & Co.
	Lewandowski John Martha lab h	R. L. Polk & Co.
	Carlsen Abr Annie h	R. L. Polk & Co.
	Dowd Andrew r	R. L. Polk & Co.
	Dowd John Ann lab h	R. L. Polk & Co.
	Dowd Thos F Irene plstr h	R. L. Polk & Co.

350 FINGERBOARD RD

Year	Uses	Source
2005	h Nolan Delores	Hill-Donnelly Information Services
2000	Dennis Dooley	Cole Information Services
	Delores Nolan	Cole Information Services
1995	NOLAN Dolores	NYNEX

352 FINGERBOARD RD

Year	Uses	Source
2005	Trombetta Frank v	Hill-Donnelly Information Services
	Trombetta Construction	Hill-Donnelly Information Services
	Trombetta Frank	Hill-Donnelly Information Services
2000	Jeff Purrazzella	Cole Information Services

354 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	356 358 360 NP	Cole Information Services

FINDINGS

Fingerboard Rd

356 Fingerboard Rd

Year	Uses	Source
2010	CALLARI STEPHEN	EDR Digital Archive
	CALLARI STEPHEN	EDR Digital Archive

FINGERBOARD RD

356 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
1995	CALLARI S	NYNEX

358 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services

Fingerboard Rd

360 Fingerboard Rd

Year	Uses	Source
2014	JUSTIN REALTY GROUP LLC	EDR Digital Archive
	JUSTIN REALTY GROUP LLC	EDR Digital Archive
2010	JUSTIN REALTY GROUP LLC	EDR Digital Archive
	JUSTIN REALTY GROUP LLC	EDR Digital Archive

FINGERBOARD RD

360 FINGERBOARD RD

Year	Uses	Source
2005	H Galbo M L o	Hill-Donnelly Information Services
1990	HUECKEL R	NYNEX Information Resource Company

362 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	HYLAN BLVD INTS	Cole Information Services
1995	RONCA T A	NYNEX

FINDINGS

365 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
1995	TERREELONGE Lynn	NYNEX

367 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	Dennis R Dapolito	Cole Information Services
1995	DAPOLITO Dennis R	NYNEX
1990	DAPOLITO DENNIS R	NYNEX Information Resource Company
1984	DAPOLITO DENNIS R	New York Telephone

369 FINGERBOARD RD

Year	Uses	Source
2005	Zaretsky Viktor	Hill-Donnelly Information Services

371 FINGERBOARD RD

Year	Uses	Source
2005	H Schwartz Michele A	Hill-Donnelly Information Services
2000	Norman Simpson	Cole Information Services
	B Simpson	Cole Information Services
1995	SIMPSON Norman	NYNEX

Fingerboard Rd

372 Fingerboard Rd

Year	Uses	Source
2010	ARETE CENTER INC	EDR Digital Archive
	ARETE CENTER INC	EDR Digital Archive

FINGERBOARD RD

372 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services

373 FINGERBOARD RD

Year	Uses	Source
2005	H Nosikovskly Vadim v	Hill-Donnelly Information Services

FINDINGS

Fingerboard Rd

375 Fingerboard Rd

Year	Uses	Source
2010	BULONE JOSEPH	EDR Digital Archive
	BULONE JOSEPH	EDR Digital Archive

FINGERBOARD RD

375 FINGERBOARD RD

Year	Uses	Source
2005	H Bulone Joseph Jr A	Hill-Donnelly Information Services
2000	Joseph Bulone Jr	Cole Information Services
1990	BULONE JOSEPH JR	NYNEX Information Resource Company
1934	Petch John inspr Bethlehem Orphan Home r	R. L. Polk & Co.
	Pucschel Gertrude inspr Bethlehem Orphan Home r	R. L. Polk & Co.
	Schroeder Conrad E Bethlehem Orphan Home clergymn	R. L. Polk & Co.
	Bethlehem Orphan Home Rev Conrad B Schroeder dir	R. L. Polk & Co.
	Lammert Richd wtchmn Bethlehem Orphan Home r	R. L. Polk & Co.
	Frees Herman eng Bethlehem Orphan Home r	R. L. Polk & Co.
1928	BETHLEHEM ORPHAN & HALF ORPHAN ASYLUM	New York Telephone

377 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	Dorothy Shields	Cole Information Services
1995	PHILLIPS Arlan	NYNEX

Fingerboard Rd

378 Fingerboard Rd

Year	Uses	Source
2014	MZS MANAGEMENT INC	EDR Digital Archive
	MZS MANAGEMENT INC	EDR Digital Archive
2010	VINCENTS HOME MAINTENANCE INC	EDR Digital Archive
	MZS MANAGEMENT INC	EDR Digital Archive

Year	Uses	Source
2010	VINCENTS HOME MAINTENANCE INC	EDR Digital Archive
	MZS MANAGEMENT INC	EDR Digital Archive

FINGERBOARD RD

378 FINGERBOARD RD

Year	Uses	Source
2005	h Fontana Glovanna A	Hill-Donnelly Information Services
	H La Gala Toni AZ a	Hill-Donnelly Information Services
	H Brancacio a os	Hill-Donnelly Information Services

381 FINGERBOARD RD

Year	Uses	Source
2005	Nicotera Dominic A	Hill-Donnelly Information Services
2000	Dominic Nicotera	Cole Information Services
1995	NICOTERA Dominic	NYNEX

383 FINGERBOARD RD

Year	Uses	Source
2005	H Yuda Maya AO	Hill-Donnelly Information Services
2000	Igor Yuda	Cole Information Services
	Maya Yuda	Cole Information Services
1995	KILLEN Peter J	NYNEX

385 FINGERBOARD RD

Year	Uses	Source
2005	H Mossbacker Robert 3 A	Hill-Donnelly Information Services
2000	Robt J Mossbacker	Cole Information Services

387 FINGERBOARD RD

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	HILLBROOK DR INTS	Cole Information Services

389 FINGERBOARD RD

Year	Uses	Source
2005	HEidn M I	Hill-Donnelly Information Services
	Yazir Mumune	Hill-Donnelly Information Services

FINDINGS

391 FINGERBOARD RD

Year	Uses	Source
2005	Marno J o	Hill-Donnelly Information Services

FINGERBOUARD RD

315 FINGERBOUARD RD

Year	Uses	Source
1928	TIRELLI A R	New York Telephone

FINGERBRD RD

338 FINGERBRD RD

Year	Uses	Source
1928	TIRELLI H R	New York Telephone

FINGRBRD RD

316 FINGRBRD RD

Year	Uses	Source
1979	RANDAZZO G	New York Telephone
	MAIRA JOSEPH	New York Telephone
1975	DEXTER WARREN	New York Telephone Company
	BERNET C	New York Telephone Company
1970	MAIRA LOUIS F	New York Telephone

321 FINGRBRD RD

Year	Uses	Source
1990	PRATO G	NYNEX Information Resource Company
1984	PRATO G	New York Telephone
1979	PRATO G	New York Telephone
1975	PRATO G A	New York Telephone Company
	PRATO G	New York Telephone Company
1970	PRATO G	New York Telephone

325 FINGRBRD RD

Year	Uses	Source
1975	SCAMPAS R	New York Telephone Company
	SHAMAH WM	New York Telephone Company

FINDINGS

326 FINGRBRD RD

Year	Uses	Source
1990	SHIELDS GERALD	NYNEX Information Resource Company
1984	SHIELDS GERALD	New York Telephone
1979	CULLEY J KEVIN	New York Telephone
	SHIELDS GERALD	New York Telephone
1975	SHIELDS GERALD	New York Telephone Company
	TOWNSEND ROBERT WILLIAM	New York Telephone Company
1928	RICE PHILIP	New York Telephone

327 FINGRBRD RD

Year	Uses	Source
1990	TROMBETTA FRANK	NYNEX Information Resource Company
1984	TROMBETTA FRANK	New York Telephone
1979	TROMBETTA FRANK	New York Telephone
1975	TROMBETTA FRANK	New York Telephone Company
1970	TROMBETTA FRANK	New York Telephone

330 FINGRBRD RD

Year	Uses	Source
1975	RAHAL DORA	New York Telephone Company
1970	KRAMER DANIEL C	New York Telephone

338 FINGRBRD RD

Year	Uses	Source
1990	MAZZOLA RONALD	NYNEX Information Resource Company
1984	MAZZOLA RONALD	New York Telephone
1975	CARNESI ANTHONY	New York Telephone Company

350 FINGRBRD RD

Year	Uses	Source
1975	BASCONE SALVATORE	New York Telephone Company

354 FINGRBRD RD

Year	Uses	Source
1979	LAFATA GASPER	New York Telephone
1975	LAFATA GASPER	New York Telephone Company

360 FINGRBRD RD

Year	Uses	Source
1975	KUNZ ALLAN T	New York Telephone Company

Year	Uses	Source
1970	ROTH HAL L	New York Telephone

362 FINGRBRD RD

Year	Uses	Source
1984	RONCA EDWARD F	New York Telephone
1975	RONCA EDWARD F	New York Telephone Company
1970	RONCA EDWARD F	New York Telephone

365 FINGRBRD RD

Year	Uses	Source
1984	D ANGELO L	New York Telephone

371 FINGRBRD RD

Year	Uses	Source
1990	SIMPSON NORMAN	NYNEX Information Resource Company
1984	SIMPSON NORMAN	New York Telephone

Garson Ave

25 Garson Ave

Year	Uses	Source
2010	CANINO FAMILY LTD PARTNERSHIP	EDR Digital Archive
	CANINO FAMILY LTD PARTNERSHIP	EDR Digital Archive

87 Garson Ave

Year	Uses	Source
2010	BANZAI DEBUG INC	EDR Digital Archive
	BANZAI DEBUG INC	EDR Digital Archive

HILLBROAK DR

330 HILLBROAK DR

Year	Uses	Source
1984	ROSSI LOUIS	New York Telephone

HILLBROOK DR

295 HILLBROOK DR

Year	Uses	Source
2005	H Sdomon 3 SA&	Hill-Donnelly Information Services
2000	299 NP	Cole Information Services

FINDINGS

Year	Uses	Source
1984	SOLOMON TERRY & JANICE	New York Telephone

297 HILLBROOK DR

Year	Uses	Source
2005	HAndrin J 3 A	Hill-Donnelly Information Services
	Mohamed Gamal	Hill-Donnelly Information Services

299 HILLBROOK DR

Year	Uses	Source
2005	H Fulfrost P M	Hill-Donnelly Information Services

301 HILLBROOK DR

Year	Uses	Source
2005	H Alongi James	Hill-Donnelly Information Services
2000	James Alongi	Cole Information Services

303 HILLBROOK DR

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	M C Fiordino	Cole Information Services
1995	FIORDILINO M C	NYNEX
1984	FIORDLLINO M C	New York Telephone

305 HILLBROOK DR

Year	Uses	Source
2005	H Rosso 3oseph	Hill-Donnelly Information Services
2000	Joseph Rosso	Cole Information Services
1995	ROSSO Joseph	NYNEX
1990	ROSSO JOSEPH	NYNEX Information Resource Company
1984	ROSSO JOSEPH	New York Telephone

307 HILLBROOK DR

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	Elim Brusilovsky	Cole Information Services
1995	BRUSILOVSKY Efim	NYNEX
1990	BRUSILOVSKY EFIM	NYNEX Information Resource Company

309 HILLBROOK DR

Year	Uses	Source
2005	H Komamitsky Boris	Hill-Donnelly Information Services

FINDINGS

Year	Uses	Source
2005	Komamitsky Boris	Hill-Donnelly Information Services
2000	Boris Komamitsky	Cole Information Services
	Boris Komamitsky	Cole Information Services
1995	KOMARNITSKY Boris	NYNEX
1990	KOMARNITSKY BORIS	NYNEX Information Resource Company
1984	SULLIVAN ROBERT	New York Telephone

317 HILLBROOK DR

Year	Uses	Source
2005	Galiardi Daniel T	Hill-Donnelly Information Services
2000	Daniel T Gailardi	Cole Information Services
1995	GALIARDI Daniel T	NYNEX
1990	GALIARDI DANIEL T	NYNEX Information Resource Company
1984	GALIARDI DANIEL T	New York Telephone

319 HILLBROOK DR

Year	Uses	Source
2005	H Rosenwasser Stuart L	Hill-Donnelly Information Services
2000	S L Rosemwasser	Cole Information Services
1995	TUZHILIN Raisa	NYNEX
1990	TUZHILIN RAISA	NYNEX Information Resource Company

321 HILLBROOK DR

Year	Uses	Source
2005	H Krug Boris	Hill-Donnelly Information Services
2000	Boris Krug	Cole Information Services
1995	KRUG Boris	NYNEX
1990	KRUG BORIS	NYNEX Information Resource Company
1984	KRUG BORIS	New York Telephone

Hillbrook Dr

323 Hillbrook Dr

Year	Uses	Source
2014	TRAVEL IN STYLE INC	EDR Digital Archive
	TRAVEL IN STYLE INC	EDR Digital Archive
2010	IQBAL SAEED M	EDR Digital Archive
	IQBAL SAEED M	EDR Digital Archive

FINDINGS

HILLBROOK DR

323 HILLBROOK DR

Year	Uses	Source
2005	Bemhardt A C	Hill-Donnelly Information Services
2000	FINGERBOARD RD INTS	Cole Information Services
1990	KING ANTOINE	NYNEX Information Resource Company

324 HILLBROOK DR

Year	Uses	Source
2005	H Kokakis A	Hill-Donnelly Information Services
2000	A Kokakis	Cole Information Services
1995	KOKAKIS A	NYNEX
1984	CORAPI VICTOR	New York Telephone

325 HILLBROOK DR

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services

326 HILLBROOK DR

Year	Uses	Source
2005	H Fuchs B	Hill-Donnelly Information Services
	H Fuks Boris	Hill-Donnelly Information Services
1984	DONALD WILLIAM	New York Telephone

327 HILLBROOK DR

Year	Uses	Source
2005	h Berman Leonid	Hill-Donnelly Information Services
	HCherches D	Hill-Donnelly Information Services
2000	328 NP	Cole Information Services
1995	LOSMOZOS Manuel	NYNEX

328 HILLBROOK DR

Year	Uses	Source
2005	n Velez I R	Hill-Donnelly Information Services

Hillbrook Dr

329 Hillbrook Dr

Year	Uses	Source
2014	AJSW CORP	EDR Digital Archive

Year	Uses	Source
2014	AJSW CORP	EDR Digital Archive
2010	AJSW CORP	EDR Digital Archive
	AJSW CORP	EDR Digital Archive

HILLBROOK DR

329 HILLBROOK DR

Year	Uses	Source
2005	H Hsl Tao Hsia	Hill-Donnelly Information Services

330 HILLBROOK DR

Year	Uses	Source
2005	H Sokolinskaya Maya	Hill-Donnelly Information Services
1984	ROSSI LOUIS	New York Telephone

331 HILLBROOK DR

Year	Uses	Source
2005	H Soha S	Hill-Donnelly Information Services
2000	S Soha	Cole Information Services
1995	SOHA S	NYNEX

332 HILLBROOK DR

Year	Uses	Source
2005	Colef P	Hill-Donnelly Information Services
2000	P Colef	Cole Information Services
1995	COLEF P	NYNEX
1990	APPELMAN BRUCE	NYNEX Information Resource Company
1984	APPELMAN BRUCE	New York Telephone

333 HILLBROOK DR

Year	Uses	Source
2005	Hydell ET	Hill-Donnelly Information Services
2000	Elizabeth Hydell	Cole Information Services
1995	KAPLAN Sol	NYNEX
1990	KAPLAN SOL	NYNEX Information Resource Company
1984	KAPLAN SOL	New York Telephone

334 HILLBROOK DR

Year	Uses	Source
2005	H Schemltz Louis HN	Hill-Donnelly Information Services
2000	Louis H Schemitz	Cole Information Services

Year	Uses	Source
1995	SCHEMITZ Louis H	NYNEX
1990	SCHEMITZ LOUIS H	NYNEX Information Resource Company
1984	SCHEMITZ LOUIS H	New York Telephone

335 HILLBROOK DR

Year	Uses	Source
2005	n Pincus Bernard	Hill-Donnelly Information Services
2000	Bernard Pincus	Cole Information Services
1990	PINCUS BERNARD	NYNEX Information Resource Company
1984	PINCUS BERNARD	New York Telephone

336 HILLBROOK DR

Year	Uses	Source
2005	H Berte Joseph AV	Hill-Donnelly Information Services
2000	Joseph Berte	Cole Information Services
1995	BERTE Joseph	NYNEX
1990	BERTE JOSEPH	NYNEX Information Resource Company
1984	BERTE JOSEPH	New York Telephone

337 HILLBROOK DR

Year	Uses	Source
2005	h Rubinshteyn Frida	Hill-Donnelly Information Services
	h Koren Polina	Hill-Donnelly Information Services
2000	Polina Koren	Cole Information Services
	Frida Rubinshteyn	Cole Information Services
1984	HOSSEINI B A	New York Telephone

338 HILLBROOK DR

Year	Uses	Source
2005	H Spring Evan	Hill-Donnelly Information Services

340 HILLBROOK DR

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
2000	William Irnwalle	Cole Information Services
1995	IMWALLE William	NYNEX

342 HILLBROOK DR

Year	Uses	Source
2005	H Vasslliou A	Hill-Donnelly Information Services

FINDINGS

HILLBROOSK DR

303 HILLBROOSK DR

Year	Uses	Source
1990	FIORDILINO M C	NYNEX Information Resource Company

HILLBROYK DR

323 HILLBROYK DR

Year	Uses	Source
1984	TANTOCO MANUEL	New York Telephone

Impala Ct

14 Impala Ct

Year	Uses	Source
2010	COSTGO DIRECT INC	EDR Digital Archive
	GOOD EARTH REALTY INC	EDR Digital Archive
	GOOD EARTH REALTY INC	EDR Digital Archive
	COSTGO DIRECT INC	EDR Digital Archive

IMPALA CT

14 IMPALA CT

Year	Uses	Source
2005	HLee SS A 05os	Hill-Donnelly Information Services
	Kok Sau Yoong V	Hill-Donnelly Information Services

15 IMPALA CT

Year	Uses	Source
2005	H Xhani Edmond G	Hill-Donnelly Information Services

16 IMPALA CT

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services

17 IMPALA CT

Year	Uses	Source
2005	IHa Dan	Hill-Donnelly Information Services

18 IMPALA CT

Year	Uses	Source
2005	HZhu KS AO	Hill-Donnelly Information Services
	Wong Hol Chee	Hill-Donnelly Information Services

Impala Ct

19 Impala Ct

Year	Uses	Source
2010	SHAGGY DOG INN FAUN CORP	EDR Digital Archive
	DANIEL J COSTELLO PC	EDR Digital Archive
	SHAGGY DOG INN FAUN CORP	EDR Digital Archive
	DANIEL J COSTELLO PC	EDR Digital Archive

IMPALA CT

19 IMPALA CT

Year	Uses	Source
2005	ICostello D J	Hill-Donnelly Information Services

20 IMPALA CT

Year	Uses	Source
2005	H Tilis Feyjin T	Hill-Donnelly Information Services

Impala Ct

21 Impala Ct

Year	Uses	Source
2014	IMPALA CRT HOMEOWNERS ASSN INC	EDR Digital Archive
	IMPALA CRT HOMEOWNERS ASSN INC	EDR Digital Archive
2010	EAL LTD	EDR Digital Archive
	IMPALA CRT HOMEOWNERS ASSN INC	EDR Digital Archive
	EAL LTD	EDR Digital Archive
	IMPALA CRT HOMEOWNERS ASSN INC	EDR Digital Archive

IMPALA CT

21 IMPALA CT

Year	Uses	Source
2005	Euclyptus E	Hill-Donnelly Information Services
	Eucalyptus L G	Hill-Donnelly Information Services

Year	Uses	Source
2005	H Bernardo E v O	Hill-Donnelly Information Services
	Eucalyptus F	Hill-Donnelly Information Services

30 IMPALA CT

Year	Uses	Source
2005	H Camacho A P VO	Hill-Donnelly Information Services

32 IMPALA CT

Year	Uses	Source
2005	H Lin Henry AO	Hill-Donnelly Information Services

34 IMPALA CT

Year	Uses	Source
2005	H Delgado Steve & Evie v A	Hill-Donnelly Information Services

36 IMPALA CT

Year	Uses	Source
2005	HTarantola D C VO	Hill-Donnelly Information Services
	Alvarado Michele Vo	Hill-Donnelly Information Services

38 IMPALA CT

Year	Uses	Source
2005	M Gonzalez Lisa G	Hill-Donnelly Information Services

40 IMPALA CT

Year	Uses	Source
2005	n Zajewska Marta GA	Hill-Donnelly Information Services

Impala Ct

42 Impala Ct

Year	Uses	Source
2014	GAR-DAR MANAGEMENT CORP	EDR Digital Archive
	GAR-DAR MANAGEMENT CORP	EDR Digital Archive

IMPALA CT

42 IMPALA CT

Year	Uses	Source
2005	H Muro R VA	Hill-Donnelly Information Services

FINDINGS

Impala Ct

44 Impala Ct

Year	Uses	Source
2010	CHRISTIAN PENTECOSTAL CH STUDY	EDR Digital Archive
	CHRISTIAN PENTECOSTAL CH STUDY	EDR Digital Archive

IMPALA CT

44 IMPALA CT

Year	Uses	Source
2005	H Christian Tarence AA	Hill-Donnelly Information Services

KNAUTH PL

20 KNAUTH PL

Year	Uses	Source
2005	H Imperial Teresita A	Hill-Donnelly Information Services
2000	Teresita Imperial	Cole Information Services

Landis Ave

26 Landis Ave

Year	Uses	Source
2010	ST JOHN VLLA ACADEMY HIGH SCHL	EDR Digital Archive
	ST JOHN VLLA ACADEMY HIGH SCHL	EDR Digital Archive

LANDIS AVE

26 LANDIS AVE

Year	Uses	Source
2005	St John Villa Academy 2 G a	Hill-Donnelly Information Services
	M & B Kitchens	Hill-Donnelly Information Services
2000	St John Vll Acdmy	Cole Information Services
1995	Saint John Villa Academy	NYNEX
	High School	NYNEX
1990	ST JOHN VILLA ACADEMY CONVENT	NYNEX Information Resource Company
1984	ST JOHNS VILLA ACADEMY	New York Telephone
1979	ST JOHN VILLA ACADMY CNVNT	New York Telephone
1975	ST JOHNS VILLA CAFETERIA	New York Telephone Company
	ST JOHN VILLA ACADMY CNVNT	New York Telephone Company

Year	Uses	Source
1970	ST JOHN VILLA ACADMY CNVNT	New York Telephone
1965	ST JOHNS VILLA ACADMY CONVENT	New York Telephone Company
1960	ST JOHNS VILLA ACADMY CONVENT	New York Telephone Company

35 LANDIS AVE

Year	Uses	Source
2005	H Herkert Scott A	Hill-Donnelly Information Services
	H Rosa J A	Hill-Donnelly Information Services
2000	Hyun Kim	Cole Information Services
1995	KIM Hyun	NYNEX
1990	KIM HYUN	NYNEX Information Resource Company
1984	KIM HYUN	New York Telephone
	JOHNSON HILDA	New York Telephone
	AMKOR CHEMICAL CO	New York Telephone
1979	GUIDE SERVICE FOR THE BLIND INC	New York Telephone
1975	PAOLICELLI MARY B MISS	New York Telephone Company
	GUIDE SERVICE FOR THE BLIND INC	New York Telephone Company
	BITTNER O A	New York Telephone Company
1970	PAOLICELLI MARY B MISS	New York Telephone
	NISSEN F H	New York Telephone
	GUIDE SERVICE FOR THE BLIND INC	New York Telephone
1965	PAOLICELLI MARY B MISS	New York Telephone Company
	NOLAN P A	New York Telephone Company
1960	CAPPOZALO ROSEMARY MRS	New York Telephone Company
	PAOLICELLI MARY B MISS	New York Telephone Company
	CAPPOZALO DANI	New York Telephone Company
1934	Advance Upholstering Co TN Eustace V Paolicelli uphol	R. L. Polk & Co.
	National Furniture Repairing Co TN Jos & Eustace V Paolicelli	R. L. Polk & Co.
	Paolicelli Eustace V National Furn Ropairing Co r	R. L. Polk & Co.
	Paolicelli Giacinta embdr r	R. L. Polk & Co.
	Paolicelli Jos Frances Nail Furn Repairing oe h	R. L. Polk & Co.
	Paolicelli Mary embdr r	R. L. Polk & Co.

FINDINGS

Landis Ave

59 Landis Ave

Year	Uses	Source
2010	FIRST CLASS AVI APPEARANCE	EDR Digital Archive
	FIRST CLASS AVI APPEARANCE	EDR Digital Archive

N NARROWS RD

18 N NARROWS RD

Year	Uses	Source
1995	ZOLTOWSKI Joseph	NYNEX

NARORWS RD S

32 NARORWS RD S

Year	Uses	Source
1990	GUSSOW & EMMA ATTS	NYNEX Information Resource Company

NARROWS RD S

5 NARROWS RD S

Year	Uses	Source
1979	GALLO H A	New York Telephone

10 NARROWS RD S

Year	Uses	Source
2005	H Budson D I AO	Hill-Donnelly Information Services
1979	MARSHALL J	New York Telephone
1970	BAEZ SAMUEL L CDR	New York Telephone

12 NARROWS RD S

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services
1990	NADAL HENRY C	NYNEX Information Resource Company
1984	NADAL HENRY C	New York Telephone
1979	NADAL HENRY C	New York Telephone
1975	NADAL HENRY C	New York Telephone Company

14 NARROWS RD S

Year	Uses	Source
2005	H Conroy P AV	Hill-Donnelly Information Services

Year	Uses	Source
1990	CONROY P	NYNEX Information Resource Company
1984	CONROY P	New York Telephone
1979	CONROY P	New York Telephone
1975	CONROY P	New York Telephone Company

18 NARROWS RD S

Year	Uses	Source
2005	C D Business Corp I P	Hill-Donnelly Information Services
	h Desmond Christopher v	Hill-Donnelly Information Services
	Desmond Christopher I P	Hill-Donnelly Information Services
1990	ZOLTOWSKI JOSEPH	NYNEX Information Resource Company
1979	BERGSTROM GUSTAV	New York Telephone
1975	VAPHIDES CHARLES E	New York Telephone Company

20 NARROWS RD S

Year	Uses	Source
2005	No Current Listing	Hill-Donnelly Information Services

S NARROWS RD

12 S NARROWS RD

Year	Uses	Source
2000	Henry C Nadal	Cole Information Services
1995	NADAL Henry C	NYNEX

14 S NARROWS RD

Year	Uses	Source
2000	P Conroy	Cole Information Services

18 S NARROWS RD

Year	Uses	Source
2000	C Desmond	Cole Information Services

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
57-61 Cleveland Place	1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
10 NARROWS RD S	2014, 2010, 2000, 1995, 1990, 1984, 1975, 1965, 1960, 1934, 1928
11 CLEVELAND PL	2014, 2010, 1990, 1984, 1979, 1928
11 CLEVLND PL	2014, 2010, 2005, 2000, 1995, 1975, 1970, 1965, 1960, 1934, 1928
12 NARROWS RD S	2014, 2010, 2000, 1995, 1970, 1965, 1960, 1934, 1928
12 S NARROWS RD	2014, 2010, 2005, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
14 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
14 Impala Ct	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
14 Impala Ct	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
14 NARROWS RD S	2014, 2010, 2000, 1995, 1970, 1965, 1960, 1934, 1928
14 S NARROWS RD	2014, 2010, 2005, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
15 CLEVELAND PL	2014, 2010, 1995, 1990, 1984, 1979
15 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
16 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
17 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
18 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
18 N NARROWS RD	2014, 2010, 2005, 2000, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
18 NARROWS RD S	2014, 2010, 2000, 1995, 1984, 1970, 1965, 1960, 1934, 1928
18 S NARROWS RD	2014, 2010, 2005, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
19 CLEVELAND PL	2014, 2010, 2000, 1995, 1990, 1984, 1979
19 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
19 Impala Ct	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
19 Impala Ct	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

FINDINGS

Address Researched	Address Not Identified in Research Source
20 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
20 KNAUTH PL	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
20 NARROWS RD S	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
21 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
21 Impala Ct	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
21 Impala Ct	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
24 CHEISEA	2014, 2010, 2005, 2000, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
25 CLEVELAND PL	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
25 Cleveland Pl	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
25 Cleveland Pl	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
25 Garson Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
25 Garson Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
26 Landis Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
26 Landis Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
26 LANDIS AVE	2014, 2010, 1934, 1928
295 HILLBROOK DR	2014, 2010, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
297 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
299 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
30 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
301 HILLBROOK DR	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
303 HILLBROOK DR	2014, 2010, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
303 HILLBROOSK DR	2014, 2010, 2005, 2000, 1995, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
305 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
306 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
307 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
307 HILLBROOK DR	2014, 2010, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
308 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
309 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
31 CLEVELAND PL	2014, 2010, 1990, 1984, 1979, 1970, 1965, 1960, 1928
31 CLEVELAND STREET PL	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1934, 1928
31 CLEVLND PL	2014, 2010, 2005, 2000, 1995, 1984, 1975, 1970, 1965, 1960, 1934, 1928
311 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928

FINDINGS

Address Researched	Address Not Identified in Research Source
312 FINGENBD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
312 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934
315 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
315 FINGERBOUARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934
316 FINGERBOARD RD	2014, 2010, 2000, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
316 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
316 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
316 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1965, 1960, 1934, 1928
317 FINGERBOARD RD	2014, 2010, 1995, 1984, 1979, 1975, 1970, 1965, 1960, 1928
317 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
319 FINGERBOARD RD	2014, 2010, 2005, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
319 HILLBROOK DR	2014, 2010, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
32 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
32 NARORWS RD S	2014, 2010, 2005, 2000, 1995, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
321 FINGERBOARD RD	2014, 2010, 2005, 1995, 1979, 1975, 1970, 1965, 1960, 1928
321 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1965, 1960, 1934, 1928
321 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
322 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
323 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934
323 HILLBROOK DR	2014, 2010, 1995, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
323 Hillbrook Dr	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
323 Hillbrook Dr	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
323 HILLBROYK DR	2014, 2010, 2005, 2000, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
324 HILLBROOK DR	2014, 2010, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
325 FINGERBOARD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
325 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1970, 1965, 1960, 1934, 1928
325 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
326 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
326 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1970, 1965, 1960, 1934
326 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
327 FINGERBOARD RD	2014, 2010, 1984, 1979, 1975, 1970, 1965, 1960
327 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

FINDINGS

Address Researched	Address Not Identified in Research Source
327 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
327 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1965, 1960, 1934, 1928
327 HILLBROOK DR	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
328 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
329 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
329 Hillbrook Dr	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
329 Hillbrook Dr	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
330 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
330 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1965, 1960, 1934, 1928
330 HILLBROAK DR	2014, 2010, 2005, 2000, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
330 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
331 HILLBROOK DR	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
332 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
333 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
334 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
335 HILLBROOK DR	2014, 2010, 1995, 1979, 1975, 1970, 1965, 1960, 1934, 1928
336 HILLBROOK DR	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
337 HILLBROOK DR	2014, 2010, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
338 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
338 FINGERBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934
338 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1979, 1970, 1965, 1960, 1934, 1928
338 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
34 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
340 HILLBROOK DR	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
342 HILLBROOK DR	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
348 FINGERBOARD RD	2014, 2010, 2000, 1995, 1984, 1979, 1975, 1970, 1965, 1960, 1928
348 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
348 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
35 LANDIS AVE	2014, 2010, 1928
350 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
350 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1970, 1965, 1960, 1934, 1928
352 FINGERBOARD RD	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

FINDINGS

Address Researched	Address Not Identified in Research Source
354 FINGERBOARD RD	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
354 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1970, 1965, 1960, 1934, 1928
356 FINGERBOARD RD	2014, 2010, 2000, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
356 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
356 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
358 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
36 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
360 FINGERBOARD RD	2014, 2010, 2000, 1995, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
360 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
360 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
360 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1965, 1960, 1934, 1928
362 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
362 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1979, 1965, 1960, 1934, 1928
365 FINGERBOARD RD	2014, 2010, 2000, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
365 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1990, 1979, 1975, 1970, 1965, 1960, 1934, 1928
367 FINGERBOARD RD	2014, 2010, 1979, 1975, 1970, 1965, 1960, 1934, 1928
369 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
371 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
371 FINGRBRD RD	2014, 2010, 2005, 2000, 1995, 1979, 1975, 1970, 1965, 1960, 1934, 1928
372 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
372 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
372 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
373 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
375 FINGERBOARD RD	2014, 2010, 1995, 1984, 1979, 1975, 1970, 1965, 1960
375 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
375 Fingerboard Rd	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
377 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
378 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
378 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
378 Fingerboard Rd	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
38 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
381 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

FINDINGS

Address Researched	Address Not Identified in Research Source
383 FINGERBOARD RD	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
385 FINGERBOARD RD	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
387 FINGERBOARD RD	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
389 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
391 FINGERBOARD RD	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
40 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
42 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
42 Impala Ct	2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
42 Impala Ct	2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
44 Impala Ct	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
44 Impala Ct	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
44 IMPALA CT	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
45 CHICAGO AVE	2014, 2010, 1970, 1965, 1960
5 NARROWS RD S	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1975, 1970, 1965, 1960, 1934, 1928
51 CLEVELAND PL	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
59 Landis Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
59 Landis Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
63 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
72 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
76 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
77 CHICAGO AVE	2014, 2010, 1970, 1965, 1960, 1928
77 Chicago Ave	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
77 Chicago Ave	2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
77 CHICGO AVE	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1934, 1928
77 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
78 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
80 CLEVELAND	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934
80 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
80 DOGWOOD LN	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
81 CLEVELAND	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1934, 1928
81 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
81 DOGWOOD LN	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

FINDINGS

Address Researched	Address Not Identified in Research Source
82 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
82 DOGWOOD LN	2014, 2010, 2000, 1995, 1979, 1975, 1970, 1965, 1960, 1934, 1928
83 DOGWOOD LN	2014, 2010, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
84 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
84 DOGWOOD LN	2014, 2010, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
85 DOGWOOD LN	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
86 CLEVELAND ST	2014, 2010, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1928
86 DOGWOOD LN	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
87 DOGWOOD LN	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
87 Garson Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
87 Garson Ave	2014, 2005, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
88 DOGWOOD LN	2014, 2010, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928
89 DOGWOOD LN	2014, 2010, 2000, 1995, 1990, 1984, 1979, 1975, 1970, 1965, 1960, 1934, 1928

THE CITY OF NEW YORK

DEPARTMENT OF BUILDINGS

CERTIFICATE OF OCCUPANCY

BOROUGH STATEN ISLAND DATE: NOV 28 1984 NO. 641942

ZONING DISTRICT R1-2

This certificate supersedes C. O. No. 16059/58

THIS CERTIFIES that the new altered ~~existing~~ building premises located at Block 3087 Lot 1

61 Cleveland Place

CONFORMS SUBSTANTIALLY TO THE APPROVED PLANS AND SPECIFICATIONS AND TO THE REQUIREMENTS OF ALL APPLICABLE LAWS, RULES AND REGULATIONS FOR THE USES AND OCCUPANCIES SPECIFIED HEREIN

PERMISSIBLE USE AND OCCUPANCY

Sub-Base	OG					Boiler Room, Storage
Base	100x60	460			3	Auditorium, Stage
1st	100x60	164			3	5 Classrooms, Office, 2 Toilets Library
Mezz	100x60	25				
2nd	100x60	164			3	6 Classrooms, Office, Toilets Storage
3rd	100x60	164			3	5 Classrooms, Office, Toilets Storage
Attic	1,200				3	Storage

OPEN SPACE USES _____

(SPECIFY PARKING SPACES, LOADING BERTHS, OTHER USES, NONE)

NO CHANGES OF USE OR OCCUPANCY SHALL BE MADE UNLESS A NEW AMENDED CERTIFICATE OF OCCUPANCY IS OBTAINED

THIS CERTIFICATE OF OCCUPANCY IS ISSUED SUBJECT TO FURTHER LIMITATIONS, CONDITIONS AND SPECIFICATIONS NOTED ON THE REVERSE SIDE

Philip Banker
BOROUGH COMMISSIONER

Mark T. Winston
COMMISSIONER

☐ ORIGINAL ☒ OFFICE COPY DEPARTMENT OF BUILDINGS ☐ COPY

6/1912

THAT THE ZONING LOT ON WHICH THE PREMISES IS LOCATED IS BOUNDED AS FOLLOWS:

BEGINNING at a point on the Southeast side of Cleveland Place distant 0' feet from the corner formed by the intersection of Cleveland Place and Carson Avenue

running thence E 317.87 feet; thence S 600.68 feet;
thence W 425.02 feet; thence N 75.0' feet;
thence W 150.0 feet; thence N 336.28 feet;
thence S. 107.89 feet; thence N 80. + 210.67 feet;
to the point or place of beginning.

~~Old~~ or ALT. No 256/83 DATE OF COMPLETION 11/21/84 CONSTRUCTION CLASSIFICATION II B
BUILDING OCCUPANCY GROUP CLASSIFICATION G HEIGHT 3 & B & STORIES 52 FEET.
Sub Basement

THE FOLLOWING FIRE DETECTION AND EXTINGUISHING SYSTEMS ARE REQUIRED AND WERE INSTALLED IN COMPLIANCE WITH APPLICABLE LAWS.

	YES	NO
STANDPIPE SYSTEM		
YARD HYDRANT SYSTEM		
STANDPIPE FIRE TELEPHONE AND SIGNALLING SYSTEM		
SMOKE DETECTOR	X	
FIRE ALARM AND SIGNAL SYSTEM		

	YES	NO
AUTOMATIC SPRINKLER SYSTEM		
Interior Fire Alarm	X	

STORM DRAINAGE DISCHARGES INTO:
A) STORM SEWER ☐ B) COMBINED SEWER ☐ C) PRIVATE SEWAGE DISPOSAL SYSTEM ☐

SANITARY DRAINAGE DISCHARGES INTO:
A) SANITARY SEWER ☐ B) COMBINED SEWER ☐ C) PRIVATE SEWAGE DISPOSAL SYSTEM ☐

LIMITATIONS OR RESTRICTIONS
BOARD OF STANDARDS AND APPEALS CAL. NO. _____
CITY PLANNING COMMISSION CAL. NO. _____
OTHERS.

Form M (Rev. 11/70)

THE CITY OF NEW YORK

DEPARTMENT OF BUILDINGS
CERTIFICATE OF OCCUPANCY

BOROUGH STATEN ISLAND DATE: JUL 22 1987 NO. 069493

This certificate supersedes C.O. No. 45944 ZONING DISTRICT R1-2

THIS CERTIFIES that the new—~~alteration to existing~~—building—premises located at

9 HARROWS ROAD SOUTH Block 3087 Lot 1

CONFORMS SUBSTANTIALLY TO THE APPROVED PLANS AND SPECIFICATIONS AND TO THE REQUIREMENTS OF ALL APPLICABLE LAWS, RULES, AND REGULATIONS FOR THE USES AND OCCUPANCIES SPECIFIED HEREIN

PERMISSIBLE USE AND OCCUPANCY

STORY	LIVE LOAD LBS PER SQ FT	MAXIMUM NO OF PERSONS PERMITTED	ZONING DWELLING OR ROOMING UNITS	BUILDING CODE HABITABLE ROOMS	ZONING USE GROUP	BUILDING CODE OCCUPANCY GROUP	DESCRIPTION OF USE
CELLAR	O.G.	5			3	D-2	HEATING
FIRST	O.G.	1,130			3	F1-6	GYMNASIUM & LOCKER ROOM
		6			3	D-2	KITCHEN & ELECTRICAL
		0			3	B-2	GYMNASIUM EQUIPMENT
		8			3	G	DIRECTOR & TEACHER ROOMS
MEZZANINE	75	40			3	G	LOCKER ROOM

CURB CUT NUMBER 48868

cc: 48968

OPEN SPACE USES ACCESSORY PARKING PAD FOR NINE (9) CARS (2,743 SQ.FT.)
(SPECIFY—PARKING SPACES, LOADING BERTHS, OTHER USES, NONE)

NO CHANGES OF USE OR OCCUPANCY SHALL BE MADE UNLESS A NEW AMENDED CERTIFICATE OF OCCUPANCY IS OBTAINED

THIS CERTIFICATE OF OCCUPANCY IS ISSUED SUBJECT TO FURTHER LIMITATIONS, CONDITIONS AND SPECIFICATIONS NOTED ON THE REVERSE SIDE.

[signature]
BOROUGH COMMISSIONER

[signature]
COMMISSIONER

☐ ORIGINAL ☑ OFFICE COPY—DEPARTMENT OF BUILDINGS ☐ COPY

069493

THAT THE ZONING LOT ON WHICH THE PREMISES IS LOCATED IS BOUNDED AS FOLLOWS:

BEGINNING at a point on the WEST side of HASTINGS STREET
distant ZERO feet from the corner formed by the intersection of
HASTINGS STREET and NARROWS ROAD SOUTH;
running thence SW 230.72 feet; thence NW 121.32 feet;
thence SOUTHWEST 191.99 (TAX MAP) feet; thence NORTHWEST 75 feet;
thence SOUTHWEST 150 feet; thence NORTHWEST 316.28 feet;
thence NORTHEAST 716.43 feet; thence SOUTHEAST 627.52 feet;
to the point or place of beginning.

N.B. [redacted] No. 332/82 DATE OF COMPLETION 3/13/87 CONSTRUCTION CLASSIFICATION I-B
BUILDING OCCUPANCY GROUP CLASSIFICATION F-9 HEIGHT 1+ STORIES, 25 FEET
GYMNASIUM MEZZANINE

THE FOLLOWING FIRE DETECTION AND EXTINGUISHING SYSTEMS ARE REQUIRED AND WERE INSTALLED IN COMPLIANCE WITH APPLICABLE LAWS.

NONE REQUIRED

	YES	NO		YES	NO
STANDPIPE SYSTEM			AUTOMATIC SPRINKLER SYSTEM		
YARD HYDRANT SYSTEM					
STANDPIPE FIRE TELEPHONE AND SIGNALLING SYSTEM					
SMOKE DETECTOR					
FIRE ALARM AND SIGNAL SYSTEM					

STORM DRAINAGE DISCHARGES INTO:
A) STORM SEWER [X] B) COMBINED SEWER [ ] C) PRIVATE SEWAGE DISPOSAL SYSTEM [ ]

SANITARY DRAINAGE DISCHARGES INTO:
A) SANITARY SEWER [X] B) COMBINED SEWER [ ] C) PRIVATE SEWAGE DISPOSAL SYSTEM [ ]

LIMITATIONS OR RESTRICTIONS:
BOARD OF STANDARDS AND APPEALS CAL. NO. _____
CITY PLANNING COMMISSION CAL. NO. _____
OTHERS.

CITY OF NEW YORK No. 303

OFFICE OF THE PRESIDENT OF THE BOROUGH OF [illegible]

BUREAU OF BUILDINGS

DATE [illegible]

CERTIFICATE OF OCCUPANCY

(Standard form adopted by the Board of Standards and Appeals July 22, 1932, and issued pursuant to Section [illegible] Greater New York Charter and Chapter 8 Building Code, Code of Ordinances, City of New York.)

This certificate supersedes all previously issued certificates.

To the owner or owners of the building or premises: [illegible]

THIS CERTIFIES that the new altered building premises located at

[illegible]

Block [illegible], Lot [illegible], conforms substantially to the approved plans and specifications, and to the requirements of the building code and all other laws and ordinances, and to the rules and regulations of the Board of Standards and Appeals, applicable to a building of its class and kind at the time the permit was issued, and CERTIFIES FURTHER that, any provisions of law relating to standpipe and sprinkler equipment have been complied with as certified by a report of the Fire Commissioner to the Superintendent of Buildings.

THIS CERTIFICATE IS ISSUED SUBJECT TO THE LIMITATIONS HEREINAFTER SPECIFIED AND TO THE FOLLOWING RESOLUTIONS OF THE BOARD OF STANDARDS AND APPEALS:

(Calendar numbers to be inserted here)

PERMISSIBLE USE AND OCCUPANCY

STORY	LIVE LOADS LBS. PER SQ. FT.	PERSONS ACCOMMODATED MALE	FEMALE	TOTAL	USE
Cellar	[illegible]				[illegible]
Basement	[illegible]			150	[illegible]
First	[illegible]			[illegible]	[illegible]
Second	[illegible]			180	[illegible]
Third	[illegible]			[illegible]	[illegible]
Fourth					
Fifth					
Sixth					

Note - Total Occupancy of Entire Building 390 persons with [illegible]

Permit No. [illegible] Type of Construction [illegible]

Height [illegible] stories [illegible] feet. Date of completion [illegible]

Located on [illegible]

zone at time of issuance of permit.

(over)

NO CHANGE OF USE OR OCCUPANCY SHALL BE MADE UNLESS FIRST APPROVED BY THE SUPERINTENDENT OF BUILDINGS.

CERTIFICATE SHALL BE KEPT CONSPICUOUSLY POSTED IN THE BUILDING.

DEPARTMENT OF BUILDINGS

BOROUGH OF RICHMOND , THE CITY OF NEW YORK

No. 19822

Date SEP 26 1960

CERTIFICATE OF OCCUPANCY

(Standard form adopted by the Board of Standards and Appeals and issued pursuant to Section 646 of the New York Charter, and Sections C26-181.0 to C26-187.0 inclusive Administrative Code 2.13.1. to 2.13.7. Building Code.)

This certificate supersedes C. O. No. 16059

To the owner or owners of the building or premises:

THIS CERTIFIES that the ~~new~~ altered ~~existing~~ building—premises located at

St. John's Villa Academy - 200.38'S. of Carson Ave.

Block 3087 Lot 52

, conforms substantially to the approved plans and specifications, and to the requirements of the building code and all other laws and ordinances, and of the rules and regulations of the Board of Standards and Appeals, applicable to a building of its class and kind at the time the permit was issued; and

CERTIFIES FURTHER that, any provisions of Section 646F of the New York Charter have been complied with as certified by a report of the Fire Commissioner to the Borough Superintendent.

~~Initial~~ Alt. No.— 399/59 Construction classification— 3

Occupancy classification— Public . Height 1 stories, 10 feet.

Date of completion— 9-22-60 . Located in Residence Use District.

C Area . Height Zone at time of issuance of permit

This certificate is issued subject to the limitations hereinafter specified and to the following resolutions of the Board of Standards and Appeals: (Calendar numbers to be inserted here)

PERMISSIBLE USE AND OCCUPANCY

STORY	LIVE LOADS Lbs. per Sq. Ft.	PERSONS ACCOMMODATED			USE
		MALE	FEMALE	TOTAL	
1st floor On ground					Kindergarten

TOTAL OCCUPANCY: Kindergarten

MM

Borough Superintendent

CERTIFICATE WILL BE NULL AND VOID IF ALTERED IN ANY MANNER OR ADDITIONS ARE MADE THERETO.

NO CHANGES OF USE OR OCCUPANCY NOT CONSISTENT WITH THIS CERTIFICATE SHALL BE MADE UNLESS FIRST APPROVED BY THE BOROUGH SUPERINTENDENT

Unless an approval for the same has been obtained from the Borough Superintendent, no change or rearrangement in the structural parts of the building, or affecting the light and ventilation of any part thereof, or in the exit facilities, shall be made; no enlargement, whether by extending on any side or by increasing its height shall be made; nor shall the building be moved from one location or position to another; nor shall there be any reduction or diminution of the area of the lot or plot on which the building is located.

The building or any part thereof shall not be used for any purpose other than that for which it is certified.

The superimposed, uniformly distributed loads, or concentrated loads producing the same stresses in the construction in any story shall not exceed the live loads specified on reverse side; the number of persons of either sex in any story shall not exceed that specified when sex is indicated, nor shall the aggregate number of persons in any story exceed the specified total; and the use to which any story may be put shall be restricted to that fixed by this certificate except as specifically stated.

This certificate does not in any way relieve the owner or owners of any other person or persons in possession or control of the building, or any part thereof from obtaining such other permits, licenses or approvals as may be prescribed by law for the uses or purposes for which the building is designed or intended; nor from obtaining the special certificates required for the use and operation of elevators; nor from the installation of fire alarm systems where required by law; nor from complying with any lawful order for additional fire extinguishing appliances under the discretionary powers of the fire commissioner; nor from complying with any lawful order issued with the object of maintaining the building in a safe or lawful condition; nor from complying with any authorized direction to remove encroachments into a public highway or other public place, whether attached to or part of the building or not.

If this certificate is marked "Temporary", it is applicable only to those parts of the building indicated on its face, and certifies to the legal use and occupancy of only such parts of the building; it is subject to all the provisions and conditions applying to a final or permanent certificate; it is not applicable to any building under the jurisdiction of the Housing Division unless it is also approved and endorsed by them, and it must be replaced by a full certificate at the date of expiration.

If this certificate is for an existing building, erected prior to March 14, 1916, it has been duly inspected and it has been found to have been occupied or arranged to be occupied prior to March 14, 1916, as noted on the reverse side, and that on information and belief, since that date there has been no alteration or conversion to a use that changed its classification as defined in the Building Code, or that would necessitate compliance with some special requirement or with the State Labor Law or any other law or ordinance; that there are no notices of violations or orders pending in the Department of Buildings at this time; that Section 646F of the New York City Charter has been complied with as certified by a report of the Fire Commissioner to the Borough Superintendent; and that, so long as the building is not altered, except by permission of the Borough Superintendent, the existing use and occupancy may be continued.

"§ 646 F. No certificate of occupancy shall be issued for any building, structure, enclosure, place or premises wherein containers for combustibles, chemicals, explosives, inflammables and other dangerous substances, articles, compounds or mixtures are stored, or wherein automatic or other fire alarm systems or fire extinguishing equipment are required by law to be or are installed, until the fire commissioner has tested and inspected and has certified his approval in writing of the installation of such containers, systems or equipment to the Borough Superintendent of the borough in which the installation has been made. Such approval shall be recorded on the certificate of occupancy."

Additional copies of this certificate will be furnished to persons having an interest in the buildings or premises, upon payment of a fee of fifty cents per copy.

THE CITY OF NEW YORK

DEPARTMENT OF BUILDINGS
CERTIFICATE OF OCCUPANCY

BOROUGH Staten Island DATE: OCT 19 1964 NO. 43515

ZONING DISTRICT R1-2

This certificate supersedes C. O. No.

THIS CERTIFIES that the new ~~altered existing~~ building premises located at 57 Cleveland Place Block 3087 Lot 1

CONFORMS SUBSTANTIALLY TO THE APPROVED PLANS AND SPECIFICATIONS AND TO THE REQUIREMENTS OF ALL APPLICABLE LAWS, RULES AND REGULATIONS FOR THE USES AND OCCUPANCIES SPECIFIED HEREIN.

PERMISSIBLE USE AND OCCUPANCY

S Bas	C.G.						Heat & Hot Water provided from Boiler of Building No. 57B
Bas	C.G. & 60			3			Recreation Room, Lounge, Dining Rm, Kitchen
1st	60	25		2			2 Offices, Parlor, Living Rm, Chapel
2nd	60			8			Class B, 8 Bedrooms
			CONVENT				

OPEN SPACE USES: _____
(SPECIFY—PARKING SPACES, LOAD NO. BERTHS, OTHER USES NOTED)

NO CHANGES OF USE OR OCCUPANCY SHALL BE MADE UNLESS A NEW AMENDED CERTIFICATE OF OCCUPANCY IS OBTAINED

THIS CERTIFICATE OF OCCUPANCY IS ISSUED SUBJECT TO FURTHER LIMITATIONS, CONDITIONS AND SPECIFICATIONS NOTED ON THE REVERSE SIDE

Philip Becker — Commissioner

Charles M. Smith — Borough Superintendent

☐ ORIGINAL ☒ OFFICE COPY DEPARTMENT OF BUILDINGS ☐ COPY

THAT THE ZONING LOT ON WHICH THE PREMISES IS LOCATED IS BOUNDED AS FOLLOWS:

BEGINNING at a point on the Southeast side of Cleveland Place distant 0' from the corner formed by the intersection of Cleveland Place and Gordon Street

running thence East 317.87 feet; thence South 600.68 feet; thence North 25.00; West 160.00 feet;

thence West 424.00 feet; thence North 116.28; East 107.89 feet; thence North 80.+ 210.67 feet;

thence ..... feet; thence ..... feet;

thence ..... feet, thence ..... feet,

to the point or place of beginning.

N.B. & ALT. No. 374/83 DATE OF COMPLETION 10/9/84 CONSTRUCTION CLASSIFICATION II B

BUILDING OCCUPANCY GROUP CLASSIFICATION Res HEIGHT 2 & Basement STORIES 27.0 FEET

THE FOLLOWING FIRE DETECTION AND EXTINGUISHING SYSTEMS ARE REQUIRED AND WERE INSTALLED IN COMPLIANCE WITH APPLICABLE LAWS.

	YES	NO		YES	NO
STANDPIPE SYSTEM			AUTOMATIC SPRINKLER SYSTEM		
YARD HYDRANT SYSTEM					
STANDPIPE FIRE TELEPHONE AND SIGNALLING SYSTEM					
SMOKE DETECTOR Existing		X			
FIRE ALARM AND SIGNAL SYSTEM Existing		X			

STORM DRAINAGE DISCHARGES INTO:
A) STORM SEWER ☐ B) COMBINED SEWER ☐ C) PRIVATE SEWAGE DISPOSAL SYSTEM ☐

SANITARY DRAINAGE DISCHARGES INTO:
A) SANITARY SEWER ☐ B) COMBINED SEWER ☐ C) PRIVATE SEWAGE DISPOSAL SYSTEM ☐

LIMITATIONS OR RESTRICTIONS
BOARD OF STANDARDS AND APPEALS CAL NO. _____
CITY PLANNING COMMISSION CAL NO. _____
OTHERS:

DEPARTMENT OF BUILDINGS

BOROUGH OF [redacted], THE CITY OF NEW YORK

No. 28091

Date APR 17 1964

CERTIFICATE OF OCCUPANCY

(Standard form adopted by the Board of Standards and Appeals and issued pursuant to Section 646 of the New York City Charter and Sections C26-1810.1 to C26-1837.0 inclusive Administrative Code 2.1.31. to 2.1.37. Building Code)

This certificate supersedes C. O. No.

To the owner or lessee of the building or premises:

THIS CERTIFIES that the new—altered—existing—building—premises located at
25 Lucia Ave. S.E.,cor. Chicago Avenue

Block **3087** Lot **1**

conforms substantially to the approved plans and specifications, and to the requirements of the building code and all other laws and ordinances, and of the rules and regulations of the Board of Standards and Appeals, applicable to a building of the class and kind at the time the permit was issued; and

CERTIFIES FURTHER that any provisions of Section 646F of the New York Charter have been complied with as certified by a report of the Fire Commissioner to the Borough Superintendent.

N.B. New No. **27/55**

Construction classification— **1**

Occupancy classification— **Public** Height **2** stories **22'-0"** feet.

Date of completion— **4/17/64** Located in **Residential** Use District

0 Area **1** Height Zone at time of issuance of permit

This certificate is issued subject to the limitations hereinafter specified and to the following resolutions of the Board of Standards and Appeals: (Calendar number to be inserted here)

PERMISSIBLE USE AND OCCUPANCY

STORY	PERMISSIBLE OCCUPANTS			USE
	AREA	RENTAL	TOTAL	
Basement	On ground	-	368	Storage Room, Cafeteria, Boiler Room, Kitchen, Kitchen Storage, Clothes
1st Floor	100 & 60	-	308	Science Room, Typing Room, Classrooms Offices Clinic, Teachers' Book Room Library.

TOTAL OCCUPANCY: SCHOOL

$370,000

[redacted]

Borough Superintendent

CERTIFICATE WILL BE NULL AND VOID IF ALTERED IN ANY MANNER OR ADDITIONS ARE MADE THERETO.

NO CHANGES OF USE OR OCCUPANCY NOT CONSISTENT WITH THIS CERTIFICATE SHALL BE MADE UNLESS FIRST APPROVED BY THE BOROUGH SUPERINTENDENT

Unless an approval for the same has been obtained from the Borough Superintendent, no change or rearrangement in the structural parts of the building, or affecting the egress or elevators of any part thereof, or in the exit facilities, shall be made; no enlargement, whether by extension on any side or by increasing in height shall be made; nor shall the building be moved from one lot or portion to another, nor shall there be any reduction or diminution of the area of the lot or plot on which the building is located.

The building or any part thereof shall not be used for any purpose other than that for which it is certificated.

The superimposed, uniformly distributed loads, or concentrated loads or whatever the actual system of the construction in any story shall not exceed the live loads specified or assumed for the purpose of which such story is occupied, nor shall any such story be occupied by a greater number of persons of either sex or any more than that specified when any is indicated, nor shall the aggregate number of persons in any story exceed the specified total; and the use to which any such story may be put shall be restricted to that stated by this certificate except as specifically stated.

This certificate does not in any way relieve the owner or owners or any other person or persons in possession or control of the building, or any part thereof from obtaining such licenses, permits or approvals as may be prescribed by law for the uses or purposes for which the building or any part thereof is occupied, nor from obtaining the special certificates required for the use and operation of elevators, nor from the installation of fire alarm systems where required by law, nor from complying with any lawful order issued by the fire commissioner relative to the fire and fire extinguishing appliances under the discretionary powers of the fire commissioner, nor from complying with any lawful order issued with the object of maintaining the building in a safe and lawful condition, nor from complying with any authorized direction to remove encroachments into a public highway or other public place, whether attached to or part of the building or not.

If this certificate is marked "Temporary", it is applicable only to those parts of the building indicated on its face, and certifies to the legal use and occupancy of only such parts of the building as is subject to all the provisions and conditions applying to a final or permanent certificate, it is not applicable to any building under the jurisdiction of the Housing Division, unless it is also approved and endorsed by them, and it must be replaced by a full certificate at the date of expiration.

If this certificate is for an existing building, erected prior to March 15, 1916, it has been duly inspected and it has been found to have been occupied or arranged to be occupied prior to March 15, 1916, as noted on the reverse side, and that on information and belief, since that date there has been no alteration or construction to a use that changed its classification as defined in the Building Code, or that would necessitate compliance with some special requirement or with the State Labor Law or any other law or ordinance, or that there are no orders of violations or orders pending in the Department of Buildings at the time of issuance of the New York City Charter has been complied with as certified by a report of the Fire Commissioner to the Borough Superintendent, and that, so long as the building is not altered, except by permission of the Borough Superintendent, the existing use and occupancy may be continued.

"§ 644-F. No certificate of occupancy shall be issued for any building, structure, enclosure, place or premises wherein containers for combustibles, chemicals, explosives, inflammable or other dangerous substances, articles, compounds or mixtures are stored, or wherein automatic or other fire alarm systems or fire extinguishing equipment are required by law to be or are installed, until the fire commissioner has inspected and tested and has certified his approval in writing of the installation of such containers, systems or equipments to the Borough Superintendent of the borough in which the installation has been made. Such approval shall be recorded on the certificate of occupancy."

Additional copies of this certificate will be furnished to persons having an interest in the building or premises upon payment of a fee of fifty cents per copy.

NYC Buildings

NYC

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NYC Department of Buildings

Permits In-Process / Issued by Premises

Premises: 57 CLEVELAND PLACE STATEN ISLAND **BIN: 5108458 Block: 3087 Lot: 1**

NUMBER	JOB TYPE	SEQ NO	ISSUED DATE	EXPIRATION DATE	STATUS	APPLICANT NAME
520283568-01-AL	A3 - ALT3	01	02/27/2017	07/01/2017	ISSUED	SMITH THOMAS
520265445-01-AL	A3 - ALT3	01	03/28/2016	07/01/2016	ISSUED	SMITH THOMAS
520216588-01-EW OT	A2 - ALT2	01	12/29/2014	10/14/2015	ISSUED	MAZZA JOHN
520213180-01-PL	A2 - ALT2	01	11/17/2014	11/17/2015	ISSUED	MANTELLO RICHARD
520211690-01-EW OT	A2 - ALT2	01	11/05/2014	10/14/2015	ISSUED	MAZZA JOHN
520146173-01-PL	A2 - ALT2	01	07/12/2013	07/12/2014	ISSUED	MANISCOLCO MICHAE
520146173-01-EW BL	A2 - ALT2	01	07/12/2013	07/12/2014	ISSUED	MANISCOLCO MICHAE
520106046-01-EW OT	A2 - ALT2	01	07/19/2012	10/14/2012	ISSUED	MAZZA JOHN
520104404-01-EW FB OIL	A2 - ALT2	01	06/26/2012	06/26/2013	ISSUED	SICILIANO VINCENT
520104404-01-EW BL	A2 - ALT2	01	06/26/2012	06/26/2013	ISSUED	SICILIANO VINCENT
520103931-01-PL	A2 - ALT2	01	07/18/2012	07/18/2013	ISSUED	MANTELLO RICHARD
520103931-01-EW OT	A2 - ALT2	01	06/21/2012	10/14/2012	ISSUED	MAZZA JOHN
520103922-01-PL	A2 - ALT2	01	07/02/2012	07/02/2013	ISSUED	BUTTERMARK LOUIS
520070324-01-AL	A3 - ALT3	02	08/24/2011	12/31/2011	ISSUED	JACKOWITZ MATT
520039823-01-EQ SF	A3 - ALT3	01	06/18/2010	04/01/2011	ISSUED	BRION JOHN
520039798-02-EW OT	A2 - ALT2	01	06/24/2010	05/10/2011	ISSUED	CANGEMI CHRISTOPH
520039798-01-EW OT	A2 - ALT2	01	06/24/2010	05/10/2011	ISSUED	CANGEMI CHRISTOPH
520002639-02-EW OT	A2 - ALT2	02	05/10/2010	05/10/2011	ISSUED	CANGEMI CHRISTOPH
520002639-01-EW OT	A2 - ALT2	02	05/10/2010	05/10/2011	ISSUED	CANGEMI CHRISTOPH
510013619-01-EQ SH	A3 - ALT3	10	04/28/2015	04/27/2016	ISSUED	REDZA IBRAIM
500787197-01-EW FB OIL	A2 - ALT2	01	07/20/2005	08/17/2005	ISSUED	REED KENNETH
500787197-01-EW BL	A2 - ALT2	01	07/20/2005	08/17/2005	ISSUED	REED KENNETH
500737580-01-EW FB OIL	A2 - ALT2	01	02/15/2005	08/17/2005	ISSUED	REED KENNETH
500737580-01-EW BL	A2 - ALT2	01	02/15/2005	08/17/2005	ISSUED	REED KENNETH
500515980-01-EW FP	A2 - ALT2	01	01/30/2002	05/16/2002	ISSUED	MEYER JAMES
500513125-01-EW OT	A2 - ALT2	01	01/17/2002	06/19/2002	ISSUED	FIGLIOLIA GEROGE
500491639-01-AL	A3 - ALT3	01	08/27/2001	01/22/2002	ISSUED	GERMANO ROBERT
500350345-01-EW OT	A2 - ALT2	01	05/26/1999	10/15/1999	ISSUED	HOGOPIAN ROBERT
500277755-01-PL	A2 - ALT2	01	09/04/1998	09/04/1999	ISSUED	SPRIO CARMINE
500277755-01-EW OT	A2 - ALT2	01	08/13/1998	07/20/1999	ISSUED	KEMBLE AARON
500275766-01-EW OT	A2 - ALT2	01	08/06/1998	01/01/1999	ISSUED	GARGIULO PETER
500275766-01-PL	A2 - ALT2	01	08/06/1998	08/06/1999	ISSUED	MULHOLLAND ROBERT
500164859-01-EW FS	A2 - ALT2	01	10/10/1995	12/22/1995	ISSUED	STOLLERMAN HERBER
500164859-01-EW FB OIL	A2 - ALT2	01	10/10/1995	12/22/1995	ISSUED	STOLLERMAN HERBER
500164859-01-EW BL	A2 - ALT2	01	10/10/1995	12/22/1995	ISSUED	STOLLERMAN HERBER
5P0001235-01-		01	07/02/1991	02/14/1992	ISSUED	STROLLERMAN HERBE

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

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NYC Department of Buildings

Property Profile Overview

Take this short survey to help improve the Buildings Information System (BIS Web). Click here to participate in the Survey.

61 CLEVELAND PLACE **STATEN ISLAND 10305** **BIN# 5107482**

CLEVELAND PLACE 61 - 61

Health Area	: 700	**Tax Block**	: 3087
Census Tract	: 20.02	**Tax Lot**	: 1
Community Board	: 502	**Condo**	: NO
Buildings on Lot	: 18	**Vacant**	: NO

View DCP Addresses... Browse Block

View Zoning Documents | View Challenge Results | Pre - BIS PA | View Certificates of Occupancy

Cross Street(s):	GARSON AVENUE, CHICAGO AVENUE		
DOB Special Place Name:	ST JOHN VILLA ACADEMY-CLASSRMS		
DOB Building Remarks:	BLOCK 3087 LOT1		
Landmark Status:		**Special Status:**	N/A
Local Law:	NO	**Loft Law:**	NO
SRO Restricted:	NO	**TA Restricted:**	NO
UB Restricted:	NO		
Environmental Restrictions:	N/A	**Grandfathered Sign:**	NO
Legal Adult Use:	NO	**City Owned:**	NO
Additional BINs for Building:	NONE		

Special District: UNKNOWN

This property is not located in an area that may be affected by Tidal Wetlands, Freshwater Wetlands, Coastal Erosion Hazard Area, or Special Flood Hazard Area. Click here for more information

Department of Finance Building Classification: W2-EDUCATIONAL STRUC

Please Note: The Department of Finance's building classification information shows a building's tax status, which may not be the same as the legal use of the structure. To determine the legal use of a structure, research the records of the Department of Buildings.

	Total	Open
Complaints	0	0
Violations-DOB	0	0
Violations-ECB (DOB)	0	0
Jobs/Filings	1	
ARA / LAA Jobs	0	
Total Jobs	1	
Actions	2	

OR Enter Action Type:

OR Select from List: Select...

AND Show Actions

- Elevator Records
- Electrical Applications
- Permits In-Process / Issued
- Illuminated Signs Annual Permits
- Plumbing Inspections
- Open Plumbing Jobs / Work Types
- Facades
- Marquee Annual Permits
- Boiler Records
- DEP Boiler Information
- Crane Information
- After Hours Variance Permits

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

Property Report for:

(no-address)

B. Overview

B1. Overview

Address

Zip code	10305
Borough	Staten Island
Block & lot	03089-0059
Sanborn map	503 313
Tax map	51301

Owner

Name	Sisters St John The B
Address	Not available

Property Taxes

Tax class	4
Tax assessor's market value	$1,312,000
Projected tax assessor's market value	$1,351,000
Current tax bill	$0
Projected tax bill	$0

Neighborhood

Neighborhood	Grasmere - Concord
Community district	2
Closest Police station	1.00 Miles
Closest Fire station	0.35 Miles
School district number	31
Census tract	20

Hazards & Environment

Toxic site on this property	No
Neighboring toxic sites	1

Building

Building class	Playground (Q2) ?

Lot

Lot sqft	43,111 ?
Lot dimensions	375 ft x 127 ft
Corner lot	SW

Zoning

Zoning districts	R1-2 ?
Zoning map	27c

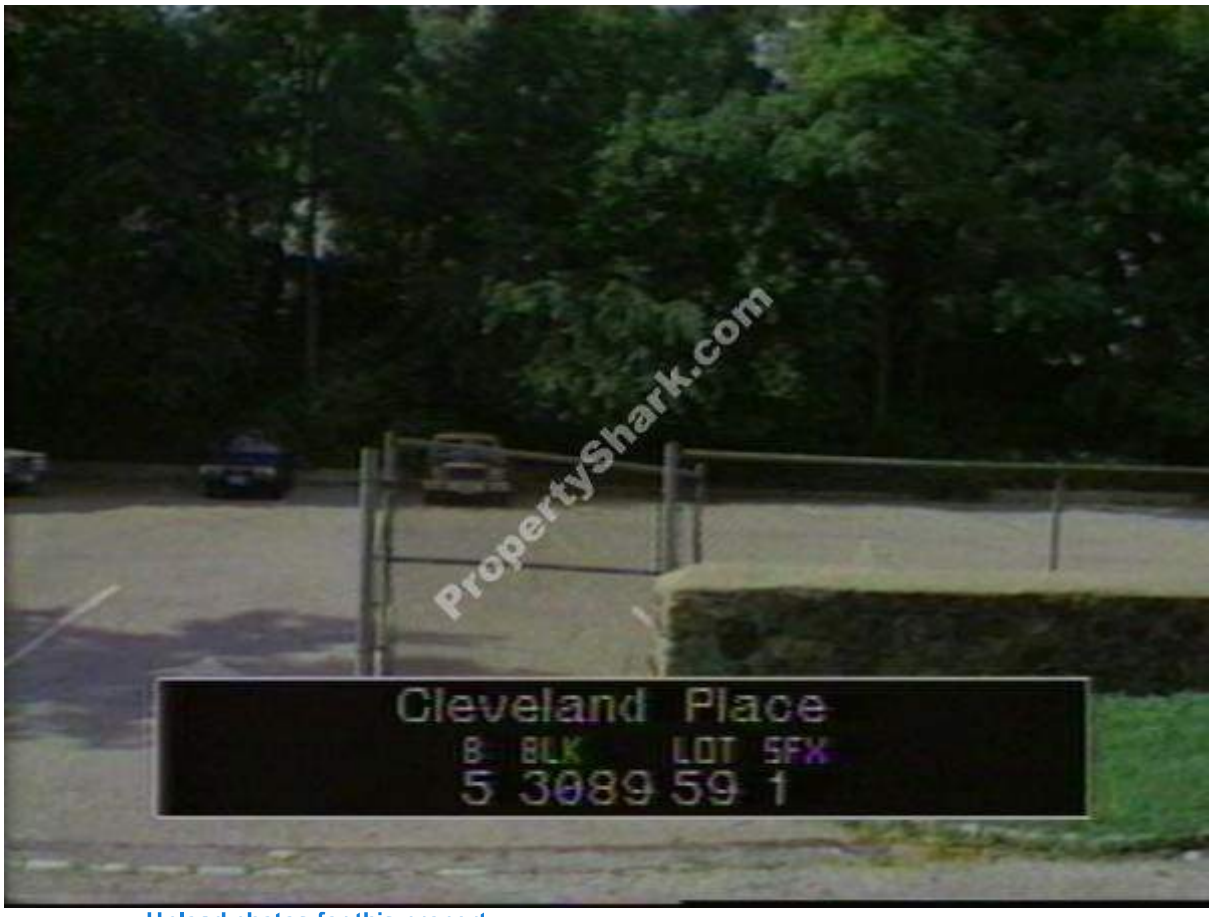
Floor Area Ratio (FAR)

Residential FAR	0.5
Facility FAR	1
Allowed usable floor area	21,556

B2. Photos

Google StreetView | Microsoft Bird's Eye View

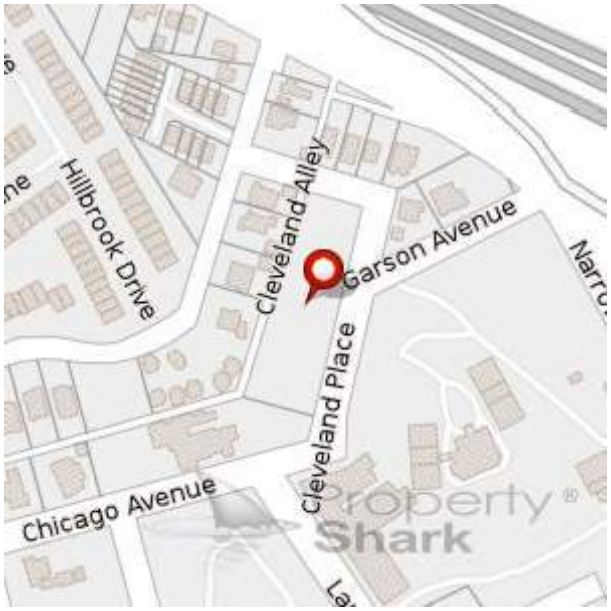
To remove watermark from picture subscribe to our Photos service.
Call us today at 718-715-1758 to upgrade your subscription.



Upload photos for this property

Photo by Department of Finance

B3. Maps



B4. For Sale

No active listing found for this property.
Have your listing displayed on a high-traffic website by visiting Point2 Homes.

C. Ownership

C1. Registered Owner

Sisters St John The B
Address: Not available
Source: Assessment Roll
Last recorded: 01/17/2017

See who is behind the LLC

Add to Address Book

See past the LLC: three ways to unmask the real owner

E. Title History

E1. Liens

Call us today at 718-715-1758 and upgrade your subscription.

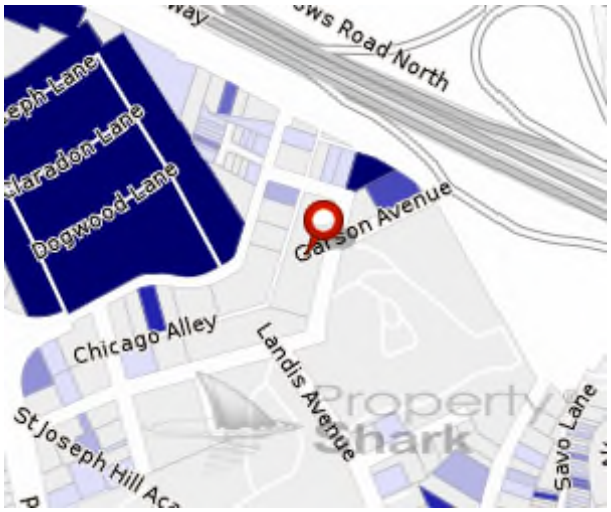
E2. Title History

No records were found.

F. Sales & Value

F1. Sales & Values Maps

Date of Last Sale



This map shows the most recent sales around the subject property, with darker colors indicating more recent sales.

- First half of 2017
- Second half of 2016
- First half of 2016
- Second half of 2015
- First half of 2015
- All 2014
- 2012 - 2013
- < 2012
- No data

The map is based only on valid sales with a recorded price over $1000.

Price per Square Foot

On this color-coded map, view the price paid per square foot around the subject property.

- Below $100
- $100 - $250
- $250 - $400
- $400 - $550
- $550 - $700
- $700 - $850
- $850 - $1000
- Above $1000
- No data

Multiple properties on the same parcel.
Color coordinates with the price ranges above.

G. Property Tax

G1. Property Tax

Market Value

The property tax assessment process starts when the city's assessors estimate a property's market value, based upon the available information. The assessors use three approaches to value the property: sales, cost and income. The *market value* is generally defined as what the property would sell for in a competitive and open market.

		2016/2017		2017/2018
Land market value		$1,180,000		$1,180,000
Building market value	+	$132,000	+	$171,000
Market value	**=**	**$1,312,000**	**=**	**$1,351,000**

Assessed Value

Assessed value is a calculation of the property value for tax purposes. It usually represents a percentage of the market value and is subject to limits on annual increases. Sometimes the city will exempt part of the assessed value from taxation, as an incentive to make improvements to an existing structure or to build on a vacant lot. There are also several tax reductions programs for residential properties that may apply and may lower the property's tax bill.

		2016/2017		2017/2018
Land assessed value		$531,000		$531,000
Building assessed value	+	$59,400	+	$76,950
Assessed value	=	$590,400	=	$607,950
Exemptions granted by city	-	$590,400	-	$607,950
Net assessed value	**=**	**$0**	**=**	**$0**

Transitional Value

While the city's assessors have noted the rapid appreciation of property in New York City, the state understands that it would be burdensome for property taxes to rise too fast. Therefore, increases in the *assessed value* are phased in over a number of years. This introduces the *transitional assessed value*, which is a limit on the portion of the assessed value introduced into the tax base. When the *assessed value* is phased in, sometimes the *exemptions* are as well.

		2016/2017		2017/2018
Transitional land value		$537,480		$534,240
Transitional building value	+	$27,090	+	$41,670
Transitional value	=	$564,570	=	$575,910
Transitional exemption value	-	$564,570	-	$575,910
Transitional net assessed value	**=**	**$0**	**=**	**$0**

Taxable Value

The *taxable value*, for 2016/2017, is the smaller of the city's *net assessed value* and the *transitional net assessed value*.

Taxable value	=	$0

Property Tax

Base tax is an estimate of what an owner **not** benefiting from tax exemptions or abatements would pay and is determined by multiplying the assessed value by the tax rate. *Current tax* is calculated by multiplying the taxable value by the tax rate.
For a very small number of properties, owner-related exemptions (for which we currently don't have information) apply, and so the values given below may be slightly different from the official ones. In addition to exemptions, the city also grants *tax abatements* to some properties. An *abatement* is simply a discount which is subtracted directly from the current tax. This results in the *property tax*, the amount the current owner pays.

Tax description	Billable value 16/17		Tax rate 16/17		Tax amount 16/17
Base tax	$564,570	*	10.5740%	=	$59,697.63
Exemption	$564,570			-	$59,697.63
Current tax	$0	*	10.5740%	=	$0.00
Total abatements				-	$0.00
Property tax				**=**	**$0.00**

Tax description	Billable value 17/18		Tax rate 17/18		Tax amount 17/18
Base tax	$575,910	*	10.5740%	=	$60,896.72
Exemption	$575,910			-	$60,896.72
Current tax	$0	*	10.5740%	=	$0.00
Total abatements				-	$0.00
Property tax				**=**	**$0.00**

For more information please visit New York City's property tax section. Also, you can view this property's assessment, tax bill and account statements here.

G2. Exemptions and Tax Abatements

Both the City and State of New York offer property tax reductions through exemptions and abatements for residential property, commercial constructions, and properties used by governmental, industrial, and nonprofit organizations. Exemptions provide tax relief by reducing a property's assessed value, and abatements reduce taxes by applying credits to the amount of tax due. The information in this section presents a summary of the granted amounts and other related values of the benefit programs. Some of this data comes from NYC Department of Housing Preservation and Development (HPD) and the Department of Finance, departments which administer the J-51 Program and the 421a Program.

Exemption Values 16/17

Land exemption value	**$531,000**
Total exemption value	**$590,400**

Exemption Values 17/18

Land exemption value	**$531,000**
Total exemption value	**$607,950**

Transitional Exemptions 16/17

Transitional land exemption value	**$537,480**
Transitional total exemption value	**$564,570**

Transitional Exemptions 17/18

Transitional land exemption value	**$575,910**
Transitional total exemption value	**$575,910**

Code	Exemption description	Transitional exemption value	Changing exempt total
1021-01 (25110)	Nonprof Orgnztn-Religious	$556,776	$7,794

G3. Tentative Values

Every year in January, the NYC Department of Finance Commissioner publishs the tentative property assessment roll for the current fiscal year. All properties are valued by law according to their condition on the taxable status date of January 5th. Owners who believe that the Department of Finance has used incorrect information to determine their market value may file forms providing corrections. After Finance verifies the complaints,

the agency will make any corrections before the final assessment roll is published on May 25. The final roll will also include changes, based on the decisions made by the New York City Tax Commission, an independent City agency, as well as new information Finance gathers about abatements, exemptions and other adjustments. In June, Finance will use the final roll and new tax rates adopted by the City Council to generate property tax bills for the fiscal year beginning July 1st.

Tentative Transitional Values

Tentative transitional land	**$534,240**
Tentative transitional total	**$575,910**
Tentative exempt land	**$534,240**
Tentative exempt total	**$575,910**

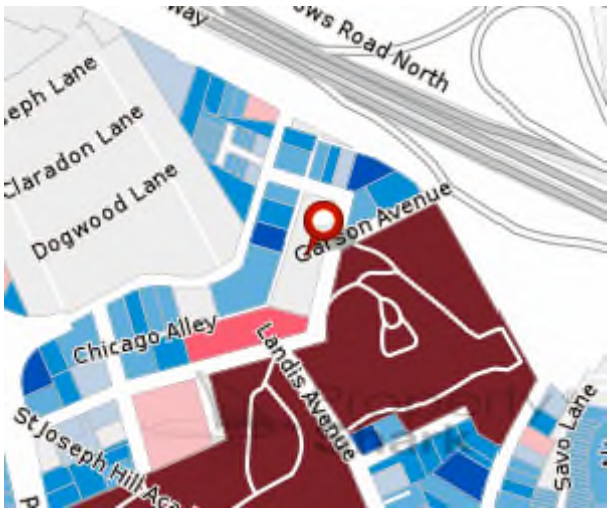
Tentative Actual Values

Tentative actual land	**$531,000**
Tentative actual total	**$607,950**
Tentative actual exempt land	**$531,000**
Tentative actual exempt total	**$607,950**

G5. Assessment History

Year	Building class	Market value	Assessed value	Taxable	Tax rate%	Base tax	Property tax
2016/17	Q2	$1,312,000	$590,400	$0	10.574%	$59,698	$0
2015/16	Q2	$1,274,000	$573,300	$0	10.656%	$59,330	$0
2014/15	Q2	$1,237,000	$556,650	$0	10.684%	$58,672	$0
2013/14	Q2	$1,225,000	$551,250	$0	10.323%	$55,686	$0
2012/13	Q2	$1,225,000	$551,250	$0	10.288%	$54,327	$0
2011/12	Q2	$1,225,390	$551,426	$0	10.152%	$51,377	$0
2010/11	Q2	$1,189,390	$535,226	$0	10.312%	$49,262	$0
2009/10	Q2	$1,128,940	$508,023	$0	10.426%	$46,704	$0
2008/09	Q2	$1,098,680	$494,406	$0	10.241%	$42,475	$0
2007/08	Q2	$980,750	$441,338	$0	10.059%	$38,654	$0
2006/07	Q2	$910,190	$409,586	$0	10.997%	$40,074	$0
2005/06	Q2	$858,780	$386,451	$0	11.306%	$38,145	$0
2004/05	Q2	$760,000	$342,000	$0	11.558%	$35,940	$0
2003/04	Q2	$760,000	$342,000	$0	11.431%	$33,539	$0

G6. Tax per Square Foot



This map shows property tax in correlation with square footage of the property.

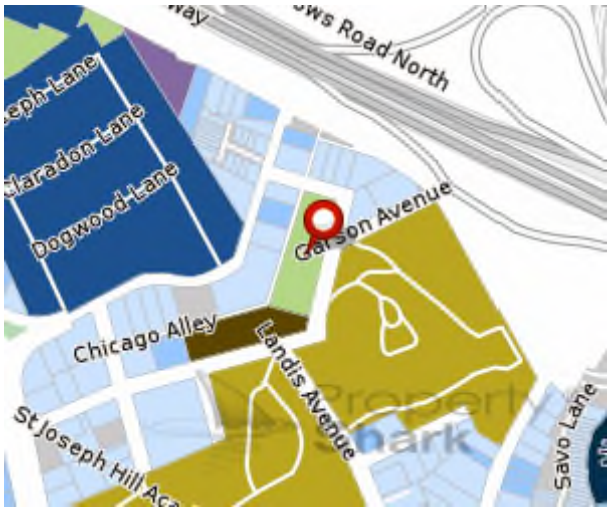
Above $10.00	$4.00 - $5.00
$9.00 - $10.00	$3.00 - $4.00
$8.00 - $9.00	$2.00 - $3.00
$7.00 - $8.00	$1.00 - $2.00
$6.00 - $7.00	Below $1.00
$5.00 - $6.00	No Data

H. Development & Use

H1. Building Class

The *building class* specifies how a property is used or what type of building is present on that property. Building classes range from A to Z (excluding X). There are at most 10 different sub-classes within each building class (ranging from 0 to 10). These building classes cover all property uses from residential and commercial to government buildings and parks.

The full list of building classes can be found here.



Building class: **Playground (Q2)**

H2. Zoning

New York City is divided into three basic *zoning districts:* residential (R), commercial (C) and manufacturing (M). These basic zoning districts are subdivided by the intensity of use. Development is governed by the use, bulk, and parking requirements of the zoning district.

Zoning Designation

Residential **R1-2**

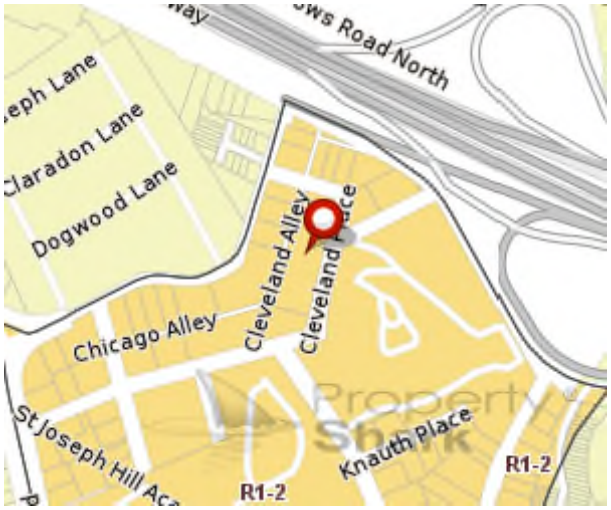
Rezoning Projects

No Rezoning Projects found.

For more information about zoning district regulations, click here.

This map was created from the NYC Department of City Planning's online zoning map files. It includes updates found in those files through 12/15/16.

Residential **R1-2**



R1 districts are leafy, low-density neighborhoods of large, single-family detached homes on spacious lots. Maped in Jamaica Estates in Queens, and Fieldston in the Bronx. Although new homes in R1-1 districts must be on larger and wider lots than homes in R1-2 and R1-2A districts, generous yard requirements and high open space ratio (OSR) or lot coverage regulations preserve the open space that characterizes all R1 districts More info

Map Disclaimer: Our maps are not official zoning maps. The print version of the NYC Zoning Resolution, which includes the zoning maps, together with any amendments adopted by the City Council subsequent to the most recent update to the print version, remains the official version of the Zoning Resolution.

H3. Floor Area Ratio & Air Rights

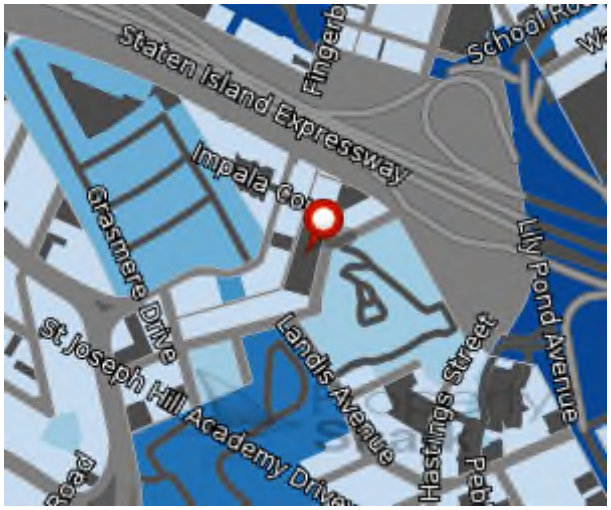
There are many rules that limit what you can build on a lot and how large it can be. But the most important is the Floor Area Ratio, or FAR. The FAR is expressed as a ratio of the size of the building in square feet to the size of the lot in square feet. For example, if a lot is 2,000 square feet and has an allowable FAR of 4.0, then you cannot build a building larger than 8,000 square feet. Max FAR depends on several factors including zoning, location and use.

Area of lot in square feet		**43,111**
FAR	x	**0.5**
Maximum usable floor area of building	=	**21,556**

Available Air Rights by Parcel

The building on this lot is smaller than the maximum set by the FAR. Thus it may be possible to add to the building (either more floors or an extension) or it may be possible to sell the "air rights" to a developer who owns a nearby lot. (Note: other factors may limit what you can do.)

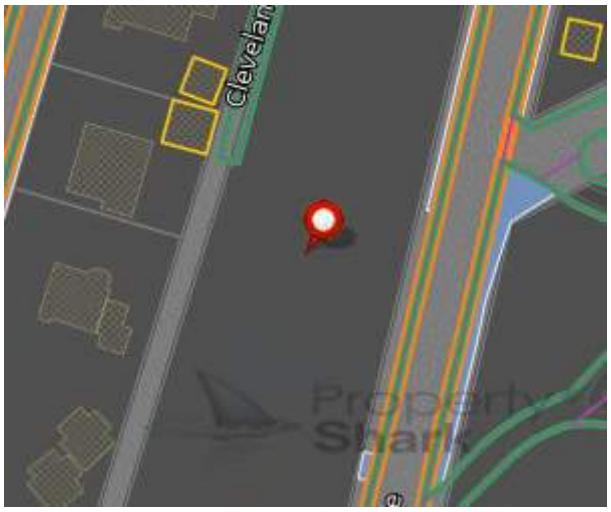
Maximum usable floor area		**21,556**
Usable floor area	-	**0**
Unused buildable square feet ("air rights")	=	**21,556**



Residential FAR	**0.5**
Facility FAR	**1**

H4. Planimetric Map

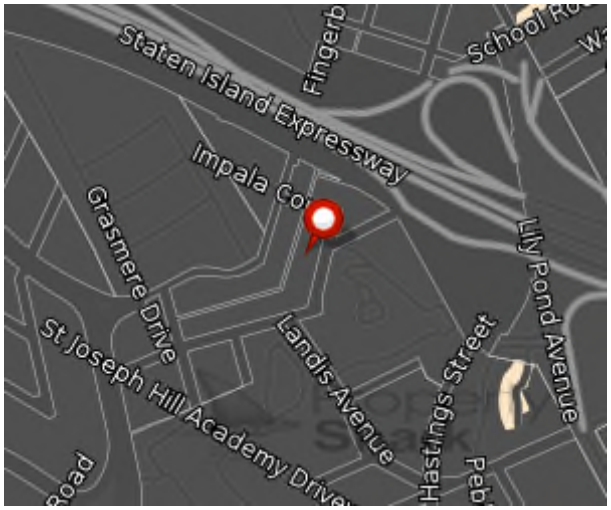
This planimetric map shows features such as retaining walls, sidewalks, medians, curbs, and roadbeds that have been digitized from aerial photography. These features must be taken into consideration when determining how a new building, or extensions to an existing building, are situated within the lot. They can also affect the maximum height that can be built.



I. Complaints & Violations

I1. HPD Violations

When excessive violations are present, this can adversely affect the support given by The NYC Department of Housing Preservation and Development (HPD). These violations can result in building-wide inspections, fees, and the requirement of extensive repair work to correct underlying conditions. In some cases, outstanding violations may result in a lien being placed on the property. It is also substantially more difficult to mortgage a building with extensive violations.



This map shows housing violations in residential buildings, giving more weight to more recent and more severe violations.

- Very high
- High
- Medium
- Low
- Very low

Class description ?

We do not have any record of violations in our database. Status can be verified here.

I2. ECB Violations

There are eleven city agencies that administer the City's quality-of-life laws and issue Notices of Violation (NOVs) for alleged violations. The ECB is a separate and independent agency that hears challenges to those NOVs. The agencies that issue the most violations for real estate are:

- Department of Buildings (DOB)
- Department of Environmental Protection (DEP)
- Fire Department
- Landmarks Preservation Commission (LPC)
- Department of Sanitation

PropertyShark obtains its ECB NOV records from the DOB and updates them nightly. Records go back to 1988

No records found.

For more information about the ECB and the types of NOVs that it handles, visit its home page.

J. Neighborhood

J1. Distance to Schools

Elementary School Proximity

This map shows zoned Elementary School and other public and private schools available in the area, with exact distances from the subject property to the school of interest.

Elementary Schools:
- District Boundary
- Attendance Zone
- Unzoned Area

School Locations:
- Zoned
- Other Public
- Charter
- Private

Attendance Elementary School(s)

School	Distance (miles)	School code	Principal	Phone number
Ps 39 Francis J Murphy Jr	0.312	31R039	MS. Tracey a. Wright	447-4543

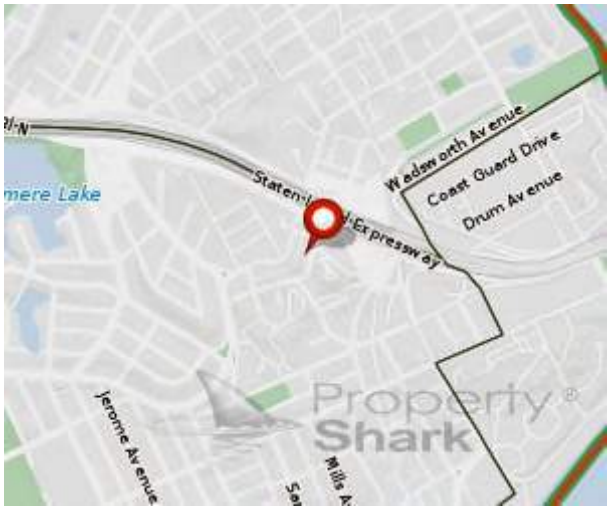
Nearest Public Elementary School (not zoned)

Distance (miles)	**1.117**
School	**Naples Street Elementary School**
School code	**31R009**
Principal	**MS. Deanna Marco**
Phone number	**876-4610**

Find more info at NYC Department of Education

Nearest Private Elementary School

Distance (miles)	**0.078**
School	**St John Villa Academy Elementary**
School code	**31R320**
Principal	**Sister Lucita Bacat**
Phone number	**447-2668**



Middle School Proximity

This map shows zoned Middle School and other public and private schools available in the area, with exact distances from the subject property to the school of interest.

Middle Schools:
- District Boundary
- Attendance Zone
- Unzoned Area

School Locations:
- Zoned
- Other Public
- Charter
- Private

Attendance Middle School(s)

School	Distance (miles)	School code	Principal	Phone number
Is 49 Berta A Dreyfus	1.411	31R049	MR. James DE Francesco	727-6040

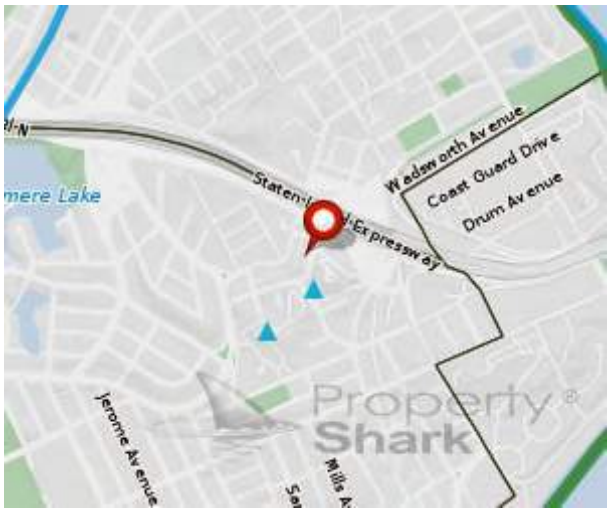
Nearest Public Middle School (not zoned)

Distance (miles)	**1.951**
School	**Michael J Petrides School (The)**
School code	**31R080**
Principal	**MS. Joanne Buckheit**
Phone number	**815-0186**

Find more info at NYC Department of Education

Nearest Private Middle School

Distance (miles)	**2.405**
School	**Miraj Islamic School**
School code	**31R737**
Principal	**MR. Jehan Tewfik**
Phone number	**816-6161**



High School Proximity

This map shows zoned High School and other public and private schools available in the area, with exact distances from the subject property to the school of interest.

High Schools:
District Boundary
Attendance Zone
Unzoned Area

School Locations:
Zoned
Other Public
Charter
Private

Attendance High School(s)

School	Distance (miles)	School code	Principal	Phone number
Curtis High School	3.018	31R450	MR. Gregory Jaenicke	390-1800

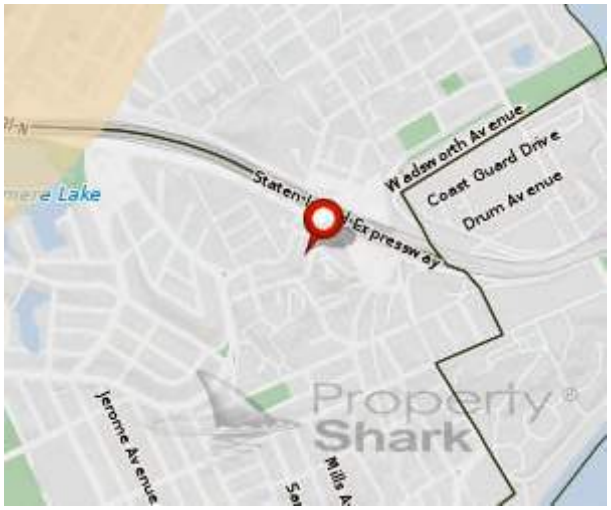
Nearest Public High School (not zoned)

Distance (miles)	**1.11**
School	**Concord High School**
School code	**31R470**
Principal	**MR. Christopher Anzalone**
Phone number	**447-1274**

Find more info at NYC Department of Education

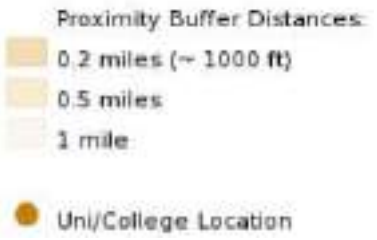
Nearest Private High School

Distance (miles)	**0.071**
School	**St John Villa Academy High School**
School code	**31R319**
Principal	**Sister Antonia Zuffante**
Phone number	**442-6240**



University Proximity

See distance to closest university from your property.



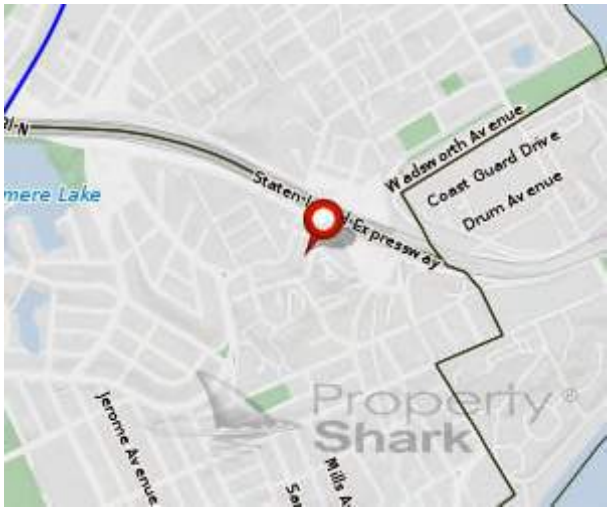
Nearest University/College

Distance (miles)	**1.504**
School name	**Wagner College**

Find more info at NYC Department of Education

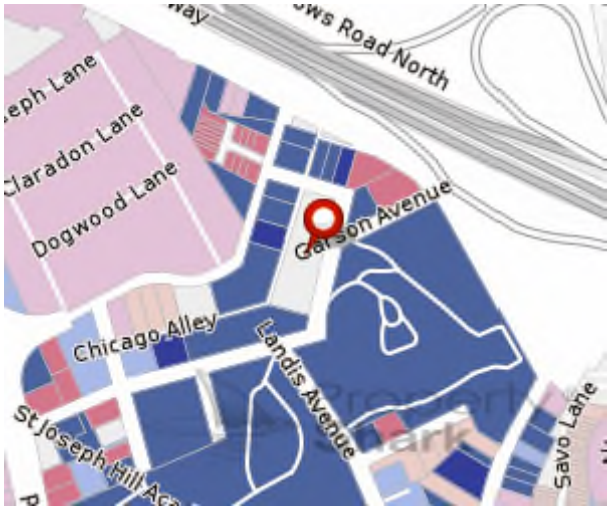
J2. Distance to Subway

On this color-coded map, view the nearest subway station for each building.



Closest station	**4th Ave - 95th St at SW corner**
Station lines	**R**
Distance (ft)	**11,601**

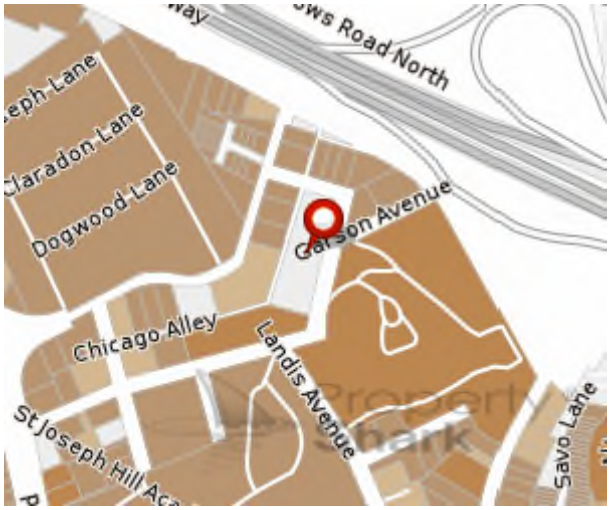
J3. Urban Landscape Maps



Year Built

On this color-coded map, view the year each property was built.

- 2010 and later
- 2000 - 2009
- 1990 - 1999
- 1970 - 1989
- 1950 - 1969
- 1900 - 1949
- 1900 and earlier
- No Data



Building Stories

On this map, view the number of stories per building.

- 10 & Up Stories
- 7 to 9 Stories
- 5 to 6 Stories
- 4 Stories
- 3 Stories
- 2 Stories
- 1 Story
- No Data

J4. Demographics By Zip Code

Demographic data shown in this section was gathered from the 2014 American Community Survey and refers to zip code **10305**.

Population Demographics

Total population	41,471
Female population	52.2%
Male population	47.8%
Median age	40.1
Male median age	39.7
Female median age	40.5

Race & Ethnicity

White	77.5%
Black or african american	4.3%
American indian	0.8%
Asian	12.0%
Other	5.4%

Education

No highschool	5.9%
Some highschool or college	56.4%
Bachelors degree	19.0%

Other

Citizens	87.7%
Citizens born in US	62.6%
English speakers	90.4%

Journey to Work

Work in a metropolitan area	100.0%
Work at home	2.4%
Go to work by car	57.4%
Go to work after 10 am	16.6%

Economic/Employment

Average household income	$83,184
White collar	82.4%
Blue collar	17.6%

Housing

Family households	70.3%
Households with kids	34.5%
Housing units	15,978
Occupied housing units	14,884
Owner occupied units	66.2%
Average number of people per household	2.73
Median year structure built	1971
Houses with mortgages	68.6%

Wealth

Median value for units with a mortgage	$407,400
Median value for units without a mortgage	$419,800
Median gross rent	$1,181
Median housing costs per month	$1,458
Population in poverty	11.1%

K. Hazards & Environment

K1. Toxic Sites

Get a Phase I Environmental Report Site Assessment or a Home Environmental Database Report for this property directly from Toxics Targeting by accessing this link.

This screening map, provided to PropertyShark by Toxics Targeting, shows environmental hazards such as toxic dumps, garbage landfills, leaking tanks, hazardous waste sites, and pollution discharges reported by local, state and federal government authorities.

Call **800-2-TOXICS** *(800-286-9427 NYS only)* or **607-273-3391** for more info.

Toxic Sites

Toxic site data reported for this property: **No**

Neighboring toxic sites: **1**

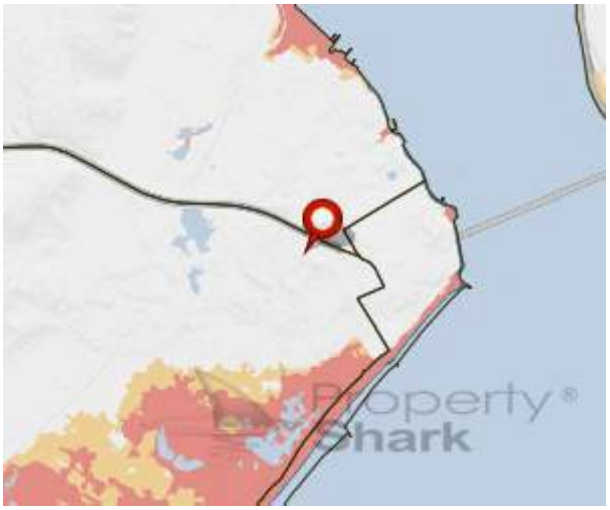
- Other Toxic Sites:
  - x **1** Petroleum Bulk Storage

Total toxic sites near the property: **No**

Map Disclaimer: Mapped locations are approximate; identified sites based on current and/or historic information; site symbols can refer to large properties; additional toxic sites are not mapped; contamination problems can impact properties far from toxic sources; sites include known and potential hazards; regulatory status of sites may have changed.

K2. Fema Flood Zones Map

On this map, you can see if the property is located in a special flood hazard area.



Note: This map was constructed using Fema Flood DFIRM data set. It does not take into account changes made after Hurricane Sandy.

Link to the map for this property at **FEMA's Map Service Center** (may not be available in all locations).

FEMA Flood Zoning

FEMA flood zone(s)	**X**
Coastal barrier resources system area (COBRA)	**Out**
Floodway	**Out**
FEMA special flood hazard area	**Out**
Map panel ID	**3604970327G**
Map quaderant ID	**40074-E1**

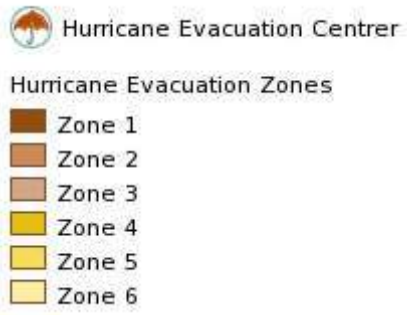
Distance to...

Nearest distance to coastline (miles)	**0.722**
Compass direction to coastline	**26**
Nearest distance to 100 year flood zone area (ft)	**2,718**
Angle100	**291**

K3. Hurricane Evacuation Zones

Zone: **X**

The map shows recent hurricane evacuation zones and evacuation reception centers.



Disclaimer

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All data comes from government sources. No attempt has been made to validate it. No attempt has been made to validate the accuracy of the programming of this web site. Do not rely on this report to support investment decisions. The only authoritative source for the information in this report is the government agencies from which the data was acquired.

Property Report for:

57 Cleveland Pl, Staten Island, NY 10305

B. Overview

B1. Overview

Address

Primary address	57 Cleveland Pl
Alternate address(es)	25 REAR Landis Ave 18 Hastings St 25 Landis Ave Other Alternate Addresses
Zip code	10305
Borough	Staten Island
Block & lot	03087-0001
Sanborn map	503 314
Tax map	51301

Owner

Name	St John Villa Academy
Address	57 Cleveland Pl Staten Island, NY 10305-3796

Property Taxes

Tax class	4
Tax assessor's market value	$19,114,000
Projected tax assessor's market value	$99,958,000
Current tax bill	$0
Projected tax bill	$0

Neighborhood

Neighborhood	Grasmere - Concord
Community district	2
Closest Police station	1.02 Miles
Closest Fire station	0.29 Miles
School district number	31
Census tract	20

Hazards & Environment

Toxic site on this property	Yes
Neighboring toxic sites	No

Building

Building class	Parochial School, Yeshiva (W2) ?
Building sqft	108,275
Building dimensions	135 ft x 61 ft
Year built	1920 (estimated)
Stories	3
Year last altered	2005 ?

Use

Residential units	1
Residential sqft	10,800
Average residential unit size	10,800
Commercial units	5
Other sqft	22,365

Lot

Lot sqft	269,400 ?
Lot dimensions	449 ft x 600 ft
Corner lot	NW
Buildings on lot	1

Zoning

Zoning districts	R1-2 ?
Zoning map	27c

Floor Area Ratio (FAR)

Residential FAR	0.5
Facility FAR	1
FAR as built	0.40 ?
Allowed usable floor area	134,700
Usable floor area as built	107,760

Easements

Owner	Mta Bridges and Tunne
Type	Land Easement
Lot sqft	5,200
Lot frontage	30
Lot depth	116
Assessment	$3,600

B2. Photos

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Call us today at 718-715-1758 to upgrade your subscription.

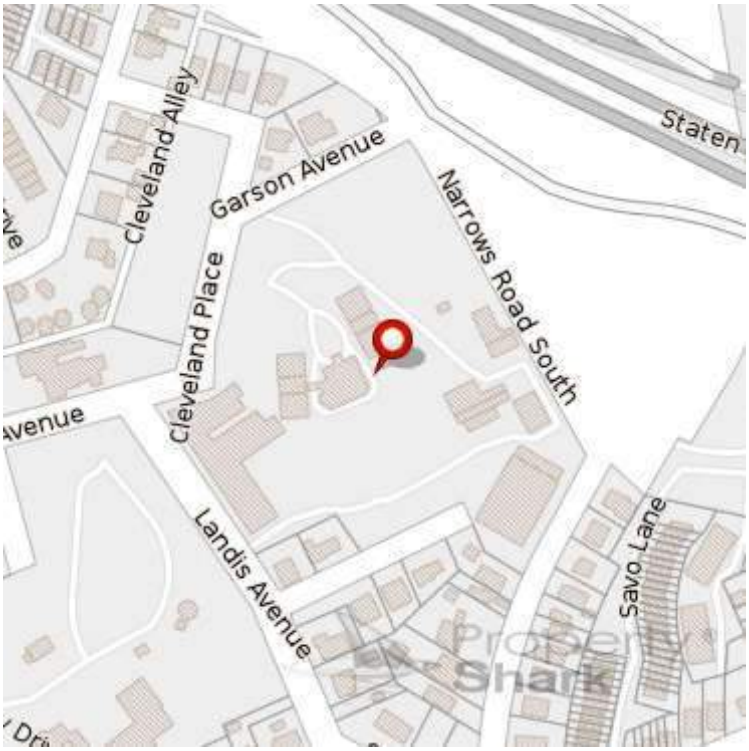
Photo by Department of Finance

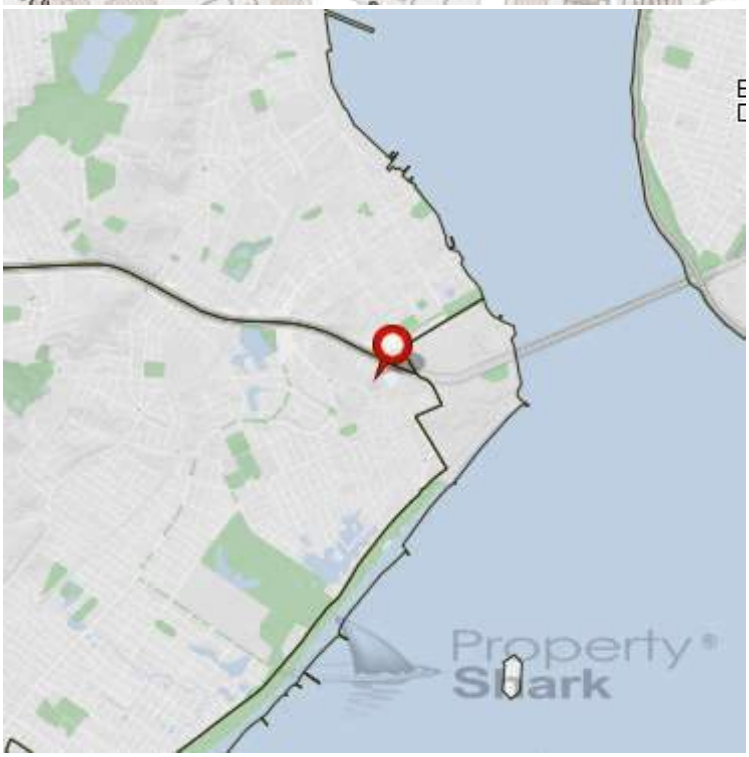
Upload photos for this property

Google StreetView

Google StreetView Microsoft Bird's Eye View

B3. Maps





B4. For Sale

No active listing found for this property.
Have your listing displayed on a high-traffic website by visiting Point2 Homes.

C. Ownership

C1. Registered Owner

St John Villa Academy
57 Cleveland Pl
Staten Island, NY 10305-3796
Source: Assessment Roll
Last recorded: 01/17/2017

Phone Lookup

See who is behind the LLC

Add to Address Book

See past the LLC: three ways to unmask the real owner

C2. Contacts from Building Permits

Registration date	Role	Name	Address	Phone number
11/14/2016	Owner	Vic Wolf Tenant-At&T	1 At&T Way Bedminster, NJ 07921	(201) 644-0808
11/14/2016	Applicant	Jiang Yu		
07/14/2016	Owner	Lois Darold St. John Villa Academy	57 Cleveland Pl Staten Island, NY 10305	(718) 447-4150
07/14/2016	Applicant	Timothy Collins		
03/28/2016	Applicant	Thomas E Smith Jacobs Telecommun Inc		(626) 578-7129
03/28/2016	Owner	Nicholas Mazza Sisters Of St John The Baptist	57 Cleveland Pl Staten Island, NY 10305	(718) 447-4150
08/26/2015	Applicant	Ronald Victorio		
04/28/2015	Applicant	Ibraim Redza Skyline Scaffolding Group		(732) 985-0013
04/28/2015	Owner	Ibraim Redza Triboro Bridge And Tunnel Auth	57 Cleveland Pl Staten Island, NY 10305	(718) 447-4150
12/22/2014	Owner	Sr. Lois Darold St. John Villa Academy	57 Cleveland Pl Staten Island, NY 10305	(718) 447-4150
12/22/2014	Applicant	Robert Schuster		
12/22/2014	Applicant	John Mazza Adak Drywall Inc		(718) 967-5536
11/17/2014	Applicant	Richard Mantello Aaron Plbg And Mech Syst		(718) 984-3011
11/12/2014	Applicant	Nicholas Tucci		
10/29/2014	Applicant	Robert E Schuster		

D. Occupancy

D1. Phone Records of Residents

Name	Unit	Phone number	Listed
Sisters Of St John The Bapt		(718) 447-4150	01/01/2016
St John Villa Academy		(718) 447-4150	01/01/1952

D2. Registered Voters

Name	Unit	Registration date	Last year voted	Phone number
Abecaille Bianchini	n/a	3/29/2010	2012	(718) 447-4150
Ann Marie R Damiani	n/a	11/15/2011	2016	(718) 447-4150
Joan Godeski	n/a	6/20/2012	2016	(718) 447-4150
Anita L Gramer	n/a	11/8/2011	2016	(718) 447-4150
Jennifer Raimo	n/a	11/3/2005	2010	(718) 447-4150
Lucita Bacat	n/a	11/22/2005	2016	
Lena H Baglino	n/a	7/10/1989	2012	
Kathryn M Cantwell	n/a	1/1/1972	2008	
Christine Chanda	n/a	10/3/1994	2000	
Josephine L Citrano	H	1/1/1968	1990	
M Virginia Cordasco	n/a	1/1/1978	2010	
Kathleen B Crowley	n/a	10/6/1987	2004	
Lois M Darold	H	1/1/1972	2016	
Olga M Depew	n/a	11/10/2003	2005	
Mary Dinsmore	n/a	1/1/1973	2010	☎ Residential Business

E. Title History

E1. Liens

No records found.

E2. Title History

No records were found.

F. Sales & Value

F1. Sales & Values Maps

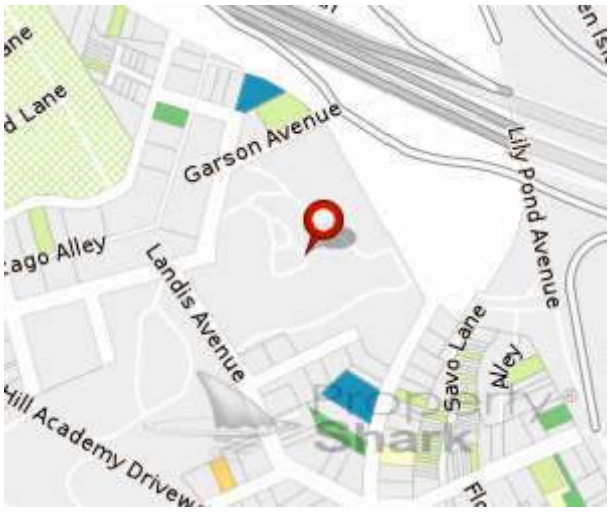
Date of Last Sale

This map shows the most recent sales around the subject property, with darker colors indicating more recent sales.

- First half of 2017
- Second half of 2016
- First half of 2016
- Second half of 2015
- First half of 2015
- All 2014
- 2012 - 2013
- < 2012
- No data

The map is based only on valid sales with a recorded price over $1000.

Price per Square Foot



On this color-coded map, view the price paid per square foot around the subject property.

- Below $100
- $100 - $250
- $250 - $400
- $400 - $550
- $550 - $700
- $700 - $850
- $850 - $1000
- Above $1000
- No data

Multiple properties on the same parcel.
Color coordinates with the price ranges above.

G. Property Tax

G1. Property Tax

Market Value

The property tax assessment process starts when the city's assessors estimate a property's market value, based upon the available information. The assessors use three approaches to value the property: sales, cost and income. The *market value* is generally defined as what the property would sell for in a competitive and open market.

		2016/2017		2017/2018
Land market value		$6,735,000		$6,735,000
Building market value	+	$12,379,000	+	$93,223,000
Market value	**=**	**$19,114,000**	**=**	**$99,958,000**

Assessed Value

Assessed value is a calculation of the property value for tax purposes. It usually represents a percentage of the market value and is subject to limits on annual increases. Sometimes the city will exempt part of the assessed value from taxation, as an incentive to make improvements to an existing structure or to build on a vacant lot. There are also several tax reductions programs for residential properties that may apply and may lower the property's tax bill.

		2016/2017		2017/2018
Land assessed value		$3,030,750		$3,030,750
Building assessed value	+	$5,570,550	+	$41,950,350
Assessed value	=	$8,601,300	=	$44,981,100
Exemptions granted by city	-	$8,601,300	-	$44,981,100
Net assessed value	**=**	**$0**	**=**	**$0**

Transitional Value

While the city's assessors have noted the rapid appreciation of property in New York City, the state understands that it would be burdensome for property taxes to rise too fast. Therefore, increases in the *assessed value* are phased in over a number of years. This introduces the *transitional assessed value*, which is a limit on the portion of the assessed value introduced into the tax base. When the *assessed value* is phased in, sometimes the *exemptions* are as well.

		2016/2017		2017/2018
Transitional land value		$2,546,910		$2,667,870
Transitional building value	+	$5,640,026	+	$12,995,095
Transitional value	=	$8,186,936	=	$15,662,965
Transitional exemption value	-	$8,186,936	-	$15,662,965
Transitional net assessed value	**=**	**$0**	**=**	**$0**

Taxable Value

The *taxable value*, for 2016/2017, is the smaller of the city's *net assessed value* and the *transitional net assessed value*.

Taxable value	=	$0

Property Tax

Base tax is an estimate of what an owner **not** benefiting from tax exemptions or abatements would pay and is determined by multiplying the assessed value by the tax rate. *Current tax* is calculated by multiplying the taxable value by the tax rate.
For a very small number of properties, owner-related exemptions (for which we currently don't have information) apply, and so the values given below may be slightly different from the official ones. In addition to exemptions, the city also grants *tax abatements* to some properties. An *abatement* is simply a discount which is subtracted directly from the current tax. This results in the *property tax*, the amount the current owner pays.

Tax description	Billable value 16/17		Tax rate 16/17		Tax amount 16/17
Base tax	$8,186,936	*	10.5740%	=	$865,686.61
Exemption	$8,186,936			-	$865,686.61
Current tax	$0	*	10.5740%	=	$0.00
Total abatements				-	$0.00
Property tax				**=**	**$0.00**

Tax description	Billable value 17/18		Tax rate 17/18		Tax amount 17/18
Base tax	$15,662,965	*	10.5740%	=	$1,656,201.92
Exemption	$15,662,965			-	$1,656,201.92
Current tax	$0	*	10.5740%	=	$0.00

Tax description	Billable value 17/18	Tax rate 17/18		Tax amount 17/18
Total abatements			-	$0.00
Property tax			=	**$0.00**

For more information please visit New York City's property tax section. Also, you can view this property's assessment, tax bill and account statements here.

G2. Exemptions and Tax Abatements

Both the City and State of New York offer property tax reductions through exemptions and abatements for residential property, commercial constructions, and properties used by governmental, industrial, and nonprofit organizations. Exemptions provide tax relief by reducing a property's assessed value, and abatements reduce taxes by applying credits to the amount of tax due. The information in this section presents a summary of the granted amounts and other related values of the benefit programs. Some of this data comes from NYC Department of Housing Preservation and Development (HPD) and the Department of Finance, departments which administer the J-51 Program and the 421a Program.

Exemption Values 16/17

Land exemption value	**$3,030,750**
Total exemption value	**$8,601,300**

Exemption Values 17/18

Land exemption value	**$3,030,750**
Total exemption value	**$44,981,100**

Transitional Exemptions 16/17

Transitional land exemption value	**$2,546,910**
Transitional total exemption value	**$8,186,936**

Transitional Exemptions 17/18

Transitional land exemption value	**$15,662,965**
Transitional total exemption value	**$15,662,965**

Code	Exemption description	Transitional exemption value	Changing exempt total
1022-01 (25120)	Nonprof Orgnztn-Educational	$7,986,867	$200,069

G3. Tentative Values

Every year in January, the NYC Department of Finance Commissioner publishs the tentative property assessment roll for the current fiscal year. All properties are valued by law according to their condition on the taxable status date of January 5th. Owners who believe that the Department of Finance has used incorrect information to determine their market value may file forms providing corrections. After Finance verifies the complaints, the agency will make any corrections before the final assessment roll is published on May 25. The final roll will also include changes, based on the decisions made by the New York City Tax Commission, an independent City agency, as well as new information Finance gathers about abatements, exemptions and other adjustments. In June, Finance will use the final roll and new tax rates adopted by the City Council to generate property tax bills for the fiscal year beginning July 1st.

Tentative Transitional Values

Tentative transitional land	**$2,667,870**
Tentative transitional total	**$15,662,965**
Tentative exempt land	**$2,667,870**
Tentative exempt total	**$15,662,965**

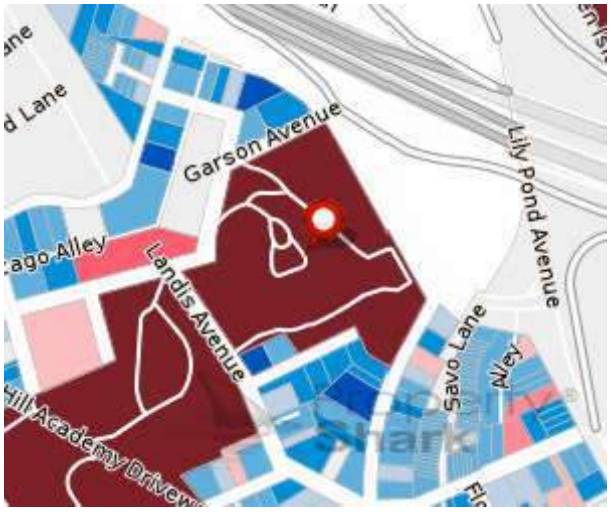
Tentative Actual Values

Tentative actual land	**$3,030,750**
Tentative actual total	**$44,981,100**
Tentative actual exempt land	**$3,030,750**
Tentative actual exempt total	**$44,981,100**

G5. Assessment History

Year	Building class	Market value	Assessed value	Taxable	Tax rate%	Base tax	Property tax
2016/17	W2	$19,114,000	$8,601,300	$0	10.574%	$865,687	$0
2015/16	W2	$18,805,000	$8,462,250	$0	10.656%	$851,081	$0
2014/15	W2	$18,256,980	$8,215,641	$0	10.684%	$834,711	$0
2013/14	W2	$17,899,000	$8,054,550	$0	10.323%	$791,577	$0
2012/13	W2	$16,891,000	$7,600,950	$0	10.288%	$776,913	$0
2011/12	W2	$16,891,000	$7,600,950	$0	10.152%	$762,431	$0
2010/11	W2	$16,170,000	$7,276,500	$0	10.312%	$714,716	$0
2009/10	W2	$15,600,000	$7,020,000	$0	10.426%	$674,715	$0
2008/09	W2	$15,555,100	$6,999,795	$0	10.241%	$626,106	$0
2007/08	W2	$15,380,100	$6,921,045	$0	10.059%	$579,399	$0
2006/07	W2	$12,905,000	$5,807,250	$0	10.997%	$596,263	$0
2005/06	W2	$7,280,000	$3,276,000	$0	11.306%	$325,613	$0
2004/05	W2	$6,440,000	$2,898,000	$0	11.558%	$307,801	$0
2003/04	W2	$6,440,000	$2,898,000	$0	11.431%	$288,267	$0

G6. Tax per Square Foot



This map shows property tax in correlation with square footage of the property.

Above $10.00	$4.00 - $5.00
$9.00 - $10.00	$3.00 - $4.00
$8.00 - $9.00	$2.00 - $3.00
$7.00 - $8.00	$1.00 - $2.00
$6.00 - $7.00	Below $1.00
$5.00 - $6.00	No Data

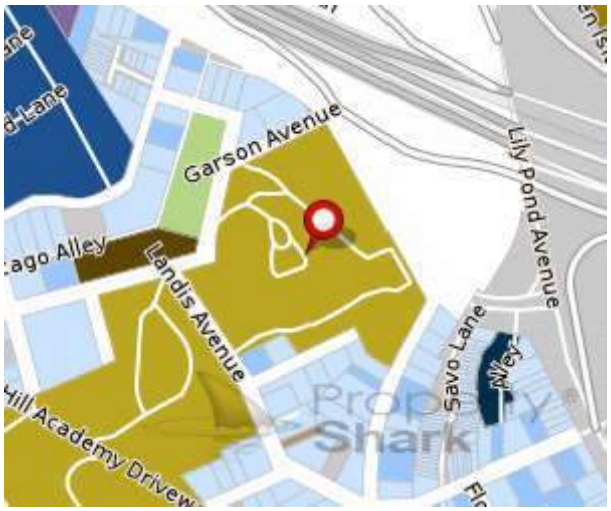
Property tax	**$1,656,202**
Tax year	**2017/2018**
Square feet	**108,275**
Tax per sqft	**$15**

H. Development & Use

H1. Building Class

The *building class* specifies how a property is used or what type of building is present on that property. Building classes range from A to Z (excluding X). There are at most 10 different sub-classes within each building class (ranging from 0 to 10). These building classes cover all property uses from residential and commercial to government buildings and parks.

The full list of building classes can be found here.



Building class: **Parochial School, Yeshiva (W2)**

H2. Zoning

New York City is divided into three basic *zoning districts:* residential (R), commercial (C) and manufacturing (M). These basic zoning districts are subdivided by the intensity of use. Development is governed by the use, bulk, and parking requirements of the zoning district.

Zoning Designation

Residential **R1-2**

Rezoning Projects

No Rezoning Projects found.

For more information about zoning district regulations, click here.

This map was created from the NYC Department of City Planning's online zoning map files. It includes updates found in those files through 12/15/16.

Residential R1-2

R1 districts are leafy, low-density neighborhoods of large, single-family detached homes on spacious lots. Maped in Jamaica Estates in Queens, and Fieldston in the Bronx. Although new homes in R1-1 districts must be on larger and wider lots than homes in R1-2 and R1-2A districts, generous yard requirements and high open space ratio (OSR) or lot coverage regulations preserve the open space that characterizes all R1 districts More info

Map Disclaimer: Our maps are not official zoning maps. The print version of the NYC Zoning Resolution, which includes the zoning maps, together with any amendments adopted by the City Council subsequent to the most recent update to the print version, remains the official version of the Zoning Resolution.

H3. Floor Area Ratio & Air Rights

There are many rules that limit what you can build on a lot and how large it can be. But the most important is the Floor Area Ratio, or FAR. The FAR is expressed as a ratio of the size of the building in square feet to the size of the lot in square feet. For example, if a lot is 2,000 square feet and has an allowable FAR of 4.0, then you cannot build a building larger than 8,000 square feet.
Max FAR depends on several factors including zoning, location and use. FAR values for this property are: Facility FAR 1,Commercial FAR 0 and Residential FAR .5.

Area of lot in square feet		**269,400**
FAR	x	**.5**
Maximum usable floor area of building	=	**134,700**

Available Air Rights by Parcel

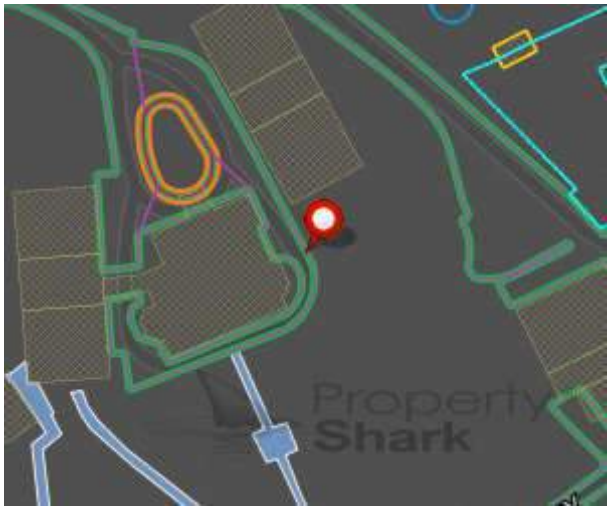
The building on this lot is smaller than the maximum set by the FAR. Thus it may be possible to add to the building (either more floors or an extension) or it may be possible to sell the "air rights" to a developer who owns a nearby lot. (Note: other factors may limit what you can do.)

Maximum usable floor area		**134,700**
Usable floor area	-	**107,760**
Unused buildable square feet ("air rights")	=	**26,939**

Unused buildable square feet: **26,939**

H4. Planimetric Map

This planimetric map shows features such as retaining walls, sidewalks, medians, curbs, and roadbeds that have been digitized from aerial photography. These features must be taken into consideration when determining how a new building, or extensions to an existing building, are situated within the lot. They can also affect the maximum height that can be built.



BIN	Type	Status	Roof height	Ground elevation
5107480	Building	Constructed	25	103
5107481	Building	Constructed	48	142
5107484	Building	Constructed	38	116
5107485	Building	Constructed	13	103
5107486	Building	Constructed	20	119
5107487	Building	Constructed	4	109
5108458	Building	Constructed	40	152
5155461	Building	Constructed	15	107
5155463	Building	Constructed	8	114
5157318	Building	Constructed	46	142

BIN	Type	Status	Roof height	Ground elevation
5157319	Building	Constructed	44	145
5157320	Building	Constructed	15	119
5157321	Building	Constructed	11	117
5157322	Building	Constructed	57	145
5157323	Building	Constructed	58	144

H5. Permits

Pre filing date	Job type	Initial cost	Job status	Work type	Link to job
11/14/2016	Alteration type 3	$5,000	Application processed - completed	Antenna	
Replacement of existing telecommunication antennas and related RRH units on roof. Retrofit existing cabinet in the existing equipment shelter on grade. all work in compliance with TPPN 5/98. no change to occupancy, use, or egress.					
07/14/2016	Alteration type 2	$10,000	Application processed - completed	Fire alarm	
Replacement of facp and devices of an existing approved fire alarm system					
02/10/2016	Alteration type 3	$5,000	Application processed - completed	Antenna	
Replacement of existing telecommunications antenna with installation of related RRH unit on roof. retrofit of existing cabinet in existing telecommunications compound on grade. all work in compliance with TPPN 5/98. no change to occupancy, use, or egress.					
12/14/2015	Alteration type 3	$5,000	Application processed - completed	Antenna	
Replacement of existing telecommunications antenna with installation of related RRH units on roof. retrofit of existing cabinet in existing telecommunications compound on grade. all work in compliance with TPPN 5/98. no change to occupancy, use, or egress					
08/26/2015	Alteration type 2	$20,000	Application processed - completed	Fire alarm	
Installation of a manual and automatic smoke/heat/CO detection fire alarm system					
12/22/2014	Alteration type 2	$4,050	Plan exam - approved	General construction	
Install new non-bearing partitions and TW0(2) doors. no change in occupancy ,use or egress. all as per plans herewith filed					
11/12/2014	Alteration type 2	$15,000	Plan exam - disapproved	Plumbing	
Install new water booster pump in sub-cellar of the existing building. No change in use, occupancy or egress. all as per plans herewith submitted					
10/29/2014	Alteration type 2	$250,000	Plan exam - approved	General construction	
Replace existing windows and exterior doors, facade repair. install new roofing no change in use, occupancy or egress. all as per plans herewith submitted					
07/03/2013	Alteration type 2	$32,000	Application processed - completed	Plumbing, boiler	
Replace boiler and gas burner					
07/17/2012	Alteration type 2	$45,000	Permit issued - entire job/work	General construction	
Convert existing classrooms to administrative offices. All as per plans herewith submitted . no change to use ,egress or occupancy.					
06/26/2012	Alteration type 2		Permit issued - entire job/work	Boiler, fuel burning	
Replace boiler and reinstall oil burner (NYC boiler no. 82207-03). this application is filed in conjunction with laa no. 510087095.					
06/21/2012	Alteration type 2	$63,600	Permit issued - partial job	Plumbing, general construction	
Remove existing toilet fixtures and replace with new. create new staff toilet. Install new tile . no change in use, occupancy or egress all as per plans herewith submitted.					

Pre filing date	Job type	Initial cost	Job status	Work type	Link to job
06/21/2012	Alteration type 2	$25,000	Plan exam - approved	Plumbing	
Install backflow prevention device at the above location. no change in use, occupancy or egress. all has per plans herewith filed					
11/07/2011	Alteration type 2	$15,000	Permit issued - entire job/work	General construction	
Erect new non-bearing partitions. replace existing hung ceiling with new. no change in use, occupancy or egress. All as per plans herewith submitted.					
06/27/2011	Alteration type 3	$25,000	Plan exam - disapproved	Antenna	
Installation of additional telecommunications cabinet on existing concrete pad on grade. installation of related antennas on roof. initial installation appro ved under application #500350345 all work in compliance with TPPN 5/98. no change to occupancy, use, or egress.					

H6. Boiler Permits

Issue date	Request type	Expiration date	Primary fuel	Link to permit
5/31/2016	Certificate to operate	2/1/2019	Fuel oil grade 2	CB562103
8/7/2014	Registration	8/22/2017	Natural gas	CB102805
4/12/2013	Registration	4/11/2016	Natural gas	CR349013
4/3/2013	Registration	8/10/2016	Fuel oil grade 2	CA219195
8/7/1995	Registration	8/10/2007	Fuel oil grade 2	CA219095
3/13/1989	Registration	3/15/2007	Fuel oil grade 2	CA074989
3/30/1987	Registration	5/18/1990	Fuel oil grade 2	CA127187
12/11/1986	Registration	1/13/1996	Fuel oil grade 2	CA010087

I. Complaints & Violations

I1. Complaints

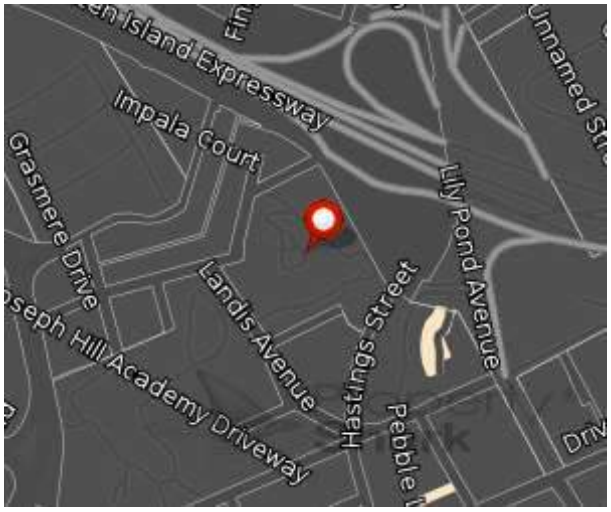
Complaint number	Address	Date entered	Complaint category	Inspection date	Disposition	Status
5103082	57 Cleveland Place	3/21/2013	Sep - Professional Certification Compliance Audit			Active
5103081	57 Cleveland Place	3/21/2013	Sep - Professional Certification Compliance Audit			Active
5099517	57 Cleveland Place	8/24/2012	Sep - Professional Certification Compliance Audit			Active
5081985	57 Cleveland Place	11/16/2009	Sidewalk Shed/Supported Scaffold/Inadequate/Defective/ None/No Pmt/No Cert	11/16/2009	Partial Stop Work Order	Closed

Complaint number	Address	Date entered	Complaint category	Inspection date	Disposition	Status
5081234	57 Cleveland Place	10/6/2009	Permit - None (Building/PA/Demo Etc.)	10/20/2009	No Violation Warranted for Complaint at Time of Inspection	Closed
5069773	57 Cleveland Place	3/3/2008	Sidewalk Shed/Supported Scaffold/Inadequate/Defective/ None/No Pmt/No Cert	3/3/2008	No Violation Warranted for Complaint at Time of Inspection	Closed
5048788	25 Landis Avenue	1/24/2005	Failure to Maintain	1/25/2005	ECB Violations Served	Closed
5048791	25 Landis Avenue	1/24/2005	Failure to Maintain	1/25/2005	No Violation Warranted for Complaint at Time of Inspection	Closed
5048354	57 Cleveland Place	12/13/2004	Zoning - Non-Conforming	12/16/2004	No Violation Warranted for Complaint at Time of Inspection	Closed

To confirm complaint status, check the HPD website.

I2. HPD Violations

When excessive violations are present, this can adversely affect the support given by The NYC Department of Housing Preservation and Development (HPD). These violations can result in building-wide inspections, fees, and the requirement of extensive repair work to correct underlying conditions. In some cases, outstanding violations may result in a lien being placed on the property. It is also substantially more difficult to mortgage a building with extensive violations.



This map shows housing violations in residential buildings, giving more weight to more recent and more severe violations.

Very high
High
Medium
Low
Very low

Class description ?

We do not have any record of violations in our database. Status can be verified here.

I3. ECB Violations

There are eleven city agencies that administer the City's quality-of-life laws and issue Notices of Violation (NOVs) for alleged violations. The ECB is a separate and independent agency that hears challenges to those NOVs. The agencies that issue the most violations for real estate are:

- Department of Buildings (DOB)
- Department of Environmental Protection (DEP)
- Fire Department
- Landmarks Preservation Commission (LPC)
- Department of Sanitation

PropertyShark obtains its ECB NOV records from the DOB and updates them nightly. Records go back to 1988

No records found.

For more information about the ECB and the types of NOVs that it handles, visit its home page.

J. Neighborhood

J1. Facilities

The Department of City Planning has information related to selected facilities and program sites in New York City. The list below shows facilities for this property.

Name	Type	Capacity	Capacity type
Saint John Villa Academy High School	Private elementary or secondary school	633	Total enrollment
Saint John Villa Academy Elementary	Private elementary or secondary school	309	Total enrollment

J2. Distance to Schools

Elementary School Proximity

This map shows zoned Elementary School and other public and private schools available in the area, with exact distances from the subject property to the school of interest.

Elementary Schools:
District Boundary
Attendance Zone
Unzoned Area

School Locations:
Zoned
Other Public
Charter
Private

Attendance Elementary School(s)

School	Distance (miles)	School code	Principal	Phone number
Ps 39 Francis J Murphy Jr	0.294	31R039	MS. Tracey a. Wright	447-4543

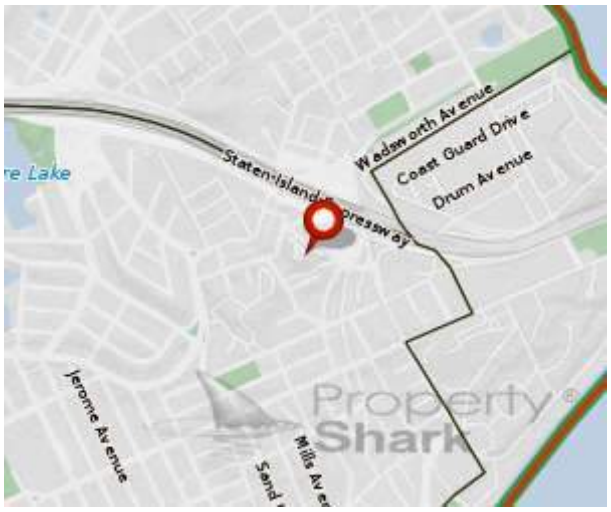
Nearest Public Elementary School (not zoned)

Distance (miles)	**1.184**
School	**Naples Street Elementary School**
School code	**31R009**
Principal	**MS. Deanna Marco**
Phone number	**876-4610**

Find more info at NYC Department of Education

Nearest Private Elementary School

Distance (miles)	**0.054**
School	**St John Villa Academy Elementary**
School code	**31R320**
Principal	**Sister Lucita Bacat**
Phone number	**447-2668**



Middle School Proximity

This map shows zoned Middle School and other public and private schools available in the area, with exact distances from the subject property to the school of interest.

Middle Schools:
- District Boundary
- Attendance Zone
- Unzoned Area

School Locations:
- Zoned
- Other Public
- Charter
- Private

Attendance Middle School(s)

School	Distance (miles)	School code	Principal	Phone number
Is 49 Berta A Dreyfus	1.475	31R049	MR. James DE Francesco	727-6040

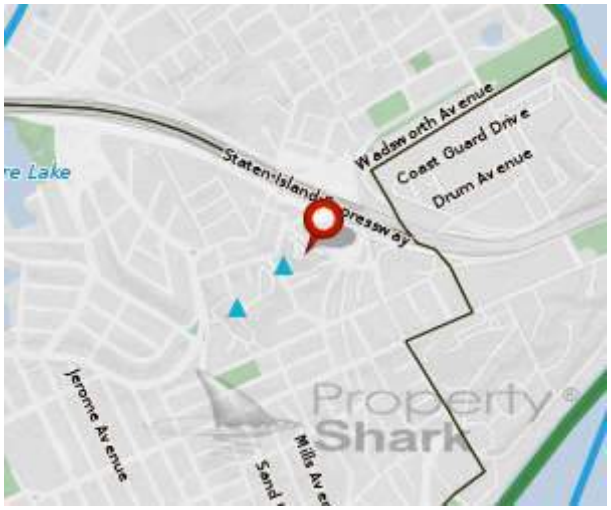
Nearest Public Middle School (not zoned)

Distance (miles)	**2.025**
School	**Michael J Petrides School (The)**
School code	**31R080**
Principal	**MS. Joanne Buckheit**
Phone number	**815-0186**

Find more info at NYC Department of Education

Nearest Private Middle School

Distance (miles)	**2.384**
School	**Poly Prep Country Day School**
School code	**20K928**
Principal	**Headmaster - MR. David B. Harman**
Phone number	**836-9800**



High School Proximity

This map shows zoned High School and other public and private schools available in the area, with exact distances from the subject property to the school of interest.

High Schools:
District Boundary
Attendance Zone
Unzoned Area

School Locations:
Zoned
Other Public
Charter
Private

Attendance High School(s)

School	Distance (miles)	School code	Principal	Phone number
Curtis High School	3.07	31R450	MR. Gregory Jaenicke	390-1800

Nearest Public High School (not zoned)

Distance (miles)	**1.19**
School	**Concord High School**
School code	**31R470**
Principal	**MR. Christopher Anzalone**
Phone number	**447-1274**

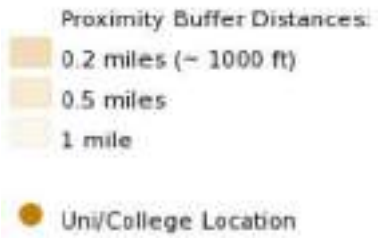
Find more info at NYC Department of Education

Nearest Private High School

Distance (miles)	**0.053**
School	**St John Villa Academy High School**
School code	**31R319**
Principal	**Sister Antonia Zuffante**
Phone number	**442-6240**

University Proximity

See distance to closest university from your property.



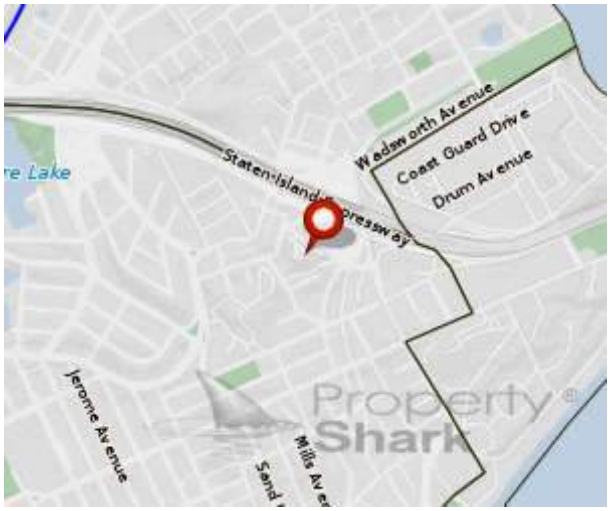
Nearest University/College

Distance (miles)	**1.584**
School name	**Wagner College**

Find more info at NYC Department of Education

J3. Distance to Subway

On this color-coded map, view the nearest subway station for each building.



Closest station	**4th Ave - 95th St at SW corner**
Station lines	**R**
Distance (ft)	**11,399**

J4. Urban Landscape Maps

Year built: **1920**

Year Built

On this color-coded map, view the year each property was built.

- 2010 and later
- 2000 - 2009
- 1990 - 1999
- 1970 - 1989
- 1950 - 1969
- 1900 - 1949
- 1900 and earlier
- No Data

Stories: **3**

Building Stories

On this map, view the number of stories per building.

- 10 & Up Stories
- 7 to 9 Stories
- 5 to 6 Stories
- 4 Stories
- 3 Stories
- 2 Stories
- 1 Story
- No Data

J5. Demographics By Zip Code

Demographic data shown in this section was gathered from the 2014 American Community Survey and refers to zip code **10305**.

Population Demographics

Total population	41,471
Female population	52.2%
Male population	47.8%
Median age	40.1
Male median age	39.7
Female median age	40.5

Race & Ethnicity

White	77.5%
Black or african american	4.3%
American indian	0.8%
Asian	12.0%
Other	5.4%

Education

No highschool	5.9%
Some highschool or college	56.4%
Bachelors degree	19.0%

Other

Citizens	87.7%
Citizens born in US	62.6%
English speakers	90.4%

Journey to Work

Work in a metropolitan area	100.0%
Work at home	2.4%
Go to work by car	57.4%
Go to work after 10 am	16.6%

Economic/Employment

Average household income	$83,184
White collar	82.4%
Blue collar	17.6%

Housing

Family households	70.3%
Households with kids	34.5%
Housing units	15,978
Occupied housing units	14,884
Owner occupied units	66.2%
Average number of people per household	2.73
Median year structure built	1971
Houses with mortgages	68.6%

Wealth

Median value for units with a mortgage	$407,400
Median value for units without a mortgage	$419,800
Median gross rent	$1,181
Median housing costs per month	$1,458
Population in poverty	11.1%

K. Hazards & Environment

K1. Toxic Sites

Get a Phase I Environmental Report Site Assessment or a Home Environmental Database Report for this property directly from Toxics Targeting by accessing this link.

This screening map, provided to PropertyShark by Toxics Targeting, shows environmental hazards such as toxic dumps, garbage landfills, leaking tanks, hazardous waste sites, and pollution discharges reported by local, state and federal government authorities.

Call **800-2-TOXICS** *(800-286-9427 NYS only)* or **607-273-3391** for more info.

Toxic Sites

- St John Villa Academy Elementary

This is a school with reported toxic risks.

Total known or potential toxic sites on property: **4**

- Leaking Tanks and Spills:
  - x **2** Spill
  - x **1** Tank Test Failure
- Other Toxic Sites:
  - x **1** Petroleum Bulk Storage

Neighboring toxic sites: **No**

Total toxic sites near the property: **2**

This toxic site data is found outside any specific property boundary.

- Leaking Tanks and Spills:
  - x **1** Spill greater than 25 gal/lbs
  - x **1** Spill

Map Disclaimer: Mapped locations are approximate; identified sites based on current and/or historic information; site symbols can refer to large properties; additional toxic sites are not mapped; contamination problems can impact properties far from toxic sources; sites include known and potential hazards; regulatory status of sites may have changed.

K2. Fema Flood Zones Map

On this map, you can see if the property is located in a special flood hazard area.

Moderate to Low Risk Areas
X < 1% ACF
0.2 PCT ACFH * < 1% ACF

High Risk Areas
A 1% ACF, no base flood elevations
AE 1% ACF, periodic base flood elevations

High Risk-Coastal Areas
VE =/> 1% ACF + Storm Waves

Floodway
COBRA **
Open Water

* 0.2% Annual Chance of Flood Hazard
** Coastal Barrier Resources System Area
ACF = Annual Chance of Flooding

Note: This map was constructed using Fema Flood DFIRM data set. It does not take into account changes made after Hurricane Sandy.

Link to the map for this property at **FEMA's Map Service Center** (may not be available in all locations).

FEMA Flood Zoning

FEMA flood zone(s)	**X**
Coastal barrier resources system area (COBRA)	**Out**
Floodway	**Out**
FEMA special flood hazard area	**Out**
Map panel ID	**3604970327G**
Map quaderant ID	**40074-E1**

Distance to...

Nearest distance to coastline (miles)	**0.595**
Compass direction to coastline	**321**
Nearest distance to 100 year flood zone area (ft)	**2,208**
Angle100	**281**

K3. Hurricane Evacuation Zones

Zone: **X**

The map shows recent hurricane evacuation zones and evacuation reception centers.

Hurricane Evacuation Centrer

Hurricane Evacuation Zones
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6

Disclaimer

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All data comes from government sources. No attempt has been made to validate it. No attempt has been made to validate the accuracy of the programming of this web site. Do not rely on this report to support investment decisions. The only authoritative source for the information in this report is the government agencies from which the data was acquired.

CLICK HERE TO SIGN UP FOR BUILDINGS NEWS

NYC Department of Buildings

Work Permit Data

Premises: 57 CLEVELAND PLACE STATEN ISLAND **Filed At: 57 CLEVELAND PLACE STATEN ISLAND**

BIN: 5108458 Block: 3087 Lot: 1 **Job Type: A2 - ALTERATION TYPE 2**

Job No:	500164859			**Fee:**	EXEMPT
Permit No:	500164859-01-EW-FB-OIL	**Issued:**	10/10/1995	**Expires:**	12/22/1995
Seq. No.:	01	**Filing Date:**	10/10/1995 INITIAL	**Status:**	ISSUED
Work:		**Proposed Job Start:**	10/10/1995	**Work Approved:**	08/21/1995

ALTERATION TYPE 2 - FUEL BURNING

REPLACE TWO BOILERS, TWO OIL BURNERS AND CHANGE GRADE OF FUEL OIL FROM #4 TO #2. NO CHANGE IN EGRESS, OCCUPANCY OR USE UNDER THIS APPLICATION.

Use: N/A **Landmark:** NO **Stories:** 0

Review is requested under Building Code: 1968

Issued to: HERBERT STOLLERMAN **OIL BURNER INSTALLER B**

Business: EMPIRE STATE FUEL CORP. **License No:** OB 004204

1640 MCDONALD AVENUE BROOKLYN NY 11230 **Phone:** 718-627-5100

Filing Represntative: ALEXANDER WEISS

Business: NEW YORK ENGINEERING ASSOC. P.C. **Phone:** 516-753-0333

270 SPAGNOLI ROAD MELVILLE NY 11747

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

APPENDIX K

RECORDS OF COMMUNICATION & AGENCY CORRESPONDENCE

RECORD OF COMMUNICATION				
Person communicated with:	Mr. Robert Bustamente			
Title and affiliation:	Facilities Manager St. John Villa			
Location/address:	St. John Villa 57 Cleveland Place, Staten Island, NY			
Telephone number:				
Communication via:		Telephone conservation	x	Personal interview
Recorded by:	Amy Jordan			
Date and Time:	April 14, 2017			
Subject:	Site use and history			

Summary of communication:

Mr. Bustamente provided access to the Site and indicated that the Site buildings were constructed throughout the 1900sand was occupied by a school throughout its history. Information provided by Mr. Bustamente is included in Section 8.0.

Comments:

FIRE DEPARTMENT – CITY OF NEW YORK

Public Records Unit / Tanks Section

9 MetroTech Center
Brooklyn, New York 11201-3857
(718) 999-2441 or 2442

Fuel Tank Special Report Request Form

SECTION A CUSTOMER INFORMATION

Please print the required information below.

AKRF Inc., Ashanti Callender
Name

440 Park Avenue South, 7th Floor
Address

New York, NY 10016
State Zip Code

646-388-9513
Telephone Number

OFFICE USE ONLY

_____
Cashier / Search No.

PRU Staff
Accepted By/Initials:_____

Searched By:_____

Total Amount:_____

Note: Please make sure you complete this form and attach all required documents. Enclose a check or money order made payable to the NYC Fire Department and a stamped self-addressed envelope (with postage). Mail checks or money orders directly to the address and unit listed above. DO NOT MAIL CASH.

SECTION B FUEL TANK REPORT - FEE $10.00 / PER REPORT

57-61	Cleveland Place	Staten Island
House Number	Street Name	Borough

- [ ] **THE TOTAL AMOUNT AND SIZE OF EXISTING FUEL OIL / HEATING TANKS**
- [X] **THE TOTAL AMOUNT AND SIZE OF REMOVED OR SEALED FUEL OIL / HEATING TANKS**
- [ ] **THE TOTAL AMOUNT AND SIZE OF EXISTING BURIED MOTOR VEHICLE TANKS**
- [ ] **THE TOTAL AMOUNT AND SIZE OF REMOVED OR SEALED BURIED MOTOR VEHICLE TANKS**
- [ ] **MOST RECENT TANK / PIPING TEST RESULTS**
- [X] **HISTORY OF BURIED TANKS LEAKS**

Note: Requests will be responded to within 10 business days.

PR3 (July-08)

Related Topics: Envirofacts

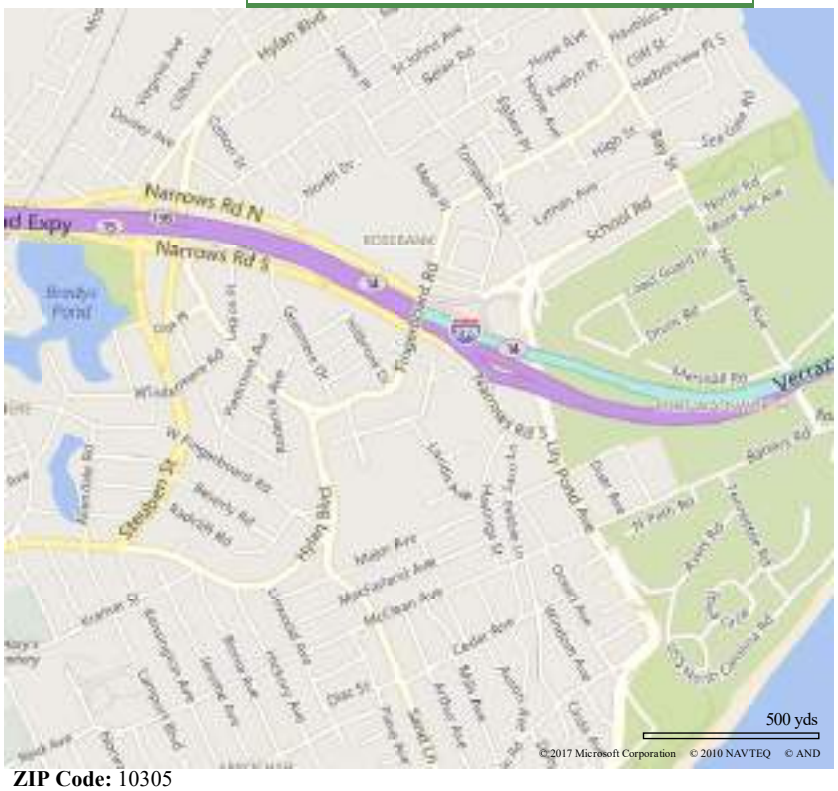
FRS

FRS Facility Query Results

Your selection returned 0 facilities which are listed below.
Results are sorted by State, City Name, and Facility Name

Facilty Registry Service Links:

- Facility Registry Service (FRS) Overview
- FRS Facility Query
- FRS Organization Query
- EZ Query
- FRS Physical Data Model
- FRS Geospatial Model



Map Legend

- Denotes a facility/site lo
- Denotes a facility/site lo by clicking on the 'Magnifyi facilities/sites displayed bel
- Denotes a "Cluster" of f clicking on the cluster will a at that location. It may take expand all clusters at a parti "Turn Clustering Off" butto individual facility/site locati
- In the tabular list of faci map, a single click on the m and zoom the map to that fa

Go To The Facility/Site Table
Restore Original Map
Download KML File
Turn Clustering Off
Turn Clustering On
New Query

ZIP Code: 10305
Location Address: 57 Cleveland place
City Name: staten island
County Name: richmond
State Abbreviation: NY

Total Number of Facilities Displayed: 0

Last updated on September 24, 2015

Abatement

About DEP

- Inside DEP
- News
- Capital Projects
- Careers at DEP
- Environmental Reviews
- Interagency MOUs
- A to Z Index
- Contact Us

Time frame Date of Records:

anyall

Requestor's Name:

Ashanti Callender

Email:

acallender@akrf.com

Organization/Firm:

AKRF

Phone:

6465388613

Address:

About DEP
Inside DEP
News
Capital Projects
Careers at DEP
Environmental Reviews
Interagency MOUs
A to Z Index
Contact Us
any/all
Requestor's Name:
Ashanti Callender
Email:
acallender@akrf.com
Organization/Firm:
AKRF
Phone:
6463889513
Address:

NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE

For office use only
CONTROL NUMBER:

FREEDOM OF INFORMATION LAW REQUEST FORM

To: Records Access Officer
NYC Department of Health and Mental Hygiene
42-09 28th Street, 14th Floor, CN 31
Long Island City, NY 11101
Phone: (347) 396-6078/6116
Fax: (347) 396-6087
recordsaccess@health.nyc.gov

Date 4 / 14 / 17

Dear Record Access Officer:

I, Ashanti Callender request copies of any inspection reports and/or records located in the Bureau of _____, of the New York City Department of Health and Mental Hygiene.

The records pertain to:

- [x] Lead Poisoning
- [ ] Animal bite
- [ ] Employment/Human Resources
- [ ] Contracts/RFPs
- [ ] Pest Control
- [ ] Correctional Health
- [ ] Early Intervention
- [ ] Food Safety
- [ ] Mental Health
- [ ] Communicable Diseases
- [ ] School Health
- [ ] Day Care
- [x] Other: _____

Please specify/describe the records you are requesting from the above program(s):

records pertaining to: underground storage tanks (USTs), spill records, remediation sites, dump sites, soil and groundwater remediation, storage of hazardous materials, and/or hazardous materials activities at 57-61 Cleveland Place, Staten Island NY. Block 3087 Lot 1

There is a charge of 25¢ per page or actual costs of reproduction, payable in advance.

Requester's Name: Ashanti Callender (Please print) _____ (Signature)

Requester's Organization: AKRF Inc.

Requester's Address: 440 Park Avenue South, 7th Floor, New York NY, 10016
Street City State Zip code

Telephone Number: (646) 388 - 9513 E-mail: acallender@akrf.com

For more information, please visit: http://www.nyc.gov/html/doh/html/contact/ogc-foil.shtml

Menu

FOIL Request Main Page (SupportHome.aspx)

I want to...

Reference No: W020785-041417

Contact E-Mail: acallender@akrf.com

Dear Ashanti:

Thank you for your Freedom of Information Law (FOIL) request. Your request has been received and is being processed. Your request was received in this office on 4/14/2017 and given the reference number FOIL #**W020785-041417** for tracking purposes. You may expect the Department's response to your request no later than **5/12/2017**.

Record Requested: **records pertaining to: underground storage tanks (USTs), spill records, remediation sites, dump sites, soil and groundwater remediation, storage of hazardous materials, and/or hazardous materials activities for: 57-61 Cleveland Place, Staten Island NY. Block 3087 Lot 1 Please indicate AKRF's project number (89215) on all correspondence.**

You can monitor the progress of your request at the link below and you'll receive an email when your request has been completed. Again, thank you for using the FOIL Center.

https://mycusthelp.com/NEWYORKDEC/_rs/RequestLogin.aspx (https://mycusthelp.com/NEWYORKDEC/_rs/RequestLogin.aspx)

New York State Department of Environmental Conservation, Record Access Office

Powered by GovQA

STATE OF NEW YORK
DEPARTMENT OF HEALTH

2364 Corning Tower Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

1. TO THE NEW YORK STATE DEPARTMENT OF HEALTH:

I hereby apply to **Inspect** □ or **Receive Copies** ☒ of the following records (use additional sheets as needed and attach)

records pertaining to: underground storage tanks (USTs), spill records, remediation sites, dump sites, soil and groundwater remediation, storage of hazardous materials, and/or hazardous materials activities for:

57-61 Cleveland Place, Staten Island NY. Block 3087 Lot 1

NAME: Ashanti Callender PHONE: ( ) 646-388-9513 EMAIL: acallender@akrf.com

FIRM: AKRF Inc.

ADDRESS: 440 Park Avenue South, 7th Floor, New York, NY 10016

SIGNATURE: _____ DATE: 4/14/2017

2. TO THE APPLICANT:

-Records Provided

☐ The reproduction costs for the records are $_____. Please forward a check payable to the New York State Department of Health to the address listed above. If we do not receive your payment within **60** days, we will assume that you no longer wish to receive the materials, and they will be sent back to the originating unit. Accordingly, any future requests for information will require an initial deposit before processing.

☐ Records have been (partially, fully) provided. (If not fully provided, date when records are expected to be fully provided:_____).

-Records Not Available

☐ Records cannot be found after a diligent search.

☐ The Department does not maintain records indicated, please contact:_____

-Records Denied or Redacted

I hereby certify that access to the records—or part of the records—have been denied to the applicant for the reason(s) checked below (You may appeal this denial of access in writing within 30 days to the Records Access Appeals Officer, Empire State Plaza, 1455 Corning Tower, Albany New York 12237):

☐ Specifically exempt by other statute(s).

☐ Unwarranted invasion of personal privacy.

☐ Would impair present or imminent contract awards or collective bargaining negotiations.

☐ Are examination questions or answers.
Are inter-agency or intra-agency materials that are not: -statistical or factual tabulations or data
-instructions to staff that affect the public
-final agency policy or determinations; or
-external audits, including but not limited to audits performed by the comptroller and the federal government.

☐ Are trade secrets.

☐ Could, if disclosed endanger the life of any person.

☐ Are compiled for law enforcement purposes and which, if disclosed would:
-interfere with law enforcement investigations or judicial proceedings
-deprive a person of the right to a fair trial or impartial adjudication
-identify a confidential source or disclose confidential information relating to a criminal investigation, or
-reveal criminal investigative techniques and procedures

☐ Would jeopardize an agency's capacity to guarantee the security of its information technology assets, such assets encompassing both electronic information systems and infrastructures.

Department Representative_____ Date:_____

FIRE DEPARTMENT

9 METROTECH CENTER BROOKLYN, N.Y. 11201-3857

PUBLIC RECORDS UNIT
TANKS SECTION

Ref No: T- 55624

AKRF INC./ASHANTI CALLENDER
440 PARK AVENUE SOUTH 7TH FLOOR
NEW YORK, NEW YORK 10016
646-388-9513

Dear Customer / Representative,

We have completed a search for address and the requsted information listed below. In the "Status" box below, we have listed the results and any additional comments we may have regarding the search.

*Search Type Customer Requested	$10 Fuel - Existing		
*Search Address	57-61 CLEVELAND PLACE		
*Borough	03 - Staten Island		
*Payment Type	02-Check	*Payment No.	170139
*Data Entered	[illegible]	*Entered By	DR
Account Number	03122736C	Requested Folder	

No. of Tanks	No. of Gallons	Tank Type	Fuel Type	Conversion
01	2,000 Gallons		FO-2	
01	6,000 Gallons		FO-2	
01	2,000 Gallons	FO-2	FO-2	

***Additional Information**

PRINTOUTS ATT. THERE'S THREE ACCT. NO'S. READ THE PRINTOUTS. ALL OF THEM ARE EXISTING AT 57 CLEVELAND PLACE.

***Status** Completed - Record found

IMPORTANT NOTICE: THIS REPORT IS NOT VALID IF ALTERED, CORRECTED OR WITHOUT FDNY CERTIFICATION STAMP AND UNIT EMPLOYEE'S SIGNATURE.

Place FDNY Certification Stamp Below

THIS IS TO CERTIFY THAT THIS IS A TRUE COPY OF THE ORIGINAL DOCUMENT ON FILE WITH FDNY
SIGNATURE DR

If you need further assistance or additional information, please call (718) 999-2441; 8 am - 4pm (Monday - Friday)

Thank you,

Public Records Representative

E- 6/9/2017 DR
C- 6/9/2017 DR

Date : 08/12/17 FPIMS Time : 09:57:39

ACCOUNT RELATED DATA INQUIRY - ACCOUNT COVERAGE

Cleveland 19

Account Number : 03122736 Owner Name : ST JOHNS VILLA ACAD
Date : 09/14/84 See List : 0
Comments : FUEL OIL #2 2000G NO FEE
PHONE#442-6240 KEVIN
GO TO BLDG C

Equipment Type	Equipment Sub Code	Number of Items	Floor
20Z	01	001	1

Date : 06/12/17 FPIMS Time : 09.58.39

ACCOUNT RELATED DATA INQUIRY - ACCOUNT COVERAGE

57 Cleveland Pl.

Account Number : 03061678 Owner Name : ST JOHNS VILLA ACAD
Date : 09/14/84 See List : 0
Comments : FUEL OIL NO 2 OIL 6000GALS
NO FEE
PHONE#442-6240 ROBERT

Equipment Type	Equipment Sub Code	Number of Items	Floor
202	01	001	1

Date : 08/12/17 FPIMS Time : 08 58 23

ACCOUNT RELATED DATA INQUIRY - ACCOUNT COVERAGE

Account Number : 03021409 Owner Name : ST JOHNS VILLA
Date : 09/14/84 See List : 0
Comments : FUEL OIL #2 2000G NO FEE
GO TO BLDG C
PHONE#447-2668 ROBERT

Equipment Type	Equipment Sub Code	Number of Items	Floor
202	01	001	-1

FIRE DEPARTMENT

9 METROTECH CENTER BROOKLYN, N.Y. 11201-3857

PUBLIC RECORDS UNIT
TANKS SECTION

Ref No: T- 55625

AKRF INC./ASHANTI CALLENDER
440 PARK AVENUE SOUTH 7TH FLOOR
NEW YORK, NEW YORK 10016
646-388-9513

Dear Customer / Representative,

We have completed a search for address and the requsted information listed below. In the "Status" box below, we have listed the results and any additional comments we may have regarding the search

*Search Type Customer Requested	810 - Motor History of Leaks		
*Search Address	57-61 CLEVELAND PLACE		
*Borough	03 - Staten Island		
*Payment Type	32-Check	*Payment No.	170139
*Date Entered	6/6/2017	*Entered By	DR
Account Number	03122736C	Requested Folder	

No. of Tanks	No. of Gallons	Tank Type	Fuel Type	Conversion

***Additional Information**

CHECKED ALL ADDRESSES.

***Status** Completed - Record not found

IMPORTANT NOTICE: THIS REPORT IS NOT VALID IF ALTERED, CORRECTED OR WITHOUT FDNY CERTIFICATION STAMP AND UNIT EMPLOYEE'S SIGNATURE.

Place FDNY Certification Stamp Below

THIS IS TO CERTIFY THAT THIS IS A TRUE COPY OF THE ORIGINAL DOCUMENT ON FILE WITH FDNY
SIGNATURE DR

If you need further assistance or additional information, please call (718) 999-2441; 8 am - 4pm (Monday - Friday)

Thank you,

Public Records Representative

E- 6/6/2017 DR
C- 6/6/2017 DR

APPENDIX L

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

ELIZABETH MATAMOROS

ENVIRONMENTAL SCIENTIST/PLANNER

Elizabeth Matamoros is an Environmental Scientist in AKRF's Hazardous Materials group. She is a recent graduate from Harvard University with a degree in Environmental Science and Public Policy. She is responsible for conducting Phase I Environmental Site Assessments (ESAs), and supporting the hazardous materials group in preparing Phase II Subsurface Investigations and hazardous materials assessments for EASs and EISs; remediation planning and oversight; and developing Remedial Action Plans and Health and Safety Plans. Elizabeth also works as a Planner in AKRF's Environmental Assessment and Planning Group in their Hudson Valley Office. She provides SEQR support to municipal and private clients, assists in the preparation of Master Plans, and participates in public engagement efforts.

BACKGROUND

Role in Project

Junior Environmental Scientist

Education

B.A., Environmental Science and Public Policy, Earth and Planetary Sciences Minor Harvard College, 2014

Certifications

OSHA 40-hour Health & Safety Training for Hazardous Waste Operations, November 2014
NYSDEC Soil & Sediment Erosion Control - SWPPP Inspector, March 2015
OSHA 8-hour Health & Safety Training for Hazardous Waste Site Personnel Refresher, September 2015OSHA 10-hour Construction Safety Training, November 2015

Years of experience

Date started at AKRF: June 2014

RELEVANT EXPERIENCE - AKRF

New York City School Construction Authority (SCA), Environmental Consulting Hazardous Materials Services

AKRF has undertaken various assignments under two consecutive hazardous materials on-call contracts, including environmental assessment, remedial design, and plumbing disinfection consulting tasks. For potential new school sites, assignments include initial due diligence, Phase I environmental site assessments (ESAs) and multi-media subsurface investigation of soil, groundwater, and soil vapor to determine the suitability of a site for development as a school, likely remediation requirements, and associated costs. For sites undergoing design and development, assignments include preparation of remediation plans, design of sub-slab depressurization systems (SSDS) and contract specifications, and construction oversight. The work has also included conducting Phase I ESAs and indoor air quality testing, preparation of specifications, supervision of storage tank removals, and investigation and remediation of spills for existing schools. Due to the sensitivity of school sites, work under this contract is often conducted on short notice and during non-school hours. Ms. Matamoros conducts Phase I ESAs, Phase II subsurface investigations, plumbing disinfections, indoor air quality investigations, and SSDS inspections as part of this contract.

Various Phase I ESAs

Ms. Matamoros prepared Phase I ESAs in accordance with ASTM E1527-13 and EPA's All Appropriate Inquiry (AAI) rule, which included conducting site visits, reviewing federal and state regulatory databases, and collecting historical fire insurance maps and building records from the municipality for review in determining possible hazardous environmental conditions. Representative projects include:

- Manhattan College (various), Bronx, New York
- Columbia University (various), New York, New York
- 37 Otsego Street, Brooklyn, New York
- West 108th Street, New York, New York
- St. Luke's Hospital, Cornwall, New York
- 9 Wilton Avenue, Norwalk, Connecticut
- 2 Soundview Drive, Greenwich, Connecticut
- 164 Mason Street, Greenwich, Connecticut
- 10 East Evergreen, New City, New York
- Amy's Kitchen Proposed Facility, Goshen, New York
- Proposed Soccer Training Facility, Orangetown, New York

Phase II Subsurface Investigations

Ms. Matamoros conducted Phase II Subsurface Investigations for sites being developed including:

- Amy's Kitchen Proposed Facility, Goshen, New York
- Proposed Soccer Training Facility, Orangetown, New York
- 37 Otsego Street, Brooklyn, New York
- Manhattan College (various), Bronx, New York

Crestwood 300-308 Columbus Avenue, Tuckahoe, NY – Environmental Monitoring

Investigation and remediation of the former gasoline filling station is being conducted under the New York State Brownfield Cleanup Program (BCP). AKRF completed a Phase I Environmental Site Assessment, Phase II Subsurface Investigation, and prepared a Remedial Action Plan (RAP) to address subsurface contamination during site redevelopment. For this project, Ms. Matamoros served as an on-site environmental monitor who conducted work zone and community air monitoring, and oversaw excavation and export of soil.

DEP Property, Carmel, NY – Soil, Sediment and Surface Water Sampling

This project was a continuation of ongoing work conducted by AKRF for a private client. Ms. Matamoros took soil, sediment, and surface water samples for part of an off-site investigation.

87 Gedney Way, White Plains NY – Groundwater Sampling

This project was a continuation of ongoing work conducted by AKRF for the City of White Plains, which previously included a landfill closure. Ms. Matamoros screened wells for methane, measured depth to groundwater, and took groundwater samples from the site.

REBECCA KINAL, P.E.

SR. TECHNICAL DIRECTOR-ENVIRONMENTAL ENGINEER

Rebecca Kinal has over twelve years of experience in the assessment and remediation of soil and groundwater contamination and other hazardous/non-hazardous waste problems. Her hydrogeologic experience includes in-situ permeability testing, drilling supervision, and computer modeling of groundwater flow. Her experience with soil and groundwater contamination includes underground storage tank leak investigations; hazardous soil removal and disposal; design and operation and maintenance (O&M) of groundwater remediation systems; soil and water sampling; soil gas surveys; fate and transport modeling; wastewater discharge permit preparation; and project coordination with federal, state, and local authorities.

Prior to her employment with AKRF, Ms. Kinal was a Project Engineer with General Physics Corporation in Columbia, Maryland, where her responsibilities included overseeing fieldwork, preparing and reviewing technical reports, computer modeling, designing remediation systems, and writing proposals.

BACKGROUND

Role in Project

Project Manager

Education

M.S., Hydrogeology, Rensselaer Polytechnic Institute, 1995

B.S., Civil Engineering, Lafayette College, 1992

Licenses/Certifications

Professional Memberships

Years of Experience

Year started in company: 2000

Year started in industry: 1996

RELEVANT EXPERIENCE

Roosevelt Union Free School District, Roosevelt, NY

Ms. Kinal is managing environmental investigation and remediation activities for the sites of three new elementary schools and a new middle school in Roosevelt, New York. Remediation activities include removal/closure of contaminated dry wells and underground petroleum storage tanks, and excavation and off-site disposal of petroleum- and pesticide-contaminated soil.

Queens West Development Project, Long Island City, NY

For over 20 years, AKRF has played a key role in advancing the Queens West development, which promises to transform an underused industrial waterfront property into one of largest and most vibrant mixed-use communities just across the East River from the United Nations. AKRF has prepared an Environmental Impact Statement that examines issues pertaining to air quality, land use and community character, economic impacts, historic and archaeological resources, and infrastructure. As part of the project, AKRF also undertook the largest

remediation ventures completed to date under the NYSDEC Brownfields Cleanup Program (BCP). Ms. Kinal helped prepare the Remedial Work Plan (RWP) and oversaw the remediation of Parcel 9, a 1.8-acre former industrial site. Remediation includes installation of a sheet pile containment wall, excavation of coal tar- and petroleum-contaminated soil under a temporary structure to control odors during remediation, vapor mitigation for the future buildings, and institutional controls. Upon completion of the remediation activities, Ms. Kinal managed the preparation of a Final Engineering Report (FER) to document the clean-up activities. The NYSDEC issued a Certificate of Completion (COC) for the Parcel 9 site in December 2006. Ms. Kinal continues to oversee post-remediation monitoring and site management activities to ensure that the remedy remains in-place and effective.

NYCSCA Mott Haven School Campus, Bronx, NY

Ms. Kinal provided environmental consulting services to the selected environmental remediation contractor for this former manufactured gas plant in the Mott Haven neighborhood of the Bronx, which was remediated under the NYSDEC BCP. These services included: preparation of an in situ sampling plan and excavation plan for waste characterization and disposal; supervision of waste characterization sampling activities; development and implementation of a community air monitoring program during all remediation activities; and daily reporting to the NYC School Construction Authority.

Shell Service Station, Millwood, NY

Ms. Kinal planned and oversaw a Phase I Environmental Site Assessment and Phase II Subsurface Investigation of this active gasoline station in northern Westchester County. The Phase I/Phase II investigations were performed for the potential buyer of the property who wished to redevelop it with a more modern service station and convenience store. Ms. Kinal also prepared a conceptual remediation plan to address several areas of petroleum contamination identified during the Phase II. The plan, which was approved by NYSDEC, will be implemented in conjunction with the site redevelopment activities to achieve closure for several spills reported at the site.

Pelham Plaza Shopping Center Site Investigation & Remediation, Pelham Manor, NY

Ms. Kinal managed a Site Investigation at Pelham Plaza, an approximately ten-acre site that formerly contained a manufactured gas plant. The site was investigated under a voluntary clean-up agreement entered into with the NYSDEC by the site owner. The site investigation included advancing over 100 soil borings with continuous soil sampling to bedrock, installing monitoring and recovery wells, and conducting test pitting both indoor and outdoor locations to collect soil and groundwater samples and determine the extent of Non-Aqueous Phase Liquid (NAPL). The investigation also included: soil gas sampling to determine contaminant concentrations in the vapors beneath the foundation of an on-site retail store; sediment sampling in an adjacent creek to identify off-site impacts; and a tidal survey to determine tidal influence on groundwater levels at the site. Ms. Kinal also oversaw on-going interim remedial measures, which include biweekly pumping of recovery wells to remove dense NAPL (DNAPL) from the site subsurface.

Yonkers Waterfront Redevelopment Project, Yonkers, NY

For this redevelopment along Yonkers' Hudson River waterfront, Ms. Kinal supervised the remediation of Parcels H and I that were contaminated with hazardous soil. During the remediation process, she reviewed the subcontractor health and safety plans, delineated the areas of excavation, and oversaw field activities to ensure compliance with the specifications and appropriate regulations. This property was remediated under the NYSDEC Environmental Restoration Program (ERP).

Yankee Stadium, Bronx, NY

Ms. Kinal performed the hazardous materials analysis for the Draft Environmental Impact Statement for the proposed new Yankee Stadium. The analysis included a Phase I Environmental Site Assessment of the entire

project area and Subsurface (Phase II) Investigation in areas where environmental conditions were identified. The Phase II investigation included geophysical surveys to search for potential underground storage tanks; and soil, soil gas, and groundwater sampling at over 40 locations to determine potential environmental impacts during and after the proposed construction.

MARCUS SIMONS

SENIOR VICE PRESIDENT

Marcus Simons is a Senior Vice President of AKRF with 20 years of environmental consulting experience, specializing in the assessment and cleanup of contaminated sites, including federal and state superfund, RCRA, TSCA, brownfield, voluntary cleanup and spill sites. His expertise includes health risk assessment, development of sampling plans, economic evaluations of remedial alternatives, and regulatory analysis. He is also AKRF's Health and Safety Officer with extensive experience of Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) issues during sampling and remediation of contaminated sites.

Mr. Simons directs much of AKRF environmental due diligence work (recently managing environmental due diligence on Tishman/Blackrock's Peter Cooper/Stuyvesant Town acquisition, reportedly the largest real estate transaction in US history), including supervising preparation of numerous Phase I and Phase II Environmental Site Assessments, as well as more complex multi-site and litigation-related projects. Mr. Simons manages preparation of the contaminated-materials portions of AKRF's Environmental Impact Statements and Environmental Assessments and has experience with procedures for hazardous material requirements under NEPA and New York SEQRA/CEQR and E-designation programs. He also has extensive experience in statistics, selection of sites for controversial facilities, and federal and state wetland regulations and waterfront permitting. In addition to analytical work, Mr. Simons has considerable experience in presenting results to regulatory agencies and the general public.

Mr. Simons has managed some of the most complex cleanup sites in New York State including: the recently completed cleanup of a 12-acre PCB-contaminated former utility property in Flushing, Queens where a 3 million square foot retail/residential building is nearing completion (remediation was performed under the State Brownfield Cleanup Program, though the site was also subject to City jurisdiction under its E-Designation program); cleanup of the nation's largest former dental factory in Staten Island for reuse as single family housing; the investigation of several former manufactured gas plants; and the investigation and remediation associated with the reconstruction of the West Side Highway and Hudson River Park in Manhattan (from the Battery to 59th Street). Mr. Simons also has extensive experience with transportation projects (Second Avenue Subway, MTA/LIRR East Side Access, Cross Harbor Freight Movement Study, Route 9A Reconstruction), large-scale rezoning projects (Long Island City, Downtown Brooklyn, Jamaica) and public and private redevelopment work (Atlantic Yards, School Construction Authority, Queens West)

BACKGROUND

Role in Project

Health & Safety Officer

Education

M.S., Engineering and Public Policy, Carnegie-Mellon University, 1988

M.A. and B.A. (Honors), Mathematics/Engineering, Cambridge University, England, 1986

Certifications

Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) – 40 Hour Site Worker and 8 Hour Site Supervisor

Years of Experience

Year started in company: 1995

Year started in industry: 1988

RELEVANT EXPERIENCE

CE Flushing Site, Flushing, NY

Mr. Simons directed the remediation of a former industrial site in Flushing, Queens, NY prior to its redevelopment as a 3 million square foot retail/residential complex. The property was cleaned up under the NYS Department of Environmental Conservation Brownfield Cleanup Program and the NYC Department of Environmental Protection's E-Designation requirements. The remedial measures included the removal of aboveground and underground storage tanks, excavation and off-site disposal of TSCA, RCRA and non-hazardous wastes, NAPL removal, and removal and investigation of on-site drainage structures. The remediation and subsequent construction involved obtaining (or obtaining waivers from) numerous permits including those for NYSDEC Tidal Wetlands, NYSDEC Long Island Wells, NYSDEC SPDES/Stormwater and NYCDEP Sewer Use.

Peter Cooper Village/Stuyvesant Town, New York, NY

Mr. Simons directed the purchaser's environmental due diligence efforts for the bidding and subsequent acquisition of this 80-acre property in Manhattan. Much of the 110-building complex is underlain by former manufactured gas plants and Con Edison entered the site into NYSDEC's Voluntary Cleanup Program. Going forward Mr. Simons will manage oversight of activities that involve disturbance of MGP-contaminated soils, as well as future testing and potentially remediation.

MTA New York City Transit Manhattan East Side Transit Alternative (MESA)/Second Avenue Subway, New York, NY

Mr. Simons directed the contaminated material assessment for this multi-billion dollar transit initiative that would provide subway service to Manhattan's East Side. The assessment identified several hundred facilities along the alignment that could have impacted soil and/or groundwater and could require special materials handling and enhanced health and safety procedures. Additional evaluation of these sites is underway.

Ferry Point Park, Bronx, NY

Mr. Simons developed the material acceptance criteria (soil standards for capping materials) for the development of Ferry Point Park (including a golf course) in the Bronx. The New York City Department of Environmental Protection DEP and the New York State Departments of Health (DOH) and Environmental Conservation (DEC) agreed for the first time to relax their strict (TAGM 4046) criteria for clean soil, based on statistical analyses of background conditions and risk-based modeling.

Prince's Point, Staten Island, NY

Mr. Simons managed the complex cleanup (including the relocation of a contaminated tidal creek) of the nation's largest former dental factory site on Staten Island's waterfront. The site was on the State Superfund list. The future use of the site as single-family residential property entailed extensive negotiations with NYSDEC and NYSDOH. The project required obtaining (or obtaining waivers from) numerous permits including those for NYSDEC Tidal and Fresh Water Wetlands, USACOE (Nationwide) Permits, NYSDEC Coastal Erosion Hazard Area, NYSDEC SPDES and Stormwater, FEMA Modifications to Land in Floodplain, and USEPA Notification of PCB Waste Activity.

Route 9A Reconstruction, New York, NY

AKRF directed extensive studies for the reconstruction in Lower Manhattan proposed by the New York State Department of Transportation (NYSDOT) in cooperation with the Federal Highway Administration (FHWA). The project is arguably the most complex environmental analyses performed for a federally funded transportation project in New York City in the last 10 years. The firm was responsible for all environmental tasks as well as the preparation for the Draft, Supplementary, and Final Environmental Impact Statements (EISs) and Section 4(f)

Evaluation for this 5-mile $250 million reconstruction of Route 9A as part of the recovery effort following the events of September 11th, 2001. Mr. Simons managed the extensive hazardous materials investigations and prepared the contract specifications for contaminated soil and tank removal, including Health and Safety oversight.

Hudson River Park, New York, NY

Mr. Simons is managing hazardous materials issues for the ongoing Hudson River Park construction, located adjacent to the Route 9A roadway. Construction is ongoing and Mr. Simons directs health and safety oversight and remediation during construction.

Jamaica Rezoning, Queens, NY

As part of the preparation of an Environmental Impact Statement, Mr. Simons managed the hazardous materials assessment of a multi-block area. In addition to conducting the assessment, Mr. Simons made recommendation as to the properties where "E-Designations" (city-recorded institutional controls on future development) should be placed.

Outlet City, Long Island City, Queens, NY

In Long Island City, Mr. Simons managed the investigation and interim remediation of an old factory complex where large volumes of creosote were spilled. The investigations and interim remedial measures (IRMs) took place under the New York State's Voluntary Cleanup Program (VCP).

MTA/LIRR East Side Access Project, New York, NY

Mr. Simons managed the hazardous materials investigations for multiple sites in the Bronx, Manhattan, and Queens associated with the Environmental Impact Statement (EIS) for the Long Island Rail Road connection to Grand Central Terminal. Mr. Simons continues to be involved in health and safety oversight related to the construction of the project.

New York City Department of Transportation, Lead Paint Removal and Disposal on Bridges Project, New York, NY

Mr. Simons conducted a regulatory analysis of related to the removal of lead paint from nearly 800 bridges. This analysis included an evaluation of the regulatory compliance of various proposed procedures with federal and state hazardous and solid waste management requirements.

American Felt and Filter Company, New Windsor, NY

Mr. Simons prepared a Remedial Investigation (including exposure assessment) and Feasibility Study for the country's oldest active felt manufacturing facility, located in Orange County. This solvent-contaminated site is on the State Superfund List.

PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

OF

PROPOSED PUBLIC SCHOOL FACILITY (ACQUISITION)
ST. JOHN VILLA CAMPUS
BLOCK 3087, LOT 1 & BLOCK 3089, LOT 59
57-61 CLEVELAND PLACE
(25 LANDIS AVENUE, 8 NARROWS ROAD SOUTH, 18 HASTINGS STREET)
STATEN ISLAND, NEW YORK 10305

SCA LLW NO. 107932
SCA CONTRACT NO. C000013429
SCA JOB NO. 66656
SCHOOL DISTRICT: 31

AKRF PROJECT NO. 89215

December 21, 2017

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EXECUTIVE SUMMARY

At the request of the New York City School Construction Authority (NYCSCA), AKRF Engineering, P.C. (AKRF) conducted a Phase II Environmental Site Investigation (ESI) of the potential acquisition located at 57-61 Cleveland Place, Staten Island, New York 10305 (the "Site"). Alternative addresses for the Site include 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, and 18 Hastings Street. The Site consists of an approximately 7.2-acre property containing 8 buildings associated with a parochial school constructed between approximately 1891 and 2005, including: a 3-story elementary school with a partial cellar; a 2-story convent with a cellar; a 4-story chapel with a cellar; a 2- to 3-story high school; a 1- to 2-story gymnasium; a 2-story annex; a 1-story child development center; and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a swimming pool with a pool shed. The Site is being considered for acquisition and conversion to a public school facility by the NYCSCA.

AKRF prepared a Phase I Environmental Site Assessment (ESA) Report for the Site dated June 2017. The Phase I ESA identified on-site recognized environmental conditions (RECs) including: in-service fuel oil storage tanks with two closed-status spill listings and one recent tightness test failure; and historic fill of unknown origin, potential buried debris, and potential abandoned underground storage tanks (USTs). Off-site RECs include potential contamination from historic railroad tracks east of the Site, a nearby petroleum bulk storage facility, and a monitoring well noted on the public sidewalk between the two Site lots. The Phase I ESA also revealed environmental concerns associated with: suspect asbestos-containing materials (ACM), lead based paint (LBP), and polychlorinated biphenyl (PCB)-containing materials in the Site structures and/or in buried debris; a 55-gallon drum with unknown contents; and current and former water damage and potential for mold growth.

The purpose of the Phase II ESI was to determine whether the RECs and environmental concerns identified in the Phase I ESA Report have affected the suitability of the Site for use as a public school facility. Initial Phase II ESI field activities were performed on July 31 through August 3, and August 21 and 22, 2017, and consisted of a geophysical survey and the completion of 19 soil borings, 4 temporary monitoring wells, and 18 temporary soil vapor/sub-slab sampling points. A total of 38 soil samples, 1 groundwater sample, and 17 soil vapor/sub-slab samples were collected for laboratory analysis. Supplemental Phase II ESI activities were conducted on November 10 and 11, 2017, and consisted of a geophysical survey , completion of 5 soil borings and, and a Soil Vapor Assessment. A total of 10 soil samples, 2 sub-slab vapor samples, and 1 ambient air sample were collected for laboratory analysis during the supplemental Phase II activities.

Based on the results of the Phase II ESI, AKRF concludes the following:

- In addition to the three known fuel oil underground storage tanks (USTs) at the Site, the geophysical survey identified an anomaly indicative of a potential fourth UST south of the garage area. Additional metallic anomalies identified during the geophysical survey are attributed to stormwater and water service utilities.
- Apparent perched groundwater was encountered at 26.5 feet below ground surface (bgs) in one temporary well installed during the initial Phase II ESI. Saturated soil was observed from 10 to 20 feet bgs in soil boring SB-GA1, advanced during the supplemental Phase II ESI activities. Based on the Site elevation and United States Geological Survey (USGS) information, the groundwater table in the Site vicinity is expected to be greater than 100 feet bgs.

- Subsurface soil generally consists of a shallow layer of historic fill overlying apparent native sand and silt with some gravel and clay.
- Petroleum-related volatile organic compounds (VOCs) detected in several soil/sub-slab vapor samples above the corresponding New York State Department of Health (NYSDOH) background ranges are attributed to the on-site petroleum use/storage.
- Tetrachloroethene (PCE) and trichloroethene (TCE) detected above their corresponding NYSDOH air guideline values (AGVs) in sub-slab vapor samples collected under the elementary school sub-basement appear to represent an isolated condition and possibly related to the historic use of solvents for boiler maintenance activities.
- No VOCs were detected in soil at concentrations above their respective UUSCOs, and no polychlorinated biphenyls (PCBs) or herbicides were detected in any of the soil samples.
- Semivolatile organic compounds (SVOCs), metals, and pesticides detected in soil at concentrations exceeding their respective NYSDEC Part 375 UUSCOs and/or CP-51 SSCOs are attributed to background conditions and/or historic fill noted in the Site subsurface, and not to an on-site release.
- Metals detected in the unfiltered groundwater sample analyzed are attributed to sediment entrained in the groundwater during sampling. No metals were detected above Class GA Ambient Water Quality Standards.

Based on the findings of the Phase II ESI and our understanding that the existing on-site buildings would be converted for use as public schools, AKRF recommends the following:

- Modifications should be made to the elementary school's ventilation system, as necessary, to ensure that the partial sub-basement is separately ventilated from the remainder of the building.
- Any suspect asbestos-containing material (ACM), lead-based paint (LBP), and/or PCB-containing materials should be properly maintained in accordance with NYCSCA protocols, and any such materials affected by proposed renovation, demolition, or construction activities at the Site be identified and properly managed during those activities in accordance with all applicable regulations and NYCSCA policies and procedures.
- If excavation is required as part of proposed renovations, all excavated material should be properly characterized prior to transportation to an off-site disposal facility. In addition, any imported backfill should be tested to ensure that it conforms to NYCSCA requirements for environmentally-clean fill.
- The metallic anomaly identified south of the maintenance garage should be investigated to verify whether an underground storage tank is present. If a UST is present, it should be properly addressed in accordance with state and local regulations.

1.0 INTRODUCTION

1.1 Purpose

At the request of the New York City School Construction Authority (NYCSCA), AKRF Engineering, P.C. (AKRF) conducted a Phase II Environmental Site Investigation (ESI) of the property located at 57-61 Cleveland Place in Staten Island, New York (the "Site"). The legal description of the Site is Block 3087, Lot 1, and Block 3089, Lot 59. Alternative addresses for the Site include 25 Landis Avenue, 61 Cleveland Place, 8 Narrows Road South, and 18 Hastings Street. The Site consists of an approximately 7.2-acre property containing 8 buildings associated with a parochial school constructed between approximately 1891 and 2005, including: a 3-story elementary school with a partial cellar; a 2-story convent with a cellar; a 4-story chapel with a cellar; a 2- to 3-story high school; a 1- to 2-story gymnasium; a 2-story annex; a 1-story child development center; and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a swimming pool with a pool shed. The Site is being considered for acquisition and conversion to a public school facility by the NYCSCA. The Site location is shown on Figure 1. A Site Plan indicating Site features and the tax block and lot numbers is provided as Figure 2.

The Phase II ESI was performed to determine whether the recognized environmental conditions (RECs) and/or Vapor Encroachment Conditions (VECs) identified in the Phase I Environmental Site Assessment (ESA) Report prepared by AKRF for the NYCSCA, dated June 20, 2017, have affected the suitability of the Site for use as a public school facility. Soil, groundwater, and soil vapor were sampled as part of the Phase II ESI to accomplish these objectives.

1.2 Recognized Environmental Conditions (RECs), Vapor Encroachment Conditions (VECs), and Environmental Concerns

AKRF previously prepared a Phase I ESA of the Site. The Phase I ESA Report, dated June 20, 2017, identified several RECs/VECs associated with the Site, which are as follows:

<u>On-Site REC/CREC/VEC:</u>

- Three in-service fuel oil underground storage tanks (USTs) with two closed-status Spill listings and one reported tank-tightness test failure.
- Potential historic material of unknown origin and/or abandoned USTs associated with demolished historic on-site buildings, and/or potential historic fill associated with past nearby highway construction.

<u>Off-Site RECs/CRECs/VECs:</u>

- Potential contamination associated with historic railroad tracks east of the Site.
- A New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) listing west-adjacent to the Site at 77 Chicago Avenue.
- A groundwater monitoring well observed during Site reconnaissance on the Cleveland Place sidewalk between the two Site lots.

The Phase I ESA Report also revealed environmental concerns associated with suspect asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyl (PCB)-containing

materials in the Site structures and/or in buried debris/fill material, a 55-gallon drum with unknown contents near the High School building, and water damage and associated mold growth.

Based on the findings of the Phase I ESA, AKRF recommended performance of a Phase II ESI, consisting of a geophysical survey and the collection and laboratory analysis of soil, sub-slab/soil vapor, and groundwater samples to determine whether the identified RECs and VECs have affected the suitability of the Site for the use as a public school facility. AKRF also recommended that any ACM, LBP, and/or PCB-containing materials be properly maintained in accordance with NYCSCA protocols, and any such materials affected by proposed renovation, demolition, or construction activities at the Site be identified and properly managed during those activities in accordance with all applicable regulations and NYCSCA policies and procedures.

2.0 DESCRIPTION OF PHASE II ESI FIELD ACTIVITIES

Initial Phase II ESI field activities were performed between July 31 and August 22, 2017. The field activities included the following:

- A geophysical survey of accessible areas of the Site;
- Advancement of 19 soil borings and collection and analysis of 38 soil samples;
- Installation of 4 temporary monitoring wells and collection and analysis of 1 groundwater sample; and
- Installation of 17 temporary soil/sub-slab vapor sampling points and collection and analysis of 17 sub-slab/soil vapor samples.

Supplemental Phase II ESI field activities were performed on November 10 and 11, 2017 to further evaluate elevated concentrations of volatile organic compounds (VOCs) detected in the sub-slab vapor samples collected at the elementary school boiler room during the initial sampling, and to further investigate a suspected UST identified near the maintenance garage in the southern portion of the Site by the initial geophysical survey. The supplemental field activities consisted the following:

- A geophysical survey to clear boring locations and confirm the suspected UST location near the garage on the southern portion of the Site;
- Advancement of 5 soil borings (3 at the elementary school boiler room and 2 adjacent to the suspect UST) and collection and analysis of 10 soil samples;
- A soil vapor assessment in the elementary school that included:
  - Inspection and chemical inventory of the elementary school building;
  - Collection and analysis of two (2) co-located indoor air samples and sub-slab vapor samples in the elementary school building and analysis of the sub-slab vapor samples for select VOCs; and
  - Collection and analysis of one (1) ambient air sample at a location adjacent to the elementary school building.

A Site Plan showing the sampling locations, Site features, tax block and lot numbers, and anticipated groundwater flow direction is provided as Figure 2. Sampling locations at the elementary school building are shown on Figure 3. Representative photographs of the Phase II field activities are included in Appendix A.

The initial Phase II and supplemental Phase II ESI activities were conducted in accordance with the AKRF's Phase II ESI Scope of Work (SOW) dated June 20, 2017 and AKRF's Supplemental ESI Proposal/SOW dated September 28, 2017, with the exception of the following:

- The original scope of work specified using sonic drilling methods to install temporary wells across the groundwater table, which is presumed to be greater than 100 feet bgs. However, based on gauging of the existing monitoring well on the Cleveland Place sidewalk (indicating potential groundwater at approximately 30 feet bgs), the proposed depths and installation methods of the temporary wells were changed. However, upon installation, groundwater was not encountered in TW-1, TW-12, and TW-17. A sample was obtained from TW-15 from apparent perched groundwater, and in consultation with NYCSCA, additional attempts at collecting groundwater samples were not made since evidence of soil contamination was not observed.
- Due to insufficient groundwater volume in TW-15, dissolved metals analysis was not performed.

- Soil borings SB-6 through SB-12 were relocated along the actual route of the fill line for the UST adjacent to the Chapel building based on the geophysical survey findings.
- Sub-slab vapor point SV-10 was relocated from inside the convent to immediately outside and north of the convent building to avoid asbestos clearance and sampling in an occupied space.
- Sub-slab vapor point SV-15 was unable to be sampled due to debris and pooling water in the pre-cored hole in the concrete slab.
- The soil sample from soil boring SB-GA1 was collected at 8 to 10 feet below grade, above the anticipated sampling interval of 13 to 15 feet below grade due to the observation of perched groundwater at approximately 10 feet below grade within the soil boring.

2.1 Asbestos Clearance and Geophysical Survey

Airtek Environmental Corp. (Airtek) performed asbestos testing of the proposed boring locations on July 6 and 7, 2017. Based on the results of the pre-probe survey, ACM was not identified at the proposed exterior sampling locations. Confirmed ACM floor tiles and/or suspect ACM waterproofing was identified at all interior locations (SV-6 through SV-18), therefore, the concrete building slabs at these locations were pre-cored by an NYCSCA asbestos abatement contractor on August 18, 21, and 22, 2017 after each location was cleared of utilities during the geophysical survey described below. A copy of the pre-probe survey report is provided in Appendix B.

A geophysical survey was performed on July 12 and 13, 2017 by Delta Geophysics Inc. (Delta) of Catasauqua, Pennsylvania, to attempt to locate potential abandoned USTs or other buried structures, and to verify that the proposed sampling locations were clear of subsurface structures and utilities. Delta returned on August 15, 2017 to clear additional interior locations relocated to avoid coring through Terrazzo flooring for the sub-slab soil vapor sampling. A supplemental geophysical survey was performed on November 10, 2017 by Nova Geophysics Services (Nova) of Douglaston, New York, to verify that the proposed sampling locations were clear of subsurface structures and utilities, confirm the suspected UST location near the maintenance garage on the southern portion of the Site, and to clear interior sampling locations within the elementary school to avoid coring through Terrazzo flooring for the sub-slab soil vapor sampling.

The investigations were conducted in accessible areas of the Site using a Geophysical Survey Systems Inc. SIR cart-mounted Ground Penetrating Radar (GPR) unit with a 400 MHz and 250MHz antenna, a radiodetection RD7000/RD7100 precision utility locator, and a Fisher M-Scope TW-6 pipe and cable locator. GPR profiles were collected and inspected for reflections that could be indicative of USTs, utility lines, or other subsurface structures. Sample locations were established in areas that did not conflict with subsurface structures or utilities. The results are discussed further in Section 4.2. A copy of the geophysical survey reports are attached as Appendix B.

2.2 Sub-Slab/Soil Vapor Sampling

Sub-slab/soil vapor sampling was conducted as part of the Phase II ESI to determine the concentration of volatile organic compounds (VOCs) in soil vapor beneath the Site. Figure 2 shows the approximate locations of the five temporary soil vapor sampling points (SV-1 through SV-5) and 12 temporary sub-slab vapor sampling point (SV-6 through SV-14 and SV-16 through SV-18) installed as a part of this Phase II ESI. SV-15 was not installed due to debris and pooling water in the pre-cored hole in the concrete slab.

The temporary soil vapor sampling points were installed and sampled on August 3, 2017. The temporary sub-slab sampling points were installed and sampled on August 22 and 23, 2017. Sampling was conducted in conformance with the applicable procedures described in ASTM E 2600-08 "Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions" and the October 2006 New York State Department of Health (NYSDOH) Soil Vapor Intrusion Guidance Document protocols. Cascade Technical Services LLC of Mineola, New York (Cascade) was retained as a subcontractor for drilling services.

The soil vapor sampling points (SV-1 through SV-5) were installed using a direct-push probe (i.e., Geoprobe®) system to advance a 0.75-inch diameter hollow probe rod fitted with an expendable 6-inch long stainless steel screened implant to a depth of 5 feet below ground surface (bgs). Dedicated tubing with threaded fittings was connected to the probe. The hollow probe rod was then removed and the boring was backfilled with clean silica sand to one foot above the screen. Hydrated bentonite was used to fill the remaining void around the sampling tubing to ground surface. The sub-slab vapor points (SV-6 through SV-14 and SV-16 through SV-18) were installed through an approximately three-inch diameter hole in the slabs of the on-site buildings, which were previously cored by a NYCSCA contractor on August 17 through August 22, 2015. The points were installed by boring to approximately six inches below the bottom of the basement slab, placing an approximately three-inch polyethylene implant with connected tubing into the boring, backfilling the area around the screen with sand, and sealing the remaining void around the sample tubing with hydrated bentonite.

Prior to sampling, each sub-slab/soil vapor point was purged of three sampler volumes using a GilAir Plus personal pump. During purging, an inverted one-gallon bucket was placed over the sampling point and helium gas was introduced through a small hole in the bucket to saturate the atmosphere around the sample port with helium gas. The purged vapors were collected into a Tedlar® bag and monitored using a portable helium detector to check for short-circuiting of ambient air into the vapor sampling point and to verify the adequacy of the bentonite seal. Helium concentrations of less than 10 percent were considered sufficient to verify a tight seal. All soil vapor points passed the seal integrity tests. Purged vapors were also field-screened for organic vapors using a photoionization detector (PID) calibrated with 100 parts per million (ppm) isobutylene and fresh air. PID readings between 3.6 and 333 ppm were detected in the soil/soil-vapor points with the maximum reading detected at SV-7 located in the high school building.

After purging, each probe was connected via Teflon™ tubing to a laboratory-supplied 6-liter SUMMA® canister equipped with a 0.1 liter per minute (L/min) flow regulator. Soil vapor samples were collected in individually-certified clean SUMMA® canisters for an approximately one-hour sampling period. The 17 samples collected during the initial Phase II ESI activities (SV-1 through SV-14, and SV-16 through SV-18) were submitted for the NYCSCA's list of 26 VOCs associated with management of petroleum and dry cleaning solvents by United States Environmental Protection Agency (USEPA) Method TO-15, as summarized in the following table:

Summary of VOCs Analyzed for in Soil Vapor Samples

Chloromethane	1,2-Dichloroethane	Ethylbenzene
Vinyl Chloride	1,1,1-Trichloroethane	*m,p*-Xylenes
Chloroethane	Benzene	o-Xylene
1,1-Dichloroethene	Carbon Tetrachloride	1,3,5-Trimethylbenzene
Methylene chloride	1,2-Dichloropropane	1,2,4-Trimethylbenzene
trans-1,2-Dichloroethene	Trichloroethene	1,3-Dichlorobenzene
1,1-Dichloroethane	Toluene	1,2-Dichlorobenzene
Methyl tert-Butyl Ether	Tetrachloroethene	Naphthalene
cis-1,2-Dichloroethene	Chlorobenzene	

The SUMMA® canisters were properly labeled and delivered by courier to TestAmerica of Burlington, Vermont, a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. Standard chain-of-custody (COC) procedures were followed.

Sub-slab and soil vapor sampling logs are provided in Appendix C. Summaries of the soil vapor sample analytical results are provided in Table 1, and copies of the analytical laboratory reports are attached in Appendix D.

2.3 Soil Investigation

Soil samples were collected to assess the current environmental conditions and to characterize subsurface soil at the Site. Figure 2 shows the locations of the 24 soil borings (SB-1 through SB-19, SB-ES1- through SB-ES3, SB-GA1 and SB-GA2) advanced as part of the initial and supplemental Phase II ESI. The initial subsurface soil sampling program was performed between July 31 and August 3, 2017. The supplemental subsurface soil sampling program was performed on November 11, 2017. Cascade was retained as a subcontractor for drilling services.

A track-mounted Geoprobe® drill rig was used to advance the soil borings and retrieve soil samples to depths ranging from approximately 10 to 30 feet bgs within soil borings SB-1 through SB-17, SB-ES2, SB-ES3, SB-GA1, and SB-GA2. Soil borings SB-18 and SB-19 were advanced to a depth of approximately 5 feet using a slide hammer. Soil boring SB-ES1 was advanced to a depth of approximately 10 feet using a hand auger and slide hammer. Soil samples were collected and screened for field evidence of contamination continuously from the ground surface to the boring completion depth in 5-foot long, 2-inch diameter macrocore samplers lined with acetate sleeves. A description of the soil retained in each Geoprobe® sample core was logged by AKRF's on-site environmental scientist, and the soil was screened in the field for VOCs with a PID calibrated at the start of each work day with 100 ppm isobutylene and fresh air. Soil boring logs, including the PID responses for each sample, are provided in Appendix C. A description of each boring location is presented in the following table:

Summary of Soil Boring Locations and Rationale

Soil Boring	Location	Rationale
SB-1,-2	Parking lot on Block 3089, Lot 59	• General fill conditions
SB-3,-4,-5	North, east, and south of the in-service 2,000-gallon UST at the elementary school	• General fill conditions • Potential contamination from fuel oil UST

Soil Boring	Location	Rationale
SB-6,-7,-8,-9	Adjacent to fill port and along fill line for in the in-service 6,000-gallon UST at the Chapel building	• General fill conditions • Potential contamination from UST fill line
SB-10, -11, -12	West of in-service 6,000-gallon UST at the Chapel building	• General fill conditions • Potential contamination from fuel oil UST
SB-13	Adjacent to 275-gallon AST at the Child Development Center-UPK	• General fill conditions • Potential contamination from fuel oil AST
SB-14,-15	West and south of in-service 2,000-gallon UST at Annex/ Garage	• General fill conditions • Potential contamination from fuel oil UST
SB-16	South of Garage	• General fill conditions • Potential contamination from garage maintenance activities
SB-17	Southern Property Boundary, near Knauth Place	• General fill conditions • Presumed downgradient conditions
SB-18,-19	Wooded area in northeastern portion of the Site	• General fill conditions • Potential filling from highway construction
SB-ES1	In the elementary school boiler room	• Investigate potential source of PCE/TCE in sub-slab soil vapor sample SV-11
SB-ES2	Outside, north of the elementary school boiler room	• Investigate potential source of PCE/TCE in sub-slab soil vapor sample SV-11
SB-ES3	Outside, east of the elementary school boiler room	• Investigate potential source of PCE/TCE in sub-slab soil vapor sample SV-11
SB-GA1	West-adjacent to suspect UST identified south of the garage	• Potential contamination associated with the suspect UST
SB-GA2	East-adjacent to suspect UST identified south of the garage	• Potential contamination associated with the suspect UST

Stained soil and a mild petroleum-like odor but no elevated PID readings were observed between 2 to 3 feet bgs in SB-7. No evidence of obvious contamination [e.g., elevated PID readings, odors, staining, etc.] was observed in the remaining soil borings advanced during the investigations; however, apparent fill material was observed in each of the soil borings from the ground surface to maximum depths ranging from approximately 5 to 20 feet bgs. In general, one soil sample was collected for laboratory analysis from within the fill layer (0-2 or 1-3 feet bgs) and a second sample was collected from approximately 10-12 feet bgs for borings near USTs, and between 5-7 feet bgs for borings near the fill lines. Care was taken to avoid including asphalt or asphaltic sub-base materials in the samples collected for laboratory analysis.

Soil samples collected during the initial Phase II ESI activities were submitted for laboratory analysis and were analyzed for combined Target Compound List (TCL) and Commissioner's Policy (CP)-51 list VOCs plus Tentatively Identified Compounds (TICs) by USEPA Method 8260, TCL and CP-51 listed semivolatile organic compounds (SVOCs) plus TICs by USEPA Method 8270, pesticides by USEPA Method 8081, herbicides by USEPA Method 8152, PCBs by USEPA Method 8082, select Target Analyte List (TAL) metals by USEPA Method 6000/7000 series (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, and zinc), cyanide by USEPA Method 9012, and hexavalent chromium by USEPA Method 7196. For waste characterization purposes, five composite samples collected from within the historic fill layer at the Site

were analyzed additionally for diesel and gasoline range organics (DRO and GRO) total petroleum hydrocarbons (TPH) by USEPA Method 8015-modified, hexavalent chromium, and cyanide. Samples analyzed for VOCs were collected using EnCore® field samplers.

Soil samples collected in/near the elementary school boiler room during the supplemental Phase II ESI activities were submitted for laboratory analysis and were analyzed for combined TCL and CP-51 list VOCs plus TICs by USEPA Method 8260. Soil samples collected from soil borings advanced adjacent to the suspect UST were analyzed for TCL and CP-51 list VOCs plus TICs by USEPA Method 8260, SVOCs plus TICs by USEPA Method 8270, pesticides by USEPA Method 8081, herbicides by USEPA Method 8152, and PCBs by USEPA Method 8082. Samples analyzed for VOCs were collected using EnCore® field samplers. A summary of the soil sampling program is presented in the following table:

Summary of PID Screening and Soil Sample Analytical Plan

Sample ID/ Soil Boring Number	Boring Depth* (feet bgs)	Sample Depth Interval Selected for Analysis* (ft bgs)	Max PID Reading (PPM)	TCL/CP-51 VOCs plus TICS	TCL/CP-51 SVOCs plus TICS	PCBs, Pesticides, Herbicides	Select TAL Metals	Cyanide	Hexavalent Chromium	DRO and GRO TPH
SB-1	20	1-3	ND	X	X	X	X			
		0-7	ND					X	X	X
		10-12	ND	X	X	X	X			
SB-2	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-3	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-4	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-5	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-6	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-7	20	1-3	ND	X	X	X	X			
		5-7	ND	X	X	X	X			
SB-8	20	1-3	ND	X	X	X	X			
		0-7	ND					X	X	X
		5-7	ND	X	X	X	X			
SB-9	10	1-3	ND	X	X	X	X			
		5-7	ND	X	X	X	X			
SB-10	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-11	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-12	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-13	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-14	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			

Sample ID/ Soil Boring Number	Boring Depth* (feet bgs)	Sample Depth Interval Selected for Analysis* (ft bgs)	Max PID Reading (PPM)	TCL/CP-51 VOCs plus TICS	TCL/CP-51 SVOCs plus TICS	PCBs, Pesticides, Herbicides	Select TAL Metals	Cyanide	Hexavalent Chromium	DRO and GRO TPH
SB-15	30	1-3	ND	X	X	X	X			
		0-7	ND					X	X	X
		10-12	ND	X	X	X	X			
SB-16	20	1-3	ND	X	X	X	X			
		10-12	ND	X	X	X	X			
SB-17	20	1-3	ND	X	X	X	X			
		0-7	ND					X	X	X
		7-9	ND	X	X	X	X			
SB-18	5	0-2	ND	X	X	X	X	X	X	X
		3-5	ND	X	X	X	X			
SB-19	5	0-2	ND	X	X	X	X			
		3-5	ND	X	X	X	X			
SB-ES1	10	0-2	ND	X						
		8-10	ND	X						
SB-ES2	20	0-2	ND	X						
		8-10	ND	X						
SB-ES3	20	0-2	ND	X						
		8-10	ND	X						
SB-GA1	20	0-2	ND	X	X	X				
		8-10	ND	X	X	X				
SB-GA2	20	0-2	ND	X	X	X				
		13-15	ND	X	X	X				

Notes:
ND = Not Detected
X = Sample analysis performed
PPM = Parts per million
TICS = Tentatively Identified Compounds

The samples were collected and containerized in accordance with NYSDEC and USEPA protocols. Each container was properly labeled, preserved, and placed in an ice-filled cooler for transport via courier to TestAmerica of Edison, New Jersey, a NYSDOH ELAP-certified analytical laboratory. Standard COC procedures were followed. Summaries of the analytical results for the soil samples are provided in Tables 2 through 7, and copies of the analytical laboratory reports are attached in Appendix D.

2.4 Groundwater Investigation

Temporary wells were installed at four locations as part of the Phase II ESI to assess the current environmental condition of groundwater beneath the Site. Four temporary wells (TW1, TW-12, TW-15, and TW-17) were installed at the locations shown on Figure 2; however, groundwater sampling was completed at only one of the wells (TW-15) as described below. The groundwater sample was completed on August 1, 2017. Cascade was retained by AKRF as a subcontractor for drilling services.

The temporary wells were installed using a Geoprobe® rig. After encountering wet soil indicative of groundwater at approximately 25 feet bgs in soil borings SB-1, SB-12, SB-15, and SB-17, a temporary well was installed using 1-inch diameter, 10-foot long PVC well screen set approximately 5 feet below the apparent water table. However, after installation, TW-1, TW-12, and TW-17 were gauged and found to be dry, therefore, no samples were collected at these locations. Following installation of TW-15, a Solinst peristaltic pump was used to purge approximately three well volumes from the well, and the purged water was monitored for temperature, pH, turbidity, dissolved oxygen, oxidation reduction potential (ORP), and conductivity using a water quality meter using a Horiba U52-2 Water Quality Meter. Measurements were recorded every five minutes, and purging continued until water quality indicators stabilized. After the wells were gauged and found to be dry or sampled, the temporary wells were removed from the ground and the borings were backfilled with drill cuttings and sand.

The groundwater sample was analyzed for combined TCL and CP-51 listed VOCs and SVOCs by USEPA Methods 8260 and 8270, respectively, and select TAL metals by USEPA Method 6000/7000 series (unfiltered analysis only). One aqueous trip blank accompanied the sample shipment and was analyzed for TCL/CP-51 listed VOCs.

The sample was collected and containerized in accordance with NYSDEC/USEPA protocols. Each container was properly labeled, preserved, and placed in a cooler for transport via courier to TestAmerica of Edison, New Jersey a NYSDOH ELAP-certified analytical laboratory. Standard chain of custody (COC) procedures were followed. Summaries of the analytical results for the groundwater sample are provided in Tables 8 through 10, and copies of the analytical laboratory reports are attached in Appendix D.

2.5 Soil Vapor Assessment

VI sampling was conducted in general accordance with applicable procedures described in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (NYSDOH, 2006). The VI sampling locations are shown on Figure 3. The field activities and methods are described further in the following sections.

2.5.1 Building Inspection and Chemical Inventory

On November 10, 2017, AKRF completed a pre-sampling inspection to gather information on the elementary school building characteristics, building occupancy, air flow patterns, utilities, building operations, chemical and maintenance product inventory, equipment, and other known factors that may affect indoor air quality in the areas to be sampled.

During the inspection, a ppbRAE™ PID capable of detecting VOCs in the parts per billion (ppb) range was used to field-screen the indoor air for the presence of organic vapors. Low PID readings ranging from 170 to 234 parts per billion (ppb) were noted throughout the elementary school building during the pre-sampling inspection. Relevant sections of a NYSDOH Indoor Air Quality Questionnaire and Building Inventory form were completed to document the results of the inspection. A copy of the form is included in Appendix E.

2.5.2 Indoor and Ambient Air Sampling

The indoor air sampling was performed on November 11, 2017 in conformance with the applicable procedures described in the NYSDOH Vapor Intrusion Guidance Document. Two (2) indoor air samples (IA-ES1 and IA-ES2) were collected for laboratory analysis of VOCs. Specifically, IA-ES1 was collected from the boiler room located within the partial sub-basement in the northern portion of the elementary school building and IA-ES2 was collected from the basement-level auditorium in the western portion of the building. In addition, an ambient air sample (AA-1) was collected from sidewalk area

south-adjacent to the building. The indoor and ambient air sampling locations are shown on Figure 3. Copies of the indoor/ambient air sampling logs are provided in Appendix C.

During the sampling event, the building's ventilation system was operating under normal conditions. During sampling, there were no known activities being performed in the building that would interfere with the sampling.

The one (1) ambient air and two (2) indoor air samples were collected using individually certified-clean 6-liter Summa® canisters. The air samples were collected over an approximately eight-hour sampling period. The indoor air samples were collected at a height of approximately three to five feet above the floor to simulate the breathing zone. Immediately after opening each Summa® canister, the initial vacuum (inches of mercury) was noted at all the locations. After approximately eight hours, final vacuum readings (inches of mercury) were noted and the Summa® canisters were closed. Initial and final vacuum readings are summarized in the following table:

Summary of Indoor and Ambient Air Sampling Field Data

Sample ID	Vacuum at the Start (In Hg)	Vacuum after sampling completion (In Hg)
IA-ES1	-30.0	-8.50
IA-ES2	-30.0	-5.50
AA-1	-30.0	-5.0

Note:
Vacuum readings recorded from analog gauges in the field. See the laboratory report for final vacuum readings measured during laboratory check-in.

The indoor air samples were submitted to the laboratory on-hold pending results of the sub-slab soil vapor samples. The ambient air sample was submitted for EPA Method TO-15 for PCE, TCE, and their associated breakdown products, as listed in the following table:

Summary of VOCs Analyzed for in Ambient Air Sample

Compound	Rationale for Including in Parameter Suite
Tetrachloroethene (PCE)	Dry cleaning solvent. Degrades to TCE. Detected in SV-11 at above the NYSDOH AGV.
Trichloroethene (TCE)	Solvent; breakdown product of PCE. Detected in SV-11 at above the NYSDOH AGV.
1,1-Dichloroethene	Breakdown product of PCE and TCE
cis-1,2-Dichloroethene	Breakdown product of PCE and TCE
trans-1,2-Dichloroethene	Breakdown product of PCE and TCE
Vinyl chloride	Breakdown product of PCE, TCE, cis-DCE, trans-DCE and 1,1-DCE, used in PVC

The air samples were collected for approximately eight (8) hours, to obtain a sufficient sample volume to utilize the USEPA Method TO-15 with a detection limit of approximately 1.0 microgram per cubic meter ($\mu g/m^3$). The analyses were conducted to achieve a detection limit of 0.2 $\mu g/m^3$ for TCE, cis-1,2-dichlorethene, and 1,1-dichloroethene, and 1 $\mu g/m^3$ for all other compounds. The Summa® canisters were properly labeled and shipped to TestAmerica for analysis. A copy of the analytical laboratory results is attached in Appendix D.

2.5.3 Sub-Slab Vapor Sampling

The sub-slab vapor sampling was performed on November 11, 2017, concurrently with the indoor air sampling. Two (2) sub-slab vapor samples (SV-ES1 and SV-ES2) were collected from vapor monitoring points located adjacent to indoor air samples IA-ES1 and IA-ES2, respectively. The vapor monitoring points were installed, purged and seal-tested using the same methods described in Section 2.2. After purging, each probe was connected via Teflon™-lined tubing to a laboratory-supplied, individually-certified, 6-liter Summa® canister equipped with a flow regulator to allow sample collection over an eight-hour period.

Immediately after opening each Summa® canister, the initial vacuum (inches of mercury) was noted at all the locations. After approximately eight hours, final vacuum readings (inches of mercury) were noted and the Summa® canisters were closed. Vacuum readings are summarized in the following table:

Summary of Sub-Slab Vapor Sampling Field Data

Sample ID	Vacuum at the Start (In Hg)	Vacuum after sampling completion (In Hg)
SV-ES1	-30.0	-15.00
SV-ES2	-30.0	-5.5

Note:
Vacuum readings recorded from analog gauges in the field. See the laboratory report for final vacuum readings measured during laboratory check-in.

The sub-slab vapor samples were analyzed using USEPA Method TO-15 for the same list of VOCs as the ambient sample. The Summa® canisters were properly labeled and shipped to TestAmerica for analysis. A copy of the analytical laboratory results is attached in Appendix D.

3.0 SITE DESCRIPTION AND PHYSICAL CHARACTERISTICS

The Site consists of an approximately 7.2-acre property containing 8 buildings associated with a parochial school constructed between approximately 1891 and 2005, including: a 3-story elementary school with a partial cellar; a 2-story convent with a cellar; a 4-story chapel with a cellar, a 2- to 3-story high school; a 1- to 2-story gymnasium; a 2-story annex; a 1-story child development center; and a 1-story garage. The Site also contains an asphalt-paved parking lot (on Block 3089, Lot 59), additional parking areas and driveways, concrete-paved pathways, landscaped areas, a wooded area, and a swimming pool with a pool shed.

3.1 Topography

According to the United States Geological Survey (USGS) 7.5-Minute Quadrangle Maps, *The Narrows, NY – NJ,* dated 2013, the elevation of the Site ranges from approximately 100 to 140 feet above the North American Vertical Datum of 1988 (an approximation of mean sea level), sloping down radially from a high point in the center of the Site toward the surrounding roadways. The nearest surface water bodies are Grasmere Lake, approximately 3,000 feet to the west, and the Lower Bay of New York Bay, approximately 3,000 feet southeast and 4,500 feet east of the Site.

3.2 Geology

According to the *USGS Geologic and Geohydrologic Reconnaissance of Staten Island, New York* (1988), the Site is underlain by Pleistocene glacial deposits consisting primarily of clay and sand with some boulders. These deposits are underlain by the Cretaceous clay member of the Raritan formation approximately 200 to 250 feet below ground surface (bgs). The Raritan formation is in turn underlain by Staten Island Serpentine crystalline bedrock at approximately 250 to 300 feet bgs.

Soil borings were advanced to a maximum depth of 30 feet bgs, with samples selected for laboratory analysis at a maximum depth of 12 feet bgs during the Phase II ESI field program. Historic fill (sand, gravel, and silt, with varying amounts of brick, wood, asphalt, and organic material) was encountered within the borings from the ground surface to maximum depths ranging from 5 to 20 feet bgs. Some of the fill (black and dark gray sand and silt containing wood) appeared to be re-worked native material. Apparent native sand, gravel, silt, and clay were encountered in some of the borings below the historic fill layer.

3.3 Hydrology

Groundwater was measured at 26.5 feet bgs in temporary well TW-15 installed during the initial Phase II ESI activities. Saturated soil was observed from 10 to 20 feet bgs in soil boring SB-GA1, advanced during the supplemental Phase II ESI activities. However, based on observations in soil borings across the Site and USGS data on regional hydrology, which indicates groundwater in the Site vicinity is likely 90 to 130 feet bgs, this is not expected to be actual groundwater, and instead a perched layer on low permeable material. Based on surface topography, groundwater is anticipated to flow in a south-southeasterly direction toward the Lower Bay, located approximately 3,000 feet southeast of the Site. There are no surface water bodies or streams on or immediately adjacent to the Site.

4.0 DISCUSSION OF FINDINGS

This section presents a discussion of the findings of the Phase II ESI. A summary of the laboratory results is presented in Tables 1 to 10. The definitions of all data qualifiers/acronyms contained in the tables are provided on the last page of the tables section of the report. The sample collection logs and the complete laboratory analytical data packages are included in Appendices C and D, respectively.

4.1 Applicable Regulatory Standards

This subsection identifies the USEPA, NYSDEC, NYSDOH, and/or NYCDEP regulatory standards and guidelines used to evaluate the results of the soil vapor, subsurface soil, and groundwater sampling. The standards and guidelines used to evaluate the specific data are described individually below.

4.1.1 Indoor Air and Sub-Slab Soil Vapor Guidelines

Analytical results for VOCs in the indoor air, sub-slab soil vapor, and soil vapor samples were compared to the NYSDOH Air Guideline Values (AGVs) and to background levels of VOCs in indoor air presented in Appendix C of the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 "NYSDOH Vapor Intrusion Guidance Document", including:

- Upper Fence Limit indoor air values from "Table C-1. NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes";
- 90th Percentile indoor air values from "Table C-2. EPA 2001: Building Assessment and Survey Evaluation (BASE) Database, SUMMA canister method"; and
- The 95th Percentile Indoor Air Values from Table C-5, Health Effects Institute (HEI) 2005: Relationship of Indoor, Outdoor and Personal Air".

PCE levels were compared to the AGV presented in the NYSDOH Fact Sheet on Tetrachloroethene in Indoor and Outdoor Air, dated September 2013. TCE levels were compared to the AGV presented in the NYSDOH Fact Sheet on Trichloroethene in Indoor and Outdoor Air, dated August 2015. The sub-slab vapor results were also compared to the Soil Vapor Decision Matrices in the NYSDOH Vapor Intrusion Guidance Document (May 2017 updated matrices at https://www.health.ny.gov/environmental/indoors/vapor_intrusion/update.htm).

4.1.1 Ambient Air Sampling Guidelines

Analytical results for VOCs in the ambient air sample were compared to the NYSDOH AGVs and to background levels of VOCs in outdoor air presented in Appendix C of the NYSDOH Vapor Intrusion Guidance Document, including: Upper Fence Limit outdoor air values from "Table C-1. NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes," 90th Percentile outdoor air values from "Table C-2. EPA 2001: Building Assessment and Survey Evaluation (BASE) Database, SUMMA canister method," and the 95th Percentile Outdoor Air Values from "Table C-5. HEI 2005: Relationship of Indoor, Outdoor and Personal Air." PCE levels were compared to the AGV presented in the NYSDOH Fact Sheet on Tetrachloroethene in Indoor and Outdoor Air, dated September 2013.

4.1.2 Soil Cleanup Objectives (SCOs)

The Unrestricted Use Soil Cleanup Objectives (UUSCOs) found in 6 NYCRR 375-6, Remedial Program SCOs, are the appropriate standards for use in evaluating the results of the analyses of the Phase II ESI soil samples. Soil that is free of contaminants above these standards is suitable for "unrestricted use", which is the land use category without imposed restrictions such as environmental easements or other land use controls. Soil analytical results were also compared to the lower of the Supplemental Soil

Cleanup Objectives (SSCOs) for Protection of Groundwater or Ecological Resources established by NYSDEC Commissioners Policy (CP)-51 – Soil Cleanup Guidance, dated October 21, 2010.

4.1.3 Groundwater Quality Standards and Guidance Values

Analytical results for groundwater were compared to New York State Class GA groundwater standards and guidance values, provided in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards (AWQSs) and Guidance Values." AWQSs are enforceable regulatory limits. Where AWQSs do not exist, ambient water quality guidance values were used to evaluate the groundwater results.

4.2 Geophysical Survey Findings

During the July 12 and 13, 2017 geophysical survey, the proposed boring locations were identified within the survey area. When possible, an area of approximately 10 feet by 10 feet around each boring location was investigated with the GPR to clear for utilities. All designated anomalies were marked on-site with spray paint. Linear anomalies indicative of storm sewer, electrical, vent lines, fill lines, product lines, gas, and water lines were identified across the Site.

Four metallic anomalies and the three known USTs were identified in the survey. The four metallic anomalies identified included the following:

- A cylindrical anomaly measuring approximately 7 feet by 5 feet located approximately 10 feet east of the garage. The anomaly was located next to a steel plate, which is reportedly associated with the water main connection for the campus. Therefore, the anomaly is likely related to utilities and is not a UST.
- A cylindrical anomaly measuring approximately 9 feet by 5 feet located approximately 30 feet south of the garage. This anomaly is considered a potential UST.
- A cylindrical anomaly measuring approximately 6 feet by 4 feet located at the base of the stairs near the chapel building. Based on tracing a nearby drain, it was confirmed that this anomaly is associated with on-site stormwater.
- A flat metal feature approximately 5 feet by 5 feet wide approximately 2 to 3 feet bgs was observed near Cleveland Place.

During the November 10, 2017 geophysical survey, the proposed supplemental boring locations were identified within the survey area. When possible, an area of approximately 10 feet by 10 feet around each boring location was investigated with the GPR to clear for utilities. All designated anomalies were marked on-site with spray paint. Linear anomalies indicative of storm sewer, electrical, vent lines, fill lines, product lines, gas, and water lines were identified within the surveyed areas.

The metallic anomaly originally discovered during the geophysical survey performed during the initial Phase II ESI activities south of the garage was verified.

The locations of the known USTs and the metallic anomalies identified by the geophysical survey are shown on Figure 2. The geophysical reports are provided in Appendix B.

4.3 Sub-Slab/Soil Vapor Sampling Findings

Laboratory quality assurance/quality control (QA/QC) procedures and analyses were used to demonstrate whether sub-slab/soil vapor analytical results have been biased either by interfering compounds in the sample matrix or by laboratory techniques that may have introduced systematic or random errors to the analytical process. The sub-slab/soil vapor sample analytical data was determined to be representative and

of acceptable quality for the purposes of this investigation. The complete analytical data report for soil vapor is presented in Appendix D.

4.3.1 Volatile Organic Compounds (VOCs) in Sub-Slab/Soil Vapor

Soil Vapor

A review of the soil vapor sample analytical results indicates that 18 of the 26 VOCs analyzed for utilizing USEPA Method TO-15 were detected in one or more of the soil vapor samples. Six VOCs were detected at concentrations greater than the background ranges, as summarized in the following table:

Detected VOC Concentrations Greater than Background Ranges in Soil Vapor

AKRF Sample ID Date Sampled Units = µg/m^3	NYSDOH AGV	NYSDOH Background Range	SV-1 8/3/17	SV-3 8/3/17	SV-4 8/4/17
1,2,4-Trimethylbenzene	***NS***	***9.5 - 9.8***	0.96	0.62 J	**54**
1,2-Dichloroethane	***NS***	***0.4-0.9***	0.14 U	**1.2**	0.14 U
1,3,5-Trimethylbenzene	***NS***	***3.7 - 3.9***	0.33 J	0.43 J	**29**
1,3-Dichlorobenzene	***NS***	***0.5 - 2.4***	0.82 J	0.3 U	**2.4**
cis-1,2-Dichloroethene	***NS***	***0.4-1.9***	**2.3**	0.11 U	0.11 U
m,p-Xylene	***NS***	***11-22.2***	1.4 J	1.5 J	**29**
o-Xylene	***NS***	***7.1-7.9***	0.54 J	0.59 J	**13**

Notes:
µg/m^3 = micrograms per cubic meter
NS = A standard has not been established for the analyte.
U = The analyte was not detected above laboratory detection limits.
J = Estimated value.
Exceedances of NYSDOH Background Ranges are highlighted in **bold** font.

No VOCs were detected in the soil vapor samples above the NYSDOH AGVs.

Sub-Slab Vapor

A review of the sub-slab soil vapor sample analytical results indicates that 20 of the 26 VOCs analyzed for utilizing USEPA Method TO-15 were detected in one or more of the sub-slab soil vapor samples. Eight VOCs were detected at concentrations greater than the background ranges and/or AGVs, as summarized in the following table:

Detected VOC Concentrations Greater than AGVs or Background Ranges in Sub-Slab Soil Vapor

AKRF Sample ID Date Sampled Units = µg/m^3	NYSDOH AGV	NYSDOH Background Range	SV-9 08/22/17	SV-11 08/22/17	SV-14 08/22/17	SV-16 08/22/17	SV-17 8/23/17
1,1-Dichloroethane	***NS***	***0.4-<0.7***	2.1 U	0.35 J	0.069 U	**11 J**	**4.2 J**
1,2,4-Trimethylbenzene	***NS***	***9.5 - 9.8***	8.5 U	6.2	**41**	14 U	13 U
1,3,5-Trimethylbenzene	***NS***	***3.7-3.9***	6 U	1.6	**27**	9.7 U	9.5 U
cis-1,2-Dichloroethene	***NS***	***0.4-<1.9***	3.5 U	**51**	0.11 U	5.7 U	5.5 U
Ethylbenzene	***NS***	***5.7 - 7.62***	4.5 U	**16**	**9.9**	**9.3 J**	7.1 U
m,p-Xylene	***NS***	***11-22.2***	11 J	**37**	**23**	17 U	16 U
o-Xylene	***NS***	***7.1-7.9***	**9 J**	7.5	**9**	8.6 U	8.4 U
Tetrachloroethene	***30***	***2.5-15.9***	2 U	**72**	1.6	3.3 U	3.2 U
Trichloroethene	***2***	***0.5 – 4.2***	1.5 U	**28**	0.049 U	2.4 U	2.4 U

Notes:
µg/m^3 = micrograms per cubic meter
NS = A standard has not been established for the analyte.

U = The analyte was not detected above laboratory detection limits.
J = Estimated value.
Exceedances of NYSDOH Background Ranges are highlighted in **bold** font.
Exceedances of NYSDOH AGVs are shaded in gray.

Discussion

The NYSDOH has established AGVs for three of the VOCs analyzed [methylene chloride, tetrachloroethene (PCE), and trichloroethene (TCE)]. Methylene chloride was not detected above its AGV in the sub-slab soil vapor samples. PCE and TCE were detected above their respective AGVs in sample SV-11 collected in the elementary school building. PCE was detected at a concentration of 72 $\mu g/m^3$, above it AGV of 30 $\mu g/m^3$, and TCE was detected at a concentration of 28 $\mu g/m^3$, above its AGV of 2 $\mu g/m^3$.

The sub-slab vapor sampling results for TCE and cis-1,2-dichloroethene in SV-11 were compared to Matrix A of the NYSDOH Vapor Intrusion Guidance Document. Based on Matrix A, the recommendations for the concentrations detected in SV-11 (51 $\mu g/m^3$ for cis-1,2-dichloroethene and 28 $\mu g/m^3$ for TCE) range from "no further action" to "mitigate" depending on the corresponding indoor air concentrations. The sub-slab vapor sampling results for PCE in SV-11 were compared to Matrix B of the NYSDOH Vapor Intrusion Guidance Document. Based on Matrix B, the recommendations for the concentration of PCE detected in SV-11 (72 $\mu g/m^3$) range from "no further action" to "identify sources and resample or mitigate" depending on the corresponding indoor air concentrations.

The petroleum-related compounds (trimethylbenzenes, benzene, ethylbenzene, and xylenes) identified above their background concentrations in soil vapor and sub-slab vapor are likely associated with historic/current fuel oil storage located at the Site, and not to an on-site release or spill. The chlorinated VOCs (TCE, PCE, 1,1-dichloroethane, cis-1,2-dichloroethane, and dichlorobenzene) identified in soil vapor above their background concentrations may be attributed to former surrounding uses, and are not likely to be associated with an on-site release, based on the Site's history and review of the laboratory results for on-site soil samples collected as part of the investigation. Samples SV-6, SV-7, SV-9, SV-10, SV-16, SV-17, and SV-18 were analyzed at high dilutions, with non-target compounds cyclohexane, heptane, and acetone causing high dilution and high method detection limits in these samples. Analytical results for VOCs in sub-slab/soil vapor are summarized in **Table 1**.

4.4 Soil Sampling Findings

Laboratory QA/QC procedures and analyses were used to demonstrate whether soil analytical results have been biased by either interfering compounds in the sample matrix or by laboratory techniques that may have introduced systematic or random errors to the analytical process. All soil sample data was determined to be representative and of acceptable quality for the purposes of this investigation. The laboratory reporting limits for some SVOCs and pesticides exceeded the corresponding UUSCOs; however, all method detection limits (MDLs) were below the comparison criteria and any detections above the MDLs were reported with a "J" qualifier. The complete soil analytical data reports are presented in Appendix D.

4.4.1 Volatile Organic Compounds (VOCs) in Soil

A review of the subsurface soil sampling analytical results indicates that four VOCs (2-butanone, acetone, methylene chloride, m-&p- xylene) were detected in at least one of the 38 soil samples collected during the initial Phase II ESI, and 10 VOCs (1,1,2-trichloror-1,2,2-trifluroethane, 1,2,4-trimethylbenzene, ethylbenzene, methylcyclohexane, methylene chloride, PCE, TCE, toluene, m-&p- xylene, o-xylene). No compounds were detected above their respective UUSCOs.

Acetone, 2-butanone, and methylene chloride are common laboratory contaminants, and the methylene chloride detections were all qualified with a B flag, indicating that it was also detected in the associated method blanks. ; The 1,2-trichloror-1,2,2-trifluroethane, 1,2,4-trimethylbenzene, ethylbenzene, methylcyclohexane, TCE, toluene, m-&p- xylene, o-xylene in samples collected during the supplemental work were also qualified with B flags, and the laboratory narrative for these samples indicated that the detections were the result of cross-contamination by samples from an unrelated project. Therefore, most of the VOC detections in the soil samples are related to laboratory contamination, and are not reflective of actual soil conditions at the Site. Analytical results for VOCs in soil are summarized in **Table 3**.

4.4.2 Semivolatile Organic Compounds (SVOCs) in Soil

A review of the subsurface soil sampling analytical results indicates that 25 SVOCs were detected in 1 or more of the samples analyzed. Eight SVOCs were detected at concentrations exceeding their respective UUSCOs or SSCOs, as summarized in the following table:

Detected SVOCs Greater Than UUSCOs and/or SSCOs in Soil

Sample Location Sample Date Depth (ft-bgs) Units = mg/kg	NYSDEC UUSCO	CP-51 SSCO	SB-4 7/31/2017 10-12	SB-15 8/1/2017 1-3	SB-17 8/1/2017 1-3	SB-18 8/2/17 0-2	SB-19 8/2/17 3-5	SB-GA1(0-2) 11/11/2017 0-2
Benzo(a)anthracene	***1***	***1***	0.037	**2.5**	0.036 U	0.24	0.64	0.037 U
Benzo(a)pyrene	***1***	***1***	0.04	**1.8**	0.03 J	0.19	0.72	0.037 U
Benzo(b)fluoranthene	***1***	***1***	0.07	**3.1**	0.048	0.34	**1.2**	0.037 U
Benzo(k)fluoranthene	***0.8***	***0.8***	0.036 U	**1.1**	0.036 U	0.17	0.47	0.037 U
Chrysene	***1***	***1***	0.05 J	**2.2**	0.042 J	0.33 J	0.75	0.37 U
Di-n-butyl phthalate	***NS***	***0.014***	0.015 J	0.037 U	0.036 U	0.026 J	0.38 U	0.019 J
Indeno(1,2,3-cd)pyrene	***0.5***	***0.5***	0.032 J	**1.4**	0.066	0.22	0.49	0.037 U
Isophorone	***NS***	***4.4***	0.052 J	0.015 U	4.5	0.15 U	0.15 U	0.15 U

Notes:
mg/kg = milligrams per kilogram
NS = A standard has not been established for the analyte.
U = The analyte was not detected above laboratory detection limits.
J = Estimated value.
Exceedances of Unrestricted Use Soil Cleanup Objectives (UUSCOs) are in **bold** font.
Exceedances of CP-51 Soil Cleanup Objectives are shaded in gray.

The SVOCs detected above their respective Part 375 Unrestricted Use SCOs consist primarily of polycyclic aromatic hydrocarbons (PAHs), a class of compounds present in petroleum products, asphalt, and as byproducts of combustion that are often found in historic fill materials. Since the samples collected at the Site did not exhibit field evidence of contamination (e.g., staining, odors, elevated PID readings), the detected PAHs are not indicative of a petroleum spill or other release, and are likely related to the historic fill material noted in these borings. Isophorone (a common component in concrete and water sealant) is likely associated with historic fill, and di-n-butyl phthalate (a plasticizer) is potentially associated with laboratory contamination. Analytical results for SVOCs in soil are summarized in **Table 3**.

4.4.3 Polychlorinated Biphenyls (PCBs) in Soil

A review of the analytical results indicates that one PCB mixture (Aroclor 1260), was detected in soil sample SB-GA1 (0-2) at a concentration well below the UUSCO for total PCBs. No PCBs were detected in any of the other soil samples. Analytical results for PCBs in soil are summarized in **Table 4**.

4.4.4 Pesticides and Herbicides in Soil

A review of the analytical results indicates that no herbicides and four pesticides (4,4-DDT, 4,4-DDE, chlordane, heptachlor epoxide) were detected in the soil samples. Of these, 4,4-DDT, and 4,4-DDE were detected in one or more samples at concentrations above their UUSCOs, as summarized in the following table:

Detected Pesticides Greater Than UUSCOs in Soil

Sample Location Date Sampled Depth (ft-bgs) Units = mg/kg	NYSDEC UUSCO	SB-12 08/02/17 1-3	SB-18 08/02/17 0-2	SB-19 08/02/17 0-2
4,4-DDE	***0.0033***	0.0074 U	**0.006 J**	**0.007 J**
4,4-DDT	***0.0033***	**0.024**	**0.007 J**	0.0075 U

Notes:
mg/kg = milligrams per kilogram
J = Estimated quantity
U = Not detected
Exceedances of Unrestricted Use Soil Cleanup Objectives (UUSCOs) are in **bold** font.

The detected pesticides are likely attributable to historic fill material which was observed in each of the soil borings advanced during the investigation, and/or historic pesticide use. Analytical results for pesticides and herbicides in soil are summarized in **Table 5**.

4.4.1 Herbicides in Soil

A review of the analytical results indicates that herbicides were not detected in the soil samples. Analytical results for herbicides in soil are summarized in **Table 5**.

4.4.2 Metals in Soil

A review of the subsurface soil sampling analytical results indicates that 14 of the 18 metals analyzed for were detected in 1 or more of the samples. Six metals (arsenic, copper, lead, mercury, nickel, and zinc) were detected at concentrations exceeding their respective UUSCOs in one or more of the samples and one metal (vanadium) was detected at concentrations exceeding their respective SSCOs in one or more of the samples. The exceedances are summarized in the following table:

Detected Metals Greater Than UUSCOs or SSCOs in Soil

Sample Location Sample Date Depth (ft-bgs) Units = mg/kg	NYSDEC UUSCO	CP-51 SSCO	SB-1 08/01/17 1-3	SB-1 08/01/17 10-12	SB-2 07/31/17 1-3	SB-2 07/31/17 10-12	SB-3 07/31/17 1-3	SB-3 07/31/17 10-12	SB-4 07/31/17 1-3
Arsenic	***13***	***NS***	1.7 J	3.1	1.3 J	3 U	6.3	6	5.8
Copper	***50***	***NS***	15.7	33.4	9.1	9.3	43.3	**57**	31.8
Lead	***63***	***NS***	8.8	13.8	3.4	2.4	16.1	13.6	**63.2**
Mercury	***0.18***	***NS***	0.02	0.017 U	0.017 U	0.017 U	0.019 U	0.018 U	0.038
Nickel	***30***	***NS***	**47.2**	**38.6**	**45.4**	**61.4**	**65.1**	**58**	26.9
Vanadium	***NS***	***39***	17.7	26.2	13	11.8	43.2	42.3	19.3
Zinc	***109***	***NS***	27.8	46.8	15.4	17.1	52.5	64.2	77.3

Sample Location **Sample Date** **Depth (ft-bgs)** **Units = mg/kg**	**NYSDEC UUSCO**	**CP-51 SSCO**	**SB-4** **07/31/17** **10-12**	**SB-5** **08/02/17** **1-3**	**SB-6** **07/31/17** **1-3**	**SB-6** **07/31/17** **10-12**	**SB-7** **07/31/17** **1-3**	**SB-8** **07/31/17** **1-3**	**SB-8** **07/31/17** **5-7**
Arsenic	***13***	***NS***	3.4	5.9	6.4	0.79 J	1.8 J	0.98 J	2.4 J
Copper	***50***	***NS***	**131**	49.9	17.7	9.3	22.6	10.4	14.3
Lead	***63***	***NS***	14	**87.7**	27.9	2.7	22.3	13.9	**71.8**
Mercury	***0.18***	***NS***	0.018 U	0.015 J	0.024	0.017 U	0.018	0.024	0.042
Nickel	***30***	***NS***	26.8	**37.2**	**37.9**	**37**	**47.7**	**42.5**	**59.6**
Vanadium	***NS***	***39***	25.5	23.9	13.8	10.3	15.1	15.8	16.9
Zinc	***109***	***NS***	32.9	**113**	30.9	15	34.9	28	49.4
Sample Location **Sample Date** **Depth (ft-bgs)** **Units = mg/kg**	**NYSDEC UUSCO**	**CP-51 SSCO**	**SB-9** **07/31/17** **1-3**	**SB-9** **07/31/17** **5-7**	**SB-10** **08/02/17** **1-3**	**SB-10** **08/02/17** **10-12**	**SB-11** **08/02/17** **1-3**	**SB-11** **08/02/17** **10-12**	**SB-12** **08/02/17** **1-3**
Arsenic	***13***	***NS***	2.6 J	1.5 J	1.7 J	3	2.5 J	0.78 J	2 J
Copper	***50***	***NS***	8.2	7.4	12.1	21	22.8	10.5	21.7
Lead	***63***	***NS***	5.9	9.4	14.7	**64**	**104**	4.2	23.4
Mercury	***0.18***	***NS***	0.018 U	0.013 U	0.018 U	0.048	0.073	0.018 U	0.049
Nickel	***30***	***NS***	**61.7**	**38.4**	**67.9**	**53.6**	**62.3**	**34.3**	**52.5**
Vanadium	***NS***	***39***	11.7	15.4	13.1	17.8	17.8	13.2	14.9
Zinc	***109***	***NS***	24.1	25	26.7	51.5	48.2	17.9	36.4
Sample Location **Sample Date** **Depth (ft-bgs)** **Units = mg/kg**	**NYSDEC UUSCO**	**CP-51 SSCO**	**SB-12** **08/02/17** **10-12**	**SB-13** **08/02/17** **1-3**	**SB-14** **08/01/17** **1-3**	**SB-14** **08/01/17** **10-12**	**SB-15** **08/01/17** **1-3**	**SB-16** **08/01/17** **1-3**	**SB-17** **08/01/17** **1-3**
Arsenic	***13***	***NS***	2.7	1.7 J	3 J	3 J	2.8 J	**83.5**	3.7
Copper	***50***	***NS***	11	12.3	18.4	12.1	19.8	49.9	20.7
Lead	***63***	***NS***	7	5	34.8	6.5	47.6	**963**	33.8
Mercury	***0.18***	***NS***	0.018 U	0.018 U	0.025	0.021 U	0.028	0.13	0.038
Nickel	***30***	***NS***	**43.9**	**50.1**	**36.3**	**102**	**32.5**	28.7	15
Vanadium	***NS***	***39***	26.9	17	14.6	20.3	15.6	17	20.9
Zinc	***109***	***NS***	32.9	18.7	42.9	39.4	52	**183**	**147**
Sample Location **Sample Date** **Depth (ft-bgs)** **Units = mg/kg**	**NYSDEC UUSCO**	**CP-51 SSCO**	**SB-17** **08/01/17** **10-12**	**SB-18** **08/02/17** **0-2**	**SB-18** **08/02/17** **3-5**	**SB-19** **08/02/17** **0-2**	**SB-19** **08/02/17** **3-5**		
Arsenic	***13***	***NS***	2 J	7.1	5.9	3.2	4.9		
Copper	***50***	***NS***	9.2 J	29.5	30.1	33.8	49.4		
Lead	***63***	***NS***	2.6	**63.3**	35.3	**81.9**	**144**		
Mercury	***0.18***	***NS***	0.017 U	0.074	0.037	**0.32**	**0.27**		
Nickel	***30***	***NS***	**58.9**	**36**	**32.3**	**33.5**	**49.6**		
Vanadium	***NS***	***39***	11.6	41.5	26.2	19.5	24.6		
Zinc	***109***	***NS***	20.3	69.2	50.5	**113**	**204**		

Notes:
mg/kg = milligrams per kilogram
J = Estimated value.
U = Not detected
NS = A standard has not been established for the analyte.
Exceedances of Unrestricted Use Soil Cleanup Objectives (UUSCOs) are in **bold** font.
Exceedances of CP-51 Soil Cleanup Objectives are shaded in gray.

In accordance with NYCSCA protocols, AKRF requested that the laboratory additionally analyze samples with total lead of 100 ppm or greater (SB-11(1-3), SB-16(1-3) and SB-19(3-5)) for leachable lead using the Toxicity Characteristic Leaching Procedure (TCLP) to determine whether the lead contained in these samples would be characterized as a hazardous waste. Results of the analyses did not detect TCLP

lead above the USEPA hazardous waste threshold of 5 milligrams per liter (mg/L) in any of the three samples, indicating that the sampled soil would not be characterized as hazardous.

In the absence of other indications of contamination, the metals exceedances are attributed to historic fill observed in each of the soil borings and/or naturally occurring levels. Analytical results for total metals and TCLP lead are presented in **Table 6**.

4.4.1 Waste Characterization Parameters in Soil

A review of the analytical results indicates that cyanide, hexavalent chromium, and gasoline range organics (GRO) total petroleum hydrocarbons (TPH) were not detected in soil samples. Diesel range organics (DRO) TPH were detected in all four of the waste characterization samples, as summarized in the following table:

Summary of Total Petroleum Hydrocarbons Detected in Soil

Client ID Date Sampled Units = mg/kg	SB-1WC 08/01/17	SB-8WC 07/31/17	SB-15WC 08/01/17	SB-17WC 08/01/17	SB-18(0-2) 08/02/17
GRO	3.4 U	2.7 U	2.2 U	2.7 U	2.5 U
DRO	26	40	14	40	15

Notes:
mg/kg = milligrams per kilogram
U = Not detected

There are no applicable regulatory criteria for TPH in New York State. TPH results provide information on soil disposal options for soil excavated during construction, since disposal facilities in the New York City metropolitan area typically require TPH analyses prior to accepting soil for disposal. The concentrations of TPH noted in the samples are not anticipated to impact potential soil disposal options. Analytical results for TPH analysis of the soil samples collected are included in **Table 7**.

4.5 Groundwater Sampling Findings

Apparent perched groundwater was measured at 26.5 feet bgs in temporary well (TW-15). Groundwater was not encountered in the other temporary wells installed during the Phase II ESI (TW-1, TW-12, and TW-17). Based on the Site's topography and location relative to nearby water bodies, the regional groundwater flow direction in the areas surrounding the Site is assumed to be southeasterly, and actual groundwater is expected deeper than 100 feet bgs. No visual evidence of contamination (e.g., discoloration, free product, orange precipitate, etc.) was observed in groundwater purge water or in the samples.

Laboratory QA/QC procedures and analyses were used to demonstrate whether groundwater analytical results have been biased by either interfering compounds in the sample matrix or by laboratory techniques that may have introduced systematic or random errors to the analytical process. Additionally, one aqueous trip blank was submitted to determine whether compounds were introduced to the samples during shipment. No groundwater samples required dilutions and all data was determined to be representative and of acceptable quality for the purposes of this investigation.

The results of the analyses of the groundwater sample are presented in Tables 8 through 10. The complete analytical data reports are presented in Appendix D. A review of the groundwater analytical results is presented in the following sections.

4.5.1 Volatile Organic Compounds (VOCs) in Groundwater

The laboratory analytical results indicate that one VOC (acetone) was detected in the groundwater sample at a concentration below its AWQS. No other VOCs were detected in the groundwater sample. A summary of the groundwater analytical results for VOCs in groundwater is presented in **Table 8**.

4.5.2 Semivolatile Organic Compounds (SVOCs) in Groundwater

The laboratory analytical results indicate that two SVOCs, caprolactam and di-n-butyl phthlate, were detected in the groundwater sample at estimated concentrations below their respective AWQSs. No other SVOCs were detected in the groundwater samples. A summary of the analytical results for SVOCs in groundwater is presented in **Table 9**.

4.5.3 Metals in Groundwater

Total Metals

A review of the analytical results for the unfiltered groundwater samples indicates that 12 of the 17 metals analyzed for were detected in the groundwater sample below their respective AWQSs. The metals detected in the unfiltered groundwater samples are primarily attributed to sediment entrained in the samples and not to an on-site release. A summary of the analytical results for total metals in groundwater is presented in **Table 10**.

Dissolved Metals

Due to insufficient volume of the groundwater sample due to low recharge in the temporary monitoring well, the analysis for dissolved metals was unable to be performed.

4.6 Soil Vapor Assessment Findings

4.6.1 Sub-Slab Vapor Sampling Findings

Three (3) VOCs were detected in sub-slab vapor sample SV-ES1 at concentrations exceeding the NYSDOH AGV and/or background range, as summarized in the following table:

Summary of Detected VOC Concentrations Greater than Background Concentrations in Sub-Slab Vapor

Sample ID Sample Date Units = µg/m3	NYSDOH Air Guideline Guideline Value	NYSDOH Background Range	SV-ES1 11/11/2017
cis-1,2-Dichloroethene	***NS***	***0.4-<1.9***	**3.7**
Tetrachloroethene	***30***	***2.5-15.9***	**18**
Trichloroethene	***2.0***	***0.5 - 4.2***	3.3

Notes:
µg/m^3 = micrograms per cubic meter
NS = A standard has not been established for the analyte.
Exceedances of NYSDOH Background Ranges are highlighted in **bold** font.
Exceedances of NYSDOH AGVs are shaded in gray.

All other detected VOC concentrations in the supplemental sub-slab vapor samples were below their respective NYSDOH background ranges. Analytical results for VOCs in the supplemental sub-slab vapor samples are included in **Table 11**. The complete analytical data report is presented in Appendix D.

4.6.2 Ambient Air Sampling Findings

VOCs were not detected in the ambient air sample at concentrations above the corresponding AGVs or the range of outdoor air background levels presented in the NYSDOH Vapor Intrusion Guidance Document. A summary of the analytical results for VOCs in the ambient air samples is presented in **Table 11**. The complete analytical data report is presented in Appendix D.

4.6.3 Discussion

The detected TCE and cis-1,2-dichloroethene concentrations in sub-slab vapor sample SV-ES1 were compared to Matrix A of the NYSDOH Vapor Intrusion Guidance Document, and the detected PCE concentration was compared to Matrix B. Comparison to the matrices indicated that the recommendation for the detected TCE, cis-1,2-dichloroethene, and PCE concentrations would be either "no further action" or "identify source(s) and resample or mitigate" depending on the corresponding indoor air concentrations. Since comparison to the matrices did not indicate a scenario requiring potential mitigation of soil vapor intrusion regardless of the indoor air level, the indoor air samples collected during the VI sampling were not analyzed.

4.7 Summary of Findings

AKRF performed a Phase II ESI consisting of initial soil, groundwater, and soil/sub-slab vapor sampling throughout the Site and supplemental soil and soil vapor assessment sampling in the areas of the elementary school building and maintenance garage. The results of the Phase II ESI indicate the following:

- The locations of the three known USTs and associated fill lines were verified during by the geophysical survey, and three additional cylindrical metallic anomalies were identified. Two of these anomalies were determined to be related to on-site utilities. The third anomaly, located south of the garage area, could be a UST or other buried structure. Two soil borings were advanced adjacent to this anomaly during the supplemental Phase II ESI field work.
- Groundwater was encountered at 26.5 feet below ground surface (bgs) in temporary well TW-15 installed at soil boring SB-15 during the Phase II ESI. Although, moist to wet soil was encountered when soil borings SB-1, SB-12, and SB-17 were extended to approximately 30 to 40 feet bgs, groundwater was not measured in the temporary wells installed in these borings. Based on these observations and USGS data indicating that the water table in the Site vicinity is likely greater than 100 feet bgs, the groundwater measured in TW-15 is likely a lens of perched groundwater on low permeable material. Shallower perched water was also noted within a silt/clay layer at approximately 10 to 20 feet bgs in soil boring SB-GA1. Based on topography and the location of nearby surface water bodies, the regional groundwater flow direction in the area surrounding the Site is assumed to be toward the southeast.
- Subsurface soil generally consisted of a layer of fill material (sand, gravel, and silt, with varying amounts of brick, concrete, wood, clay, asphalt, and organic material) from the ground surface to depths ranging from approximately 5 to 20 feet bgs. Apparent native sand and silt with some gravel and clay was encountered in some of the borings below the historic fill layer.
- Mild petroleum-like odors were detected in soil boring SB-7 between approximately 2 and 3 feet bgs, likely attributable to a thin layer of stained sand observed in the soil boring along the fill line for the UST at the chapel building. No elevated PID readings were noted in this boring, and all VOC and SVOC concentrations were below the NYSDEC UUSCOs and SSCOs in the laboratory sample from this depth interval. No field evidence of contamination was noted in any of the other soil borings advanced near the known on-site fuel oil USTs or the suspect UST south of the maintenance garage.

- No VOCs were detected in any of the soil samples at concentrations exceeding their respective UUSCOs.
- Eight SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, di-n-butyl phthalate, indeno(1,2,3-cd)pyrene, and isophorone] were detected at concentrations above UUSCOs and/or SSCOs in six of the soil samples analyzed. Since these samples did not exhibit field evidence of contamination, the detected SVOCs are not indicative of a petroleum spill or other release, and are likely related to the historic fill material noted in the borings (or possibly due to laboratory contamination for di-n-butyl phthalate).
- Four pesticides were detected in one or more of the soil samples. Of these, two compounds (4,4-DDT, and 4,4-DDE) were detected at concentrations above their respective UUSCOs, and are attributed to historic fill material and/or previous pesticide use.
- PCBs and herbicides were not detected in any of the soil samples.
- Of the 14 metals detected in soil, 6 (arsenic, copper, lead, mercury, nickel, and zinc) were identified at concentrations exceeding their respective UUSCOs in one or more of the samples and 1 (vanadium) was identified at concentrations exceeding its SSCO in two of the samples. These metal concentrations are attributed to the historic fill material and/or naturally occurring conditions.
- Three (3) soil samples had the potential to exhibit the toxicity characteristic for lead; therefore, Toxicity Characteristics Leaching Procedure (TCLP) analysis was run on the samples. Lead was not detected at a concentration exceeding the toxicity characteristic for lead in any of the three samples.
- The concentrations of TPH noted in the waste class samples are not anticipated to impact potential soil disposal options.
- No VOCs, SVOCS, or metals were detected above the Class GA AWQSs in the groundwater sample collected during the Phase II.
- Petroleum-related compounds detected in soil vapor and sub-slab vapor at concentrations above their published background levels are likely associated with historic and current fuel oil use at the Site.
- PCE and TCE detected above their respective NYSDOH AGVs in the sub-slab vapor sample SV-11 and TCE was detected above its AGV in sub-slab vapor sample SV-ES1, both collected from under the boiler room in the elementary school building's sub-basement. However, these compounds were not detected in any soil samples analyzed for this Phase II ESI, including those samples collected from three supplemental soil borings advanced in/near the boiler room. Furthermore, PCE and TCE concentrations were below their respective AGVs in the two sub-slab samples collected from under the main basement level in the elementary school (SV-12 and SV-ES2). These findings indicated that the PCE and TCE detected in sub-slab vapor under the boiler room represent an isolated condition, possibly related to historic solvent use for boiler maintenance, and are not indicative of a widespread release or source area.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Phase II ESI, AKRF concludes the following:

- In addition to the three known fuel oil underground storage tanks (USTs) at the Site, the geophysical survey identified an anomaly indicative of a potential fourth UST south of the garage area. Additional metallic anomalies identified during the geophysical survey are attributed to stormwater and water service utilities.
- Apparent perched groundwater was encountered at 26.5 feet below ground surface (bgs) in one temporary well installed during the Phase II ESI. Based on the Site elevation and United States Geological Survey (USGS) information, the groundwater table in the Site vicinity is expected to be greater than 100 feet bgs.
- Subsurface soil generally consists of a shallow layer of historic fill overlying apparent native sand and silt with some gravel and clay.
- Petroleum-related volatile organic compounds (VOCs) detected in several soil/sub-slab vapor samples above the corresponding New York State Department of Health (NYSDOH) background ranges are attributed to the on-site petroleum use/storage.
- Tetrachloroethene (PCE) and trichloroethene (TCE) detected above their corresponding NYSDOH air guideline values (AGVs) in sub-slab vapor samples collected under the elementary school sub-basement appear to represent an isolated condition and are possibly related to the historic use of solvents for boiler maintenance activities.
- No VOCs were detected in soil at concentrations above their respective UUSCOs, and no polychlorinated biphenyls (PCBs) or herbicides were detected in any of the soil samples.
- Semivolatile organic compounds (SVOCs), metals, and pesticides detected in soil at concentrations exceeding their respective NYSDEC Part 375 UUSCOs and/or CP-51 SSCOs are attributed to background conditions and/or historic fill noted in the Site subsurface, and not to an on-site release.
- Metals detected in the unfiltered groundwater sample analyzed are attributed to sediment entrained in the groundwater during sampling. No metals were detected above Class GA Ambient Water Quality Standards.

Based on the findings of the Phase II ESI and our understanding that the existing on-site buildings would be converted for use as public schools, AKRF recommends the following:

- Modifications should be made to the elementary school's ventilation system, as necessary, to ensure that the partial sub-basement is separately ventilated from the remainder of the building.
- Any suspect asbestos containing material (ACM), lead-based paint (LBP), and/or PCB-containing materials should be properly maintained in accordance with NYCSCA protocols, and any such materials affected by proposed renovation, demolition, or construction activities at the Site be identified and properly managed during those activities in accordance with all applicable regulations and NYCSCA policies and procedures.
- If excavation is required as part of proposed renovations, all excavated material should be properly characterized prior to transportation to an off-site disposal facility. Results from the limited waste characterization sampling conducted during this investigation should not be used in lieu of data from a full Site characterization. In addition, any imported backfill should be tested to ensure that it conforms to NYCSCA requirements for environmentally-clean fill.

- The metallic anomaly identified south of the maintenance garage should be investigated to verify whether an underground storage tank is present. If a UST is verified, it should be properly addressed in accordance with state and local regulations.

A description of the recommended engineering controls, including a remediation cost estimate, is included in Appendix F.

6.0 LIMITATIONS

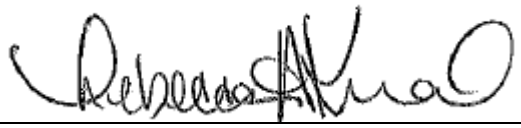
AKRF has prepared this Phase II ESI using reasonable efforts in each phase of its work to investigate RECs/VECs associated with hazardous substances, wastes and petroleum products at the Site. Findings within this report are based on information collected from observations made at the time of the investigation and associated data. This report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes. This report was prepared for the sole use of NYCSCA and related New York City municipal agencies pursuant to the AKRF Contract dated August 1, 2014.

7.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

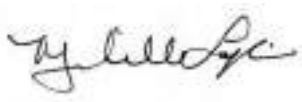
AKRF has performed a Phase II Environmental Site Investigation and Supplemental Environmental Site Investigation of the 57-61 Cleveland Place Site in Staten Island, New York. The scope of the Phase II ESI and supplemental ESI were consistent with the scopes of work dated June 20, 2017 and September 28, 2017, respectively, as stated in Section 2.0.

PREPARED BY: _____
Elizabeth Matamoros
Environmental Scientist

PREPARED BY: _____
Mark Jepsen
Environmental Scientist



PREPARED BY: _____
Rebecca A. Kinal, P.E.
Vice President (Project Manager)

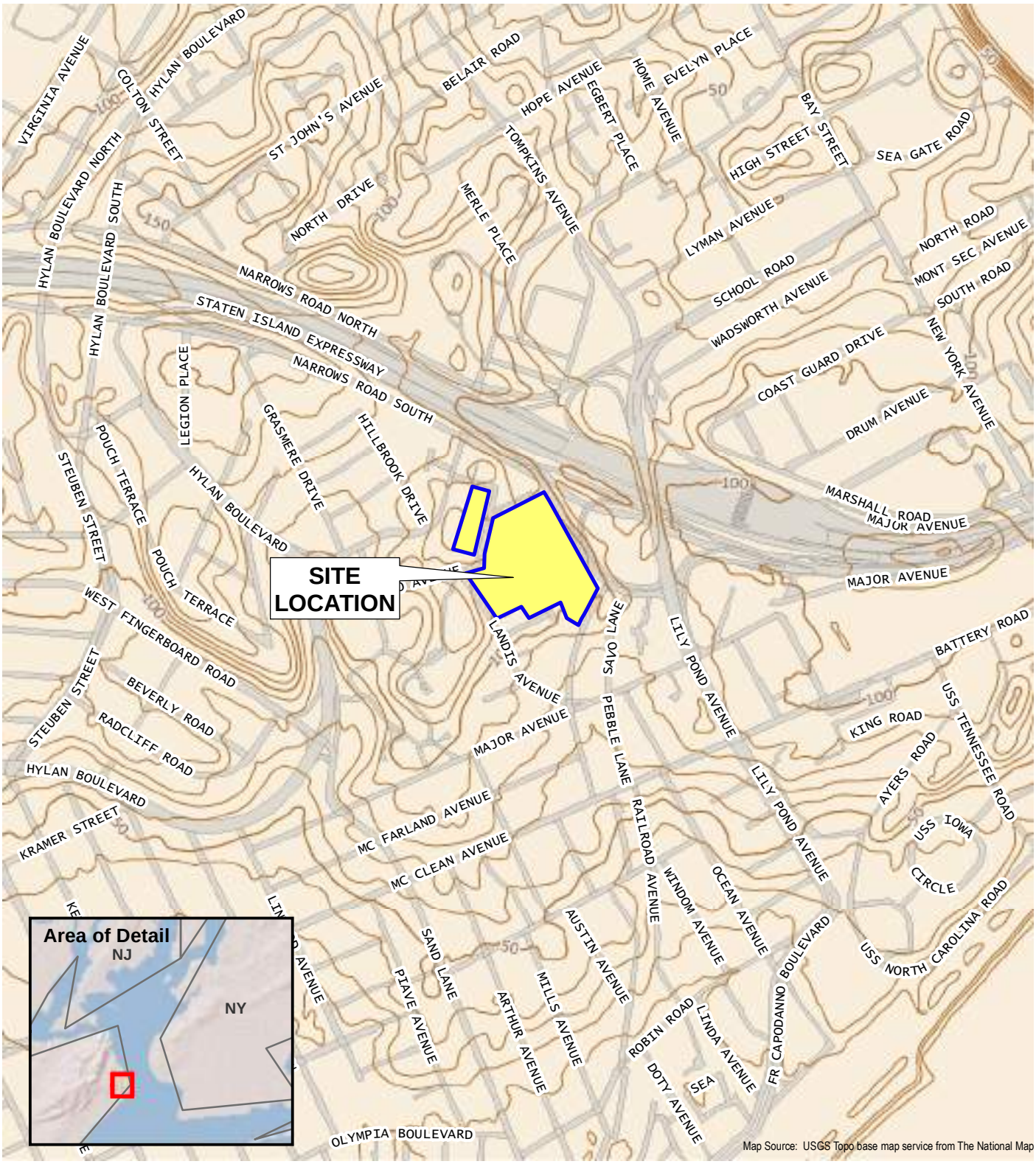


REVIEWED BY: _____
Michelle Lapin, P.E.
Sr. Vice President (QC Officer)

8.0 REFERENCES

- 6 NYCRR § 375, effective December 14, 2006, New York State Department of Environmental Conservation Rules and Regulations, Remedial Program Requirements.
- 6 NYCRR Chapter X § 700 – 706, New York State Department of Environmental Conservation Water Quality Regulations, Surface Water and Ground Water Classifications and Standards.
- ASTM E 2600-08 "Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions."
- ASTM Standards Related to the Phase II Environmental Site Assessment Process, 2nd Edition.
- CP-51/Soil Cleanup Guidance; New York State Department of Environmental Conservation, October 21, 2010.
- DER-10 Technical Guidance for Site Investigation and Remediation (5/3/2010).
- Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, New York State Department of Health Center for Environmental Health, Bureau of Environmental Exposure Investigation; (updated May 2017 for TCE and PCE).
- Phase I Environmental Site Assessment Report of 57-61 Cleveland Place, Staten Island, New York 10305, AKRF Engineering, P.C., June 20, 2017.
- Phase II Environmental Site Investigation Proposal/Scope of Work for 57-61 Cleveland Place, Staten Island, New York 10305, AKRF Engineering, P.C., June 20, 2017.
- Supplemental Environmental Site Investigation Proposal/Scope of Work for St. John Villa Campus, Staten Island, New York 10305, AKRF Engineering, P.C., September 28, 2017.

FIGURES



©2017 AKRF W:\Projects\89215 - ST. JOHN VILLA\Technical\GIS and Graphics\Hazmat\89215 Fig 1 Site loc map.mxd 11/20/2017 12:02:43 PM mvelleux

AKRF
440 Park Avenue South, New York, NY 10016

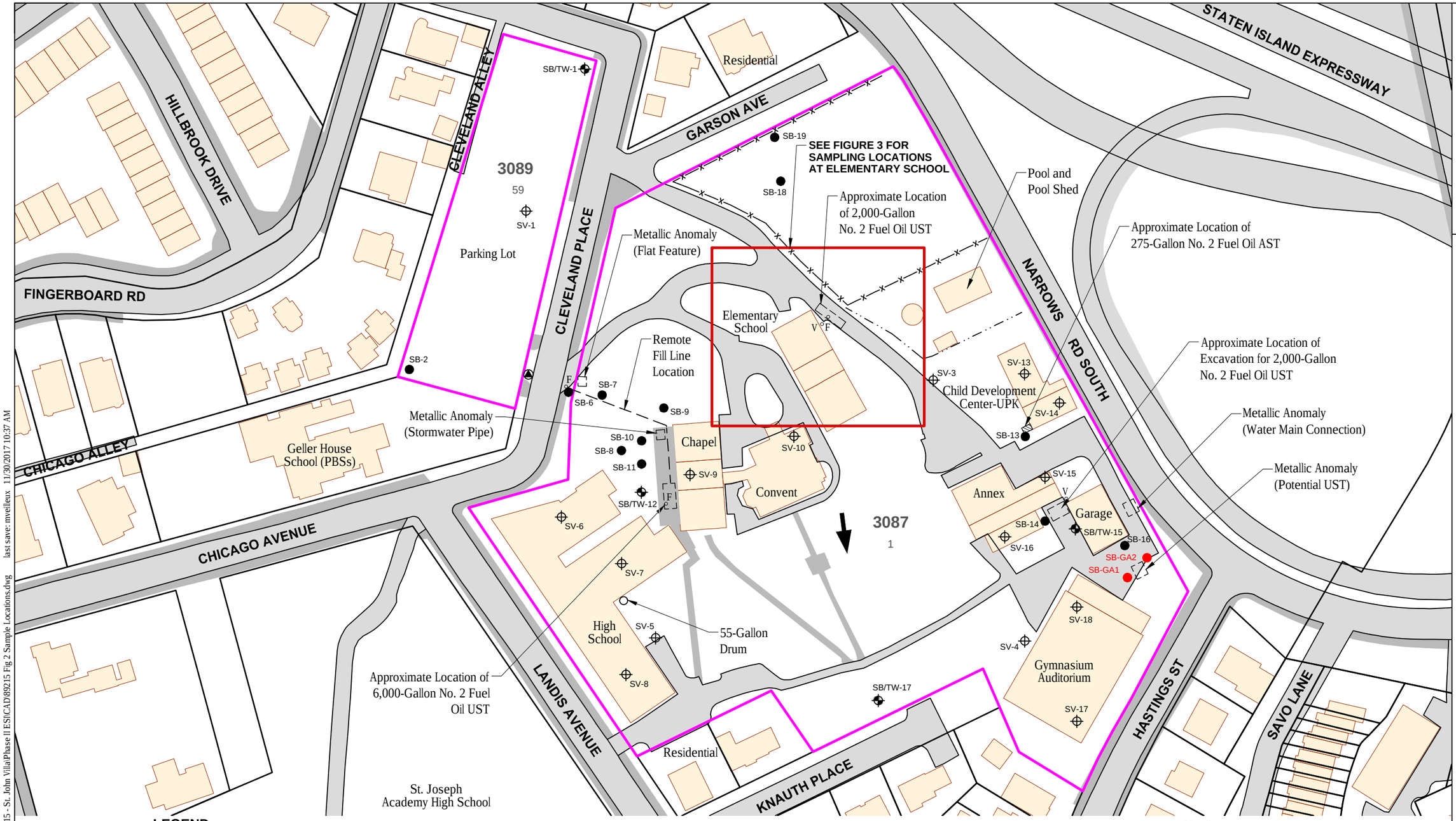
St. John Villa Campus
Staten Island, New York

SITE LOCATION

DATE
11/20/2017

PROJECT NO.
89215

FIGURE
1



LEGEND

- PROJECT SITE BOUNDARY
- 1 — LOT BOUNDARY AND TAX LOT NUMBER
- 3087 — TAX BLOCK NUMBER
- BUILDING
- PHASE II SOIL BORING
- PHASE II SOIL BORING/TEMPORARY WELL
- PHASE II SOIL VAPOR POINT
- EXISTING MONITORING WELL
- SUPPLEMENTAL PHASE II SOIL BORING
- UST — UNDERGROUND STORAGE TANK
- AST — ABOVEGROUND STORAGE TANK
- V ° — VENT PIPE
- F ° — FILL PORT
- ANTICIPATED GROUNDWATER FLOW DIRECTION
- GEOPHYSICAL ANOMALY
- —x—x— CHAIN-LINK FENCE

Map Source:
NYCDCP (NYC Dept. of City Planning 2015) GIS database.

0 50 100 200
SCALE IN FEET

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St. John Villa Campus
Staten Island, New York

SAMPLE LOCATIONS

DATE
11/30/2017

PROJECT NO.
89215

FIGURE
2

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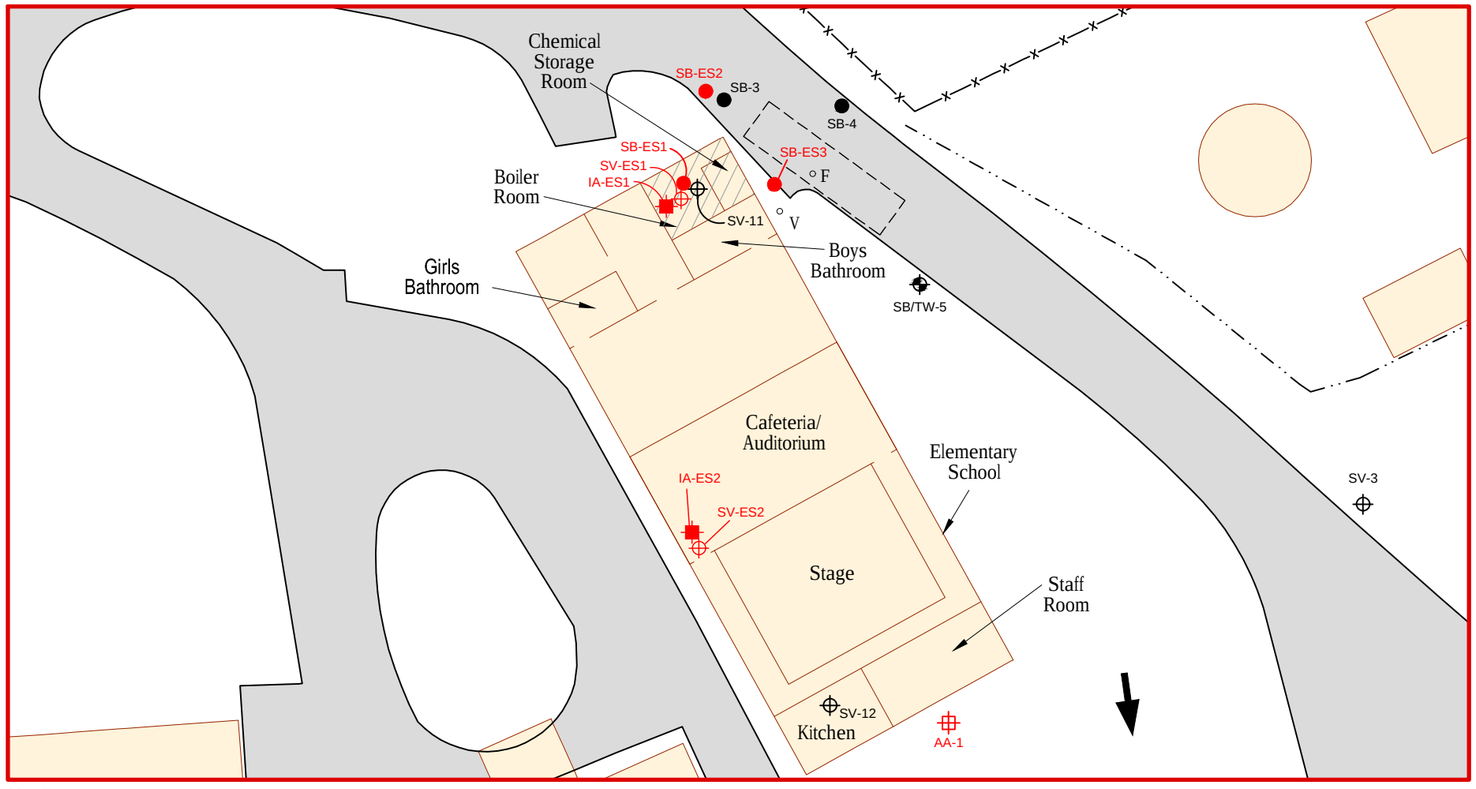
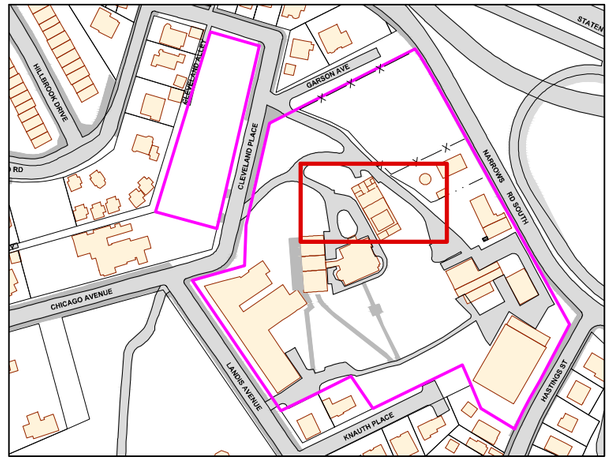


Map Source:
NYCDCP (NYC Dept. of City Planning 2015) GIS database.



KEY MAP
SCALE: 1" = 300'

LEGEND

- PROJECT SITE BOUNDARY
- 1 — LOT BOUNDARY AND TAX LOT NUMBER
- 3087 — TAX BLOCK NUMBER
- BUILDING
- PARTIAL CELLAR
- PHASE II SOIL BORING
- PHASE II SOIL BORING/TEMPORARY WELL
- PHASE II SOIL VAPOR POINT
- SUPPLEMENTAL PHASE II SOIL BORING
- SUPPLEMENTAL PHASE II SOIL VAPOR POINT
- SUPPLEMENTAL PHASE II INDOOR AIR SAMPLE
- SUPPLEMENTAL PHASE II AMBIENT AIR SAMPLE
- V ° — VENT PIPE
- F ° — FILL PORT
- ANTICIPATED GROUNDWATER FLOW DIRECTION
- GEOPHYSICAL ANOMALY
- —x—x— CHAIN-LINK FENCE

0 15 30 60
SCALE IN FEET

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St. John Villa Campus
Staten Island, New York

SAMPLING LOCATIONS AT ELEMENTARY SCHOOL

DATE
11/30/2017

PROJECT NO.
89215

FIGURE
3

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TABLES

Table 1
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds in Sub-Slab/Soil Vapor

Client ID Lab Sample ID Date Sampled Dilution Analyte	EPA 2001 BASE 90th percentile Indoor µg/m^3	NYSDOH 2003 Soil Vapor Indoor Upper Fence µg/m^3	NYSDOH 2005 HEI RIOPA 95th Percentile Indoor µg/m^3	NYSDOH 2006 Soil Vapor Intrusion Air Guidance Value µg/m^3	SV-1 200-39613-1 8/3/2017 1	SV-2 200-39613-2 8/3/2017 1	SV-3 200-39613-3 8/3/2017 1	SV-4 200-39613-4 8/3/2017 1	SV-5 200-39613-5 8/3/2017 1	SV-6 200-39823-3 8/22/2017 10
1,1,1-Trichloroethane	**20.6**	**2.5**	**NS**	**NS**	3	0.14 U	0.14 U	0.14 U	0.19 J	1.4 U
1,1-Dichloroethane	**<0.7**	**0.4**	**NS**	**NS**	0.069 U	0.069 U	0.069 U	0.069 U	0.069 U	0.69 U
1,1-Dichloroethene	**<1.4**	**0.4**	**NS**	**NS**	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	1.4 U
1,2,4-Trimethylbenzene	**9.5**	**9.8**	**NS**	**NS**	0.96	4.9	0.62 J	**54**	4	2.8 U
1,2-Dichlorobenzene	**<1.2**	**0.5**	**NS**	**NS**	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.7 U
1,2-Dichloroethane	**<0.9**	**0.4**	**NS**	**NS**	0.14 U	0.14 U	**1.2**	0.14 U	0.14 U	1.4 U
1,2-Dichloropropane	**<1.6**	**0.4**	**NS**	**NS**	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U
1,3,5-Trimethylbenzene	**3.7**	**3.9**	**NS**	**NS**	0.33 J	1.9	0.43 J	**29**	1.5	2 U
1,3-Dichlorobenzene	**<2.4**	**0.5**	**NS**	**NS**	0.82 J	0.75 J	0.3 U	**2.4**	0.3 U	3 U
Benzene	**9.4**	**13**	**10**	**NS**	1.9	0.44 J	2.3	0.58 J	0.5 J	0.89 U
Carbon tetrachloride	**<1.3**	**1.3**	**1.1**	**NS**	0.33 J	0.18 J	0.16 J	0.28 J	0.34 J	0.69 U
Chlorobenzene	**<0.9**	**0.4**	**NS**	**NS**	0.15 J	0.12 U	0.12 U	0.11 J	0.12 U	1.2 U
Chloroethane	**<1.1**	**0.4**	**NS**	**NS**	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	3.4 U
Chloromethane	**3.7**	**4.2**	**NS**	**NS**	0.59 J	0.33 U	0.34 J	0.61 J	0.49 J	3.3 U
cis-1,2-Dichloroethene	**<1.9**	**0.4**	**NS**	**NS**	**2.3**	0.11 U	0.11 U	0.11 U	0.14 J	1.1 U
Ethylbenzene	**5.7**	**6.4**	**7.62**	**NS**	1.4	0.75 J	0.81 J	4.3	0.48 J	1.5 U
m,p-Xylene	**22.2**	**11**	**22.2**	**NS**	1.4 J	2.1 J	1.5 J	**29**	2.2	3.3 U
Methyl tert-butyl ether	**11.5**	**14**	**36**	**NS**	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	1.5 U
Methylene Chloride	**10**	**16**	**7.5**	**60**	0.78 J	0.34 J	0.33 J	0.24 J	0.43 J	2.4 U
Naphthalene	**5.1**	**NS**	**NS**	**NS**	0.52 U	0.82 J	0.52 U	1.6 J	0.63 J	5.2 U
o-Xylene	**7.9**	**7.1**	**7.24**	**NS**	0.54 J	0.98	0.59 J	**13**	1.5	1.7 U
Tetrachloroethene	**15.9**	**2.5**	**6.01**	**30**	13	1.6	0.68 J	1.8	2.9	5.6 J
Toluene	**43**	**57**	**39.8**	**NS**	2.4	1.3	5.9	2.5	1.6	1.3 U
trans-1,2-Dichloroethene	**NS**	**NS**	**NS**	**NS**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U
Trichloroethene	**4.2**	**0.5**	**1.36**	**2**	1.2	0.049 U	0.049 U	0.049 U	0.049 U	0.49 U
Vinyl chloride	**<1.9**	**0.4**	**NS**	**NS**	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.46 U

Table 1
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds in Sub-Slab/Soil Vapor

Client ID Lab Sample ID Date Sampled Dilution Analyte	EPA 2001 BASE 90th percentile Indoor µg/m^3	NYSDOH 2003 Soil Vapor Indoor Upper Fence µg/m^3	NYSDOH 2005 HEI RIOPA 95th Percentile Indoor µg/m^3	NYSDOH 2006 Soil Vapor Intrusion Air Guidance Value µg/m^3	SV-7 200-39823-2 8/22/2017 49.2	SV-8 200-39823-1 8/22/2017 1	SV-9 200-39823-4 8/22/2017 30.3	SV-10 200-39823-5 8/22/2017 30.5	SV-11 200-39823-7 8/22/2017 1	SV-12 200-39823-6 8/22/2017 1
1,1,1-Trichloroethane	**20.6**	**2.5**	**NS**	**NS**	7 U	0.14 U	4.3 U	4.3 U	0.65 J	0.49 J
1,1-Dichloroethane	**<0.7**	**0.4**	**NS**	**NS**	3.4 U	0.069 U	2.1 U	2.1 U	0.35 J	0.16 J
1,1-Dichloroethene	**<1.4**	**0.4**	**NS**	**NS**	6.8 U	0.14 U	4.2 U	4.2 U	0.14 U	0.14 U
1,2,4-Trimethylbenzene	**9.5**	**9.8**	**NS**	**NS**	14 U	1.2	8.5 U	8.5 U	6.2	2.2
1,2-Dichlorobenzene	**<1.2**	**0.5**	**NS**	**NS**	13 U	0.27 U	8.2 U	8.3 U	0.27 U	0.27 U
1,2-Dichloroethane	**<0.9**	**0.4**	**NS**	**NS**	6.8 U	0.14 U	4.2 U	4.2 U	0.14 U	0.14 U
1,2-Dichloropropane	**<1.6**	**0.4**	**NS**	**NS**	8 U	0.16 U	4.9 U	4.9 U	0.16 U	0.16 U
1,3,5-Trimethylbenzene	**3.7**	**3.9**	**NS**	**NS**	9.7 U	0.47 J	6 U	6 U	1.6	0.6 J
1,3-Dichlorobenzene	**<2.4**	**0.5**	**NS**	**NS**	15 U	0.3 U	9.1 U	9.2 U	2.3	0.39 J
Benzene	**9.4**	**13**	**10**	**NS**	4.4 U	0.62	2.7 U	2.7 U	1.2	0.49 J
Carbon tetrachloride	**<1.3**	**1.3**	**1.1**	**NS**	3.4 U	0.36 J	2.1 U	2.1 U	0.37 J	0.62 J
Chlorobenzene	**<0.9**	**0.4**	**NS**	**NS**	5.7 U	0.12 U	3.5 U	3.5 U	0.12 U	0.12 U
Chloroethane	**<1.1**	**0.4**	**NS**	**NS**	17 U	0.34 U	10 U	10 U	0.34 U	0.34 U
Chloromethane	**3.7**	**4.2**	**NS**	**NS**	16 U	0.47 J	10 U	10 U	0.39 J	0.39 J
cis-1,2-Dichloroethene	**<1.9**	**0.4**	**NS**	**NS**	5.7 U	0.11 U	3.5 U	3.5 U	**51**	0.11 U
Ethylbenzene	**5.7**	**6.4**	**7.62**	**NS**	7.3 U	0.52 J	4.5 U	4.5 U	**16**	2.1
m,p-Xylene	**22.2**	**11**	**22.2**	**NS**	16 U	1.9 J	11 J	10 U	**37**	5.8
Methyl tert-butyl ether	**11.5**	**14**	**36**	**NS**	7.3 U	0.15 U	4.5 U	4.5 U	0.15 U	0.15 U
Methylene Chloride	**10**	**16**	**7.5**	**60**	12 U	0.24 U	7.2 U	7.2 U	1.2 J	0.24 U
Naphthalene	**5.1**	**NS**	**NS**	**NS**	26 U	0.52 U	16 U	16 U	1.9 J	1.1 J
o-Xylene	**7.9**	**7.1**	**7.24**	**NS**	8.5 U	0.17 U	**9 J**	5.3 U	7.5	1.7
Tetrachloroethene	**15.9**	**2.5**	**6.01**	**30**	3.3 U	7.8	2 U	2 U	**72**	15
Toluene	**43**	**57**	**39.8**	**NS**	14 J	2.6	4 U	6.5 J	6.4	3.6
trans-1,2-Dichloroethene	**NS**	**NS**	**NS**	**NS**	9.8 U	0.2 U	6 U	6 U	0.94	0.2 U
Trichloroethene	**4.2**	**0.5**	**1.36**	**2**	2.4 U	1.2	1.5 U	1.5 U	**28**	0.29 J
Vinyl chloride	**<1.9**	**0.4**	**NS**	**NS**	2.3 U	0.046 U	1.4 U	1.4 U	0.046 U	0.046 U

Table 1
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds in Sub-Slab/Soil Vapor

Client ID Lab Sample ID Date Sampled Dilution Analyte	EPA 2001 BASE 90th percentile Indoor µg/m^3	NYSDOH 2003 Soil Vapor Indoor Upper Fence µg/m^3	NYSDOH 2005 HEI RIOPA 95th Percentile Indoor µg/m^3	NYSDOH 2006 Soil Vapor Intrusion Air Guidance Value µg/m^3	SV-13 200-39823-9 8/23/2017 1	SV-14 200-39823-8 8/23/2017 1	SV-16 200-39823-10 8/23/2017 49.5	SV-17 200-39823-12 8/23/2017 48.1	SV-18 200-39823-11 8/23/2017 60.1
1,1,1-Trichloroethane	20.6	2.5	NS	NS	0.15 J	0.14 U	7 U	6.8 U	8.5 U
1,1-Dichloroethane	<0.7	0.4	NS	NS	0.069 U	0.069 U	**11 J**	**4.2 J**	4.1 U
1,1-Dichloroethene	<1.4	0.4	NS	NS	0.14 U	0.14 U	6.9 U	6.7 U	8.3 U
1,2,4-Trimethylbenzene	9.5	9.8	NS	NS	0.28 U	**41**	14 U	13 U	17 U
1,2-Dichlorobenzene	<1.2	0.5	NS	NS	0.27 U	0.27 U	13 U	13 U	16 U
1,2-Dichloroethane	<0.9	0.4	NS	NS	0.22 J	0.14 U	6.8 U	6.6 U	8.3 U
1,2-Dichloropropane	<1.6	0.4	NS	NS	0.16 U	0.16 U	8 U	7.8 U	9.7 U
1,3,5-Trimethylbenzene	3.7	3.9	NS	NS	0.2 U	**27**	9.7 U	9.5 U	12 U
1,3-Dichlorobenzene	<2.4	0.5	NS	NS	0.3 U	1.3	15 U	14 U	18 U
Benzene	9.4	13	10	NS	1.5	2.1	4.4 U	4.3 U	5.4 U
Carbon tetrachloride	<1.3	1.3	1.1	NS	0.58 J	0.4 J	3.4 U	3.3 U	4.2 U
Chlorobenzene	<0.9	0.4	NS	NS	0.12 U	0.12 U	5.7 U	5.5 U	6.9 U
Chloroethane	<1.1	0.4	NS	NS	0.34 U	0.34 U	17 U	17 U	21 U
Chloromethane	3.7	4.2	NS	NS	0.51 J	0.33 U	16 U	16 U	20 U
cis-1,2-Dichloroethene	<1.9	0.4	NS	NS	0.11 U	0.11 U	5.7 U	5.5 U	6.9 U
Ethylbenzene	5.7	6.4	7.62	NS	3.1	**9.9**	**9.3 J**	7.1 U	8.9 U
m,p-Xylene	22.2	11	22.2	NS	3.2	**23**	17 U	16 U	20 U
Methyl tert-butyl ether	11.5	14	36	NS	0.15 U	0.15 U	7.3 U	7.1 U	8.9 U
Methylene Chloride	10	16	7.5	60	0.24 U	0.27 J	12 U	11 U	14 U
Naphthalene	5.1	NS	NS	NS	0.52 U	1.7 J	26 U	25 U	32 U
o-Xylene	7.9	7.1	7.24	NS	0.55 J	**9**	8.6 U	8.4 U	10 U
Tetrachloroethene	15.9	2.5	6.01	30	0.74 J	1.6	3.3 U	3.2 U	4 U
Toluene	43	57	39.8	NS	1.7	12	9.9 J	6.3 U	17 J
trans-1,2-Dichloroethene	NS	NS	NS	NS	0.2 U	0.2 U	9.8 U	9.5 U	12 U
Trichloroethene	4.2	0.5	1.36	2	0.049 U	0.049 U	2.4 U	2.4 U	2.9 U
Vinyl chloride	<1.9	0.4	NS	NS	0.046 U	0.046 U	2.3 U	2.2 U	2.8 U

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-1(1-3') 460-138369-1 8/1/2017	SB-1(10-12') 460-138369-2 8/1/2017	SB-2(1-3') 460-138284-1 7/31/2017	SB-2(10-12') 460-138284-2 7/31/2017	SB-3(1-3') 460-138284-11 7/31/2017
1,1,1-Trichloroethane	0.68	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,1,2-Trichloroethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,1-Dichloroethane	0.27	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,1-Dichloroethene	0.33	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2,3-Trichlorobenzene	NS	20	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2,4-Trichlorobenzene	NS	3.4	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2,4-Trimethylbenzene	3.6	3.6	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2-Dichlorobenzene	1.1	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2-Dichloroethane	0.02	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,2-Dichloropropane	NS	700	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,3,5-Trimethylbenzene	8.4	8.4	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,3-Dichlorobenzene	2.4	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,4-Dichlorobenzene	1.8	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
1,4-Dioxane	0.1	NS	0.021 U	0.021 U	0.02 U	0.022 U	0.017 U
2-Butanone (MEK)	0.12	0.3	0.0051 U	0.0051 U	0.0051 U	0.0054 U	0.0043 U
2-Hexanone	NS	NS	0.0051 U	0.0051 U	0.0051 U	0.0054 U	0.0043 U
4-Isopropyltoluene	NS	10	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0051 U	0.0051 U	0.0051 U	0.0054 U	0.0043 U
Acetone	0.05	NS	0.0051 U	0.0051 U	0.0051 U	0.0054 U	0.0043 U
Benzene	0.06	0.06	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Bromoform	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Bromomethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Carbon disulfide	NS	2.7	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Carbon tetrachloride	0.76	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Chlorobenzene	1.1	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Chlorobromomethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Chlorodibromomethane	NS	10	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Chloroethane	NS	1.9	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Chloroform	0.37	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Chloromethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
cis-1,2-Dichloroethene	0.25	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
cis-1,3-Dichloropropene	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Cyclohexane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Dichlorobromomethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Dichlorodifluoromethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Ethylbenzene	1	1	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Ethylene Dibromide	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Isopropylbenzene	NS	2.3	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Methyl acetate	NS	NS	0.0051 U	0.0051 U *	0.0051 U	0.0054 U	0.0043 U
Methyl tert-butyl ether	0.93	0.93	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Methylcyclohexane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Methylene Chloride	0.05	NS	0.00075 J B	0.001 U	0.00059 J B	0.00047 J B	0.00087 U
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.001 U	0.00021 J	0.001 U	0.0011 U	0.00087 U
Naphthalene	12	12	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
n-Butylbenzene	12	12	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
N-Propylbenzene	3.9	3.9	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
o-Xylene	0.26 TS	0.26 TS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
sec-Butylbenzene	11	11	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Styrene	NS	300	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
tert-Butylbenzene	5.9	5.9	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Tetrachloroethene	1.3	2	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Toluene	0.7	0.7	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
trans-1,2-Dichloroethene	0.19	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
trans-1,3-Dichloropropene	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Trichloroethene	0.47	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Trichlorofluoromethane	NS	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Vinyl chloride	0.02	NS	0.001 U	0.001 U	0.001 U	0.0011 U	0.00087 U
Xylenes, Total	0.26	0.26	0.0021 U	0.0021 U	0.002 U	0.0022 U	0.0017 U
Total Conc	NS	NS	0.00075	0.00021	0.00059	0.00047	0

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-3(10-12') 460-138284-12 7/31/2017	SB-4(1-3') 460-138284-13 7/31/2017	SB-4(10-12') 460-138284-14 7/31/2017	SB-5(1-3') 460-138465-5 8/2/2017	SB-5(10-12') 460-138465-6 8/2/2017
1,1,1-Trichloroethane	0.68	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,1,2-Trichloroethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,1-Dichloroethane	0.27	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,1-Dichloroethene	0.33	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2,3-Trichlorobenzene	NS	20	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2,4-Trichlorobenzene	NS	3.4	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2,4-Trimethylbenzene	3.6	3.6	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2-Dichlorobenzene	1.1	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2-Dichloroethane	0.02	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,2-Dichloropropane	NS	700	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,3,5-Trimethylbenzene	8.4	8.4	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,3-Dichlorobenzene	2.4	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,4-Dichlorobenzene	1.8	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
1,4-Dioxane	0.1	NS	0.02 U	0.022 U	0.02 U	0.02 U	0.023 U
2-Butanone (MEK)	0.12	0.3	0.005 U	0.0056 U	0.0049 U	0.0049 U	0.0058 U
2-Hexanone	NS	NS	0.005 U	0.0056 U	0.0049 U	0.0049 U	0.0058 U
4-Isopropyltoluene	NS	10	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.005 U	0.0056 U	0.0049 U	0.0049 U	0.0058 U
Acetone	0.05	NS	0.005 U	0.0056 U	0.0049 U	0.0049 U	0.0058 U
Benzene	0.06	0.06	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Bromoform	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Bromomethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Carbon disulfide	NS	2.7	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Carbon tetrachloride	0.76	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U *	0.0012 U *
Chlorobenzene	1.1	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Chlorobromomethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Chlorodibromomethane	NS	10	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Chloroethane	NS	1.9	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Chloroform	0.37	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Chloromethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
cis-1,2-Dichloroethene	0.25	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
cis-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Cyclohexane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Dichlorobromomethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U *	0.0012 U *
Ethylbenzene	1	1	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Ethylene Dibromide	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Isopropylbenzene	NS	2.3	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Methyl acetate	NS	NS	0.005 U	0.0056 U	0.0049 U	0.0049 U	0.0058 U
Methyl tert-butyl ether	0.93	0.93	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Methylcyclohexane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U *	0.0012 U *
Methylene Chloride	0.05	NS	0.00054 J B	0.00073 J B	0.00057 J B	0.00098 U	0.00061 J B
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Naphthalene	12	12	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
n-Butylbenzene	12	12	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
N-Propylbenzene	3.9	3.9	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
o-Xylene	0.26 TS	0.26 TS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
sec-Butylbenzene	11	11	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Styrene	NS	300	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
tert-Butylbenzene	5.9	5.9	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Tetrachloroethene	1.3	2	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Toluene	0.7	0.7	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
trans-1,2-Dichloroethene	0.19	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
trans-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Trichloroethene	0.47	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Trichlorofluoromethane	NS	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Vinyl chloride	0.02	NS	0.001 U	0.0011 U	0.00099 U	0.00098 U	0.0012 U
Xylenes, Total	0.26	0.26	0.002 U	0.0022 U	0.002 U	0.002 U	0.0023 U
Total Conc	NS	NS	0.00054	0.00073	0.00057	0	0.00061

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-6(1-3') 460-138284-3 7/31/2017	SB-6(10-12') 460-138284-4 7/31/2017	SB-7(1-3') 460-138284-5 7/31/2017	SB-7(5-7') 460-138284-6 7/31/2017	SB-8(1-3') 460-138284-7 7/31/2017
1,1,1-Trichloroethane	0.68	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,1,2-Trichloroethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,1-Dichloroethane	0.27	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,1-Dichloroethene	0.33	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2,3-Trichlorobenzene	NS	20	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2,4-Trichlorobenzene	NS	3.4	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2,4-Trimethylbenzene	3.6	3.6	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2-Dichlorobenzene	1.1	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2-Dichloroethane	0.02	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,2-Dichloropropane	NS	700	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,3,5-Trimethylbenzene	8.4	8.4	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,3-Dichlorobenzene	2.4	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,4-Dichlorobenzene	1.8	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
1,4-Dioxane	0.1	NS	0.02 U	0.022 U	0.019 U	0.022 U	0.017 U
2-Butanone (MEK)	0.12	0.3	0.0051 U	0.0055 U	0.0048 U	0.0055 U	0.0043 U
2-Hexanone	NS	NS	0.0051 U	0.0055 U	0.0048 U	0.0055 U	0.0043 U
4-Isopropyltoluene	NS	10	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0051 U	0.0055 U	0.0048 U	0.0055 U	0.0043 U
Acetone	0.05	NS	0.0051 U	0.0055 U	0.0048 U	0.0055 U	0.0043 U
Benzene	0.06	0.06	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Bromoform	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Bromomethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Carbon disulfide	NS	2.7	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Carbon tetrachloride	0.76	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Chlorobenzene	1.1	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Chlorobromomethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Chlorodibromomethane	NS	10	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Chloroethane	NS	1.9	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Chloroform	0.37	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Chloromethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
cis-1,2-Dichloroethene	0.25	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
cis-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Cyclohexane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Dichlorobromomethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Dichlorodifluoromethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Ethylbenzene	1	1	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Ethylene Dibromide	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Isopropylbenzene	NS	2.3	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Methyl acetate	NS	NS	0.0051 U	0.0055 U	0.0048 U	0.0055 U	0.0043 U
Methyl tert-butyl ether	0.93	0.93	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Methylcyclohexane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Methylene Chloride	0.05	NS	0.001 U	0.00061 J B	0.00095 U	0.0011 U	0.00031 J B
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Naphthalene	12	12	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
n-Butylbenzene	12	12	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
N-Propylbenzene	3.9	3.9	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
o-Xylene	0.26 TS	0.26 TS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
sec-Butylbenzene	11	11	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Styrene	NS	300	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
tert-Butylbenzene	5.9	5.9	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Tetrachloroethene	1.3	2	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Toluene	0.7	0.7	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
trans-1,2-Dichloroethene	0.19	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
trans-1,3-Dichloropropene	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Trichloroethene	0.47	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Trichlorofluoromethane	NS	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Vinyl chloride	0.02	NS	0.001 U	0.0011 U	0.00095 U	0.0011 U	0.00086 U
Xylenes, Total	0.26	0.26	0.002 U	0.0022 U	0.0019 U	0.0022 U	0.0017 U
Total Conc	NS	NS	0	0.00061	0	0	0.00031

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-8(5-7') 460-138284-8 7/31/2017	SB-9(1-3') 460-138284-9 7/31/2017	SB-9(5-7') 460-138284-10 7/31/2017	SB-10(1-3') 460-138465-7 8/2/2017	SB-10(10-12') 460-138465-8 8/2/2017
1,1,1-Trichloroethane	0.68	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,1-Dichloroethane	0.27	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,1-Dichloroethene	0.33	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2,3-Trichlorobenzene	NS	20	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2,4-Trichlorobenzene	NS	3.4	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2,4-Trimethylbenzene	3.6	3.6	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2-Dichlorobenzene	1.1	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2-Dichloroethane	0.02	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,2-Dichloropropane	NS	700	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,3,5-Trimethylbenzene	8.4	8.4	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,3-Dichlorobenzene	2.4	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,4-Dichlorobenzene	1.8	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
1,4-Dioxane	0.1	NS	0.021 U	0.022 U	0.021 U	0.021 U	0.02 U
2-Butanone (MEK)	0.12	0.3	0.0053 U	0.0056 U	0.0053 U	0.0052 U	0.0049 U
2-Hexanone	NS	NS	0.0053 U	0.0056 U	0.0053 U	0.0052 U	0.0049 U
4-Isopropyltoluene	NS	10	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0053 U	0.0056 U	0.0053 U	0.0052 U	0.0049 U
Acetone	0.05	NS	0.0053 U	0.0056 U	0.0053 U	0.0052 U	0.0049 U
Benzene	0.06	0.06	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Bromoform	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Bromomethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Carbon disulfide	NS	2.7	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Carbon tetrachloride	0.76	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U *	0.00098 U *
Chlorobenzene	1.1	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Chlorobromomethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Chlorodibromomethane	NS	10	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Chloroethane	NS	1.9	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Chloroform	0.37	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Chloromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
cis-1,2-Dichloroethene	0.25	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Cyclohexane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Dichlorobromomethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U *	0.00098 U *
Ethylbenzene	1	1	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Ethylene Dibromide	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Isopropylbenzene	NS	2.3	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Methyl acetate	NS	NS	0.0053 U	0.0056 U	0.0053 U	0.0052 U	0.0049 U
Methyl tert-butyl ether	0.93	0.93	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Methylcyclohexane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U *	0.00098 U *
Methylene Chloride	0.05	NS	0.00045 J B	0.00084 J B	0.00053 J B	0.00037 J B	0.00034 J B
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Naphthalene	12	12	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
n-Butylbenzene	12	12	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
N-Propylbenzene	3.9	3.9	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
o-Xylene	0.26 TS	0.26 TS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
sec-Butylbenzene	11	11	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Styrene	NS	300	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
tert-Butylbenzene	5.9	5.9	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Tetrachloroethene	1.3	2	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Toluene	0.7	0.7	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
trans-1,2-Dichloroethene	0.19	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Trichloroethene	0.47	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Vinyl chloride	0.02	NS	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.00098 U
Xylenes, Total	0.26	0.26	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.002 U
Total Conc	NS	NS	0.00045	0.00084	0.00053	0.00037	0.00034

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-11(1-3') 460-138465-9 8/2/2017	SB-11(10-12') 460-138465-10 8/2/2017	SB-12(1-3') 460-138465-11 8/2/2017	SB-12(10-12') 460-138465-12 8/2/2017	SB-13(1-3') 460-138465-13 8/2/2017
1,1,1-Trichloroethane	0.68	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,1,2-Trichloroethane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,1-Dichloroethane	0.27	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,1-Dichloroethene	0.33	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2,3-Trichlorobenzene	NS	20	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2,4-Trichlorobenzene	NS	3.4	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2,4-Trimethylbenzene	3.6	3.6	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2-Dichlorobenzene	1.1	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2-Dichloroethane	0.02	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,2-Dichloropropane	NS	700	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,3,5-Trimethylbenzene	8.4	8.4	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,3-Dichlorobenzene	2.4	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,4-Dichlorobenzene	1.8	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
1,4-Dioxane	0.1	NS	0.018 U	0.024 U	0.019 U	0.018 U	0.02 U
2-Butanone (MEK)	0.12	0.3	0.0045 U	0.0061 U	0.0048 U	0.0045 U	0.005 U
2-Hexanone	NS	NS	0.0045 U	0.0061 U	0.0048 U	0.0045 U	0.005 U
4-Isopropyltoluene	NS	10	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0045 U	0.0061 U	0.0048 U	0.0045 U	0.005 U
Acetone	0.05	NS	0.0045 U	0.0061 U	0.0048 U	0.0041 J	0.005 U
Benzene	0.06	0.06	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Bromoform	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Bromomethane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Carbon disulfide	NS	2.7	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Carbon tetrachloride	0.76	NS	0.0009 U *	0.0012 U *	0.00095 U *	0.00091 U *	0.001 U *
Chlorobenzene	1.1	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Chlorobromomethane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Chlorodibromomethane	NS	10	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Chloroethane	NS	1.9	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Chloroform	0.37	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Chloromethane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
cis-1,2-Dichloroethene	0.25	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
cis-1,3-Dichloropropene	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Cyclohexane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Dichlorobromomethane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Dichlorodifluoromethane	NS	NS	0.0009 U *	0.0012 U *	0.00095 U *	0.00091 U *	0.001 U *
Ethylbenzene	1	1	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Ethylene Dibromide	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Isopropylbenzene	NS	2.3	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Methyl acetate	NS	NS	0.0045 U	0.0061 U	0.0048 U	0.0045 U	0.005 U
Methyl tert-butyl ether	0.93	0.93	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Methylcyclohexane	NS	NS	0.0009 U *	0.0012 U *	0.00095 U *	0.00091 U *	0.001 U *
Methylene Chloride	0.05	NS	0.00031 J B	0.0011 J B	0.00066 J B	0.00051 J B	0.00056 J B
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Naphthalene	12	12	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
n-Butylbenzene	12	12	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
N-Propylbenzene	3.9	3.9	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
o-Xylene	0.26 TS	0.26 TS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
sec-Butylbenzene	11	11	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Styrene	NS	300	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
tert-Butylbenzene	5.9	5.9	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Tetrachloroethene	1.3	2	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Toluene	0.7	0.7	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
trans-1,2-Dichloroethene	0.19	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
trans-1,3-Dichloropropene	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Trichloroethene	0.47	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Trichlorofluoromethane	NS	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Vinyl chloride	0.02	NS	0.0009 U	0.0012 U	0.00095 U	0.00091 U	0.001 U
Xylenes, Total	0.26	0.26	0.0018 U	0.0024 U	0.0019 U	0.0018 U	0.002 U
Total Conc	NS	NS	0.00031	0.0011	0.00066	0.00461	0.00056

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-13(10-12') 460-138465-14 8/2/2017	SB-14(1-3') 460-138369-3 8/1/2017	SB-14(10-12') 460-138369-4 8/1/2017	SB-15(1-3') 460-138369-5 8/1/2017	SB-15(10-12') 460-138369-6 8/1/2017
1,1,1-Trichloroethane	0.68	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,1-Dichloroethane	0.27	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,1-Dichloroethene	0.33	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2,3-Trichlorobenzene	NS	20	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2,4-Trichlorobenzene	NS	3.4	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2,4-Trimethylbenzene	3.6	3.6	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2-Dichlorobenzene	1.1	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2-Dichloroethane	0.02	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,2-Dichloropropane	NS	700	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,3,5-Trimethylbenzene	8.4	8.4	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,3-Dichlorobenzene	2.4	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,4-Dichlorobenzene	1.8	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
1,4-Dioxane	0.1	NS	0.023 U	0.022 U	0.023 U	0.022 U	0.018 U
2-Butanone (MEK)	0.12	0.3	0.0057 U	0.0054 U	0.0058 U	0.0054 U	0.0045 U
2-Hexanone	NS	NS	0.0057 U	0.0054 U	0.0058 U	0.0054 U	0.0045 U
4-Isopropyltoluene	NS	10	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0057 U	0.0054 U	0.0058 U	0.0054 U	0.0045 U
Acetone	0.05	NS	0.0057 U	0.0054 U	0.0078	0.011	0.0045 U
Benzene	0.06	0.06	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Bromoform	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Bromomethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Carbon disulfide	NS	2.7	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Carbon tetrachloride	0.76	NS	0.0011 U *	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Chlorobenzene	1.1	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Chlorobromomethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Chlorodibromomethane	NS	10	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Chloroethane	NS	1.9	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Chloroform	0.37	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Chloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
cis-1,2-Dichloroethene	0.25	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Cyclohexane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Dichlorobromomethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Dichlorodifluoromethane	NS	NS	0.0011 U *	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Ethylbenzene	1	1	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Ethylene Dibromide	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Isopropylbenzene	NS	2.3	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Methyl acetate	NS	NS	0.0057 U	0.0054 U *	0.0058 U *	0.0054 U *	0.0045 U *
Methyl tert-butyl ether	0.93	0.93	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Methylcyclohexane	NS	NS	0.0011 U *	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Methylene Chloride	0.05	NS	0.00062 J B	0.00066 J	0.00056 J B	0.00044 J B	0.0007 J
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.0011 U	0.00021 J	0.0012 U	0.00024 J B	0.00091 U
Naphthalene	12	12	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
n-Butylbenzene	12	12	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
N-Propylbenzene	3.9	3.9	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
o-Xylene	0.26 TS	0.26 TS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
sec-Butylbenzene	11	11	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Styrene	NS	300	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
tert-Butylbenzene	5.9	5.9	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Tetrachloroethene	1.3	2	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Toluene	0.7	0.7	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
trans-1,2-Dichloroethene	0.19	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Trichloroethene	0.47	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Vinyl chloride	0.02	NS	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.00091 U
Xylenes, Total	0.26	0.26	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0018 U
Total Conc	NS	NS	0.00062	0.00087	0.00836	0.01168	0.0007

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-16(1-3') 460-138369-7 8/1/2017	SB-16(10-12') 460-138369-8 8/1/2017	SB-17(1-3') 460-138369-9 8/1/2017	SB-17(10-12') 460-138369-10 8/1/2017	SB-18(0-2') 460-138465-1 8/2/2017
1,1,1-Trichloroethane	0.68	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,1-Dichloroethane	0.27	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,1-Dichloroethene	0.33	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2,3-Trichlorobenzene	NS	20	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2,4-Trichlorobenzene	NS	3.4	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2,4-Trimethylbenzene	3.6	3.6	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2-Dichlorobenzene	1.1	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2-Dichloroethane	0.02	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,2-Dichloropropane	NS	700	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,3,5-Trimethylbenzene	8.4	8.4	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,3-Dichlorobenzene	2.4	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,4-Dichlorobenzene	1.8	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
1,4-Dioxane	0.1	NS	0.021 U	0.021 U	0.023 U	0.02 U	0.028 U
2-Butanone (MEK)	0.12	0.3	0.0053 U	0.0052 U	0.0058 U	0.005 U	0.0069 U
2-Hexanone	NS	NS	0.0053 U	0.0052 U	0.0058 U	0.005 U	0.0069 U
4-Isopropyltoluene	NS	10	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0053 U	0.0052 U	0.0058 U	0.005 U	0.0069 U
Acetone	0.05	NS	0.0053 U	0.0052 U	0.0058 U	0.005 U	0.037
Benzene	0.06	0.06	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Bromoform	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Bromomethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Carbon disulfide	NS	2.7	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Carbon tetrachloride	0.76	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U *
Chlorobenzene	1.1	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Chlorobromomethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Chlorodibromomethane	NS	10	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Chloroethane	NS	1.9	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Chloroform	0.37	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Chloromethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
cis-1,2-Dichloroethene	0.25	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
cis-1,3-Dichloropropene	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Cyclohexane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Dichlorobromomethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Dichlorodifluoromethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U *
Ethylbenzene	1	1	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Ethylene Dibromide	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Isopropylbenzene	NS	2.3	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Methyl acetate	NS	NS	0.0053 U	0.0052 U *	0.0058 U	0.005 U	0.0069 U
Methyl tert-butyl ether	0.93	0.93	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Methylcyclohexane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U *
Methylene Chloride	0.05	NS	0.00051 J	0.00075 J B	0.0012 U	0.00071 J B	0.00057 J B
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.0011 U	0.00043 J B	0.0012 U	0.001 U	0.0014 U
Naphthalene	12	12	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
n-Butylbenzene	12	12	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
N-Propylbenzene	3.9	3.9	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
o-Xylene	0.26 TS	0.26 TS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
sec-Butylbenzene	11	11	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Styrene	NS	300	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
tert-Butylbenzene	5.9	5.9	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Tetrachloroethene	1.3	2	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Toluene	0.7	0.7	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
trans-1,2-Dichloroethene	0.19	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Trichloroethene	0.47	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Trichlorofluoromethane	NS	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Vinyl chloride	0.02	NS	0.0011 U	0.001 U	0.0012 U	0.001 U	0.0014 U
Xylenes, Total	0.26	0.26	0.0021 U	0.00043 J	0.0023 U	0.002 U	0.0028 U
Total Conc	NS	NS	0.00051	0.00161	0	0.00071	0.03757

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-18(3-5') 460-138465-2 8/2/2017	SB-19(0-2') 460-138465-3 8/2/2017	SB-19(3-5') 460-138465-4 8/2/2017	SB-ES1(0-2) 460-144928-1 11/11/2017	SB-ES1(8-10) 460-144928-2 11/11/2017
1,1,1-Trichloroethane	0.68	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.00098 U	0.0011 U	0.0015 U	0.0005 J B	0.0013 U
1,1,2-Trichloroethane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,1-Dichloroethane	0.27	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,1-Dichloroethene	0.33	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,2,3-Trichlorobenzene	NS	20	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,2,4-Trichlorobenzene	NS	3.4	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,2,4-Trimethylbenzene	3.6	3.6	0.00098 U	0.0011 U	0.0015 U	0.00016 J B	0.00013 J B
1,2-Dibromo-3-Chloropropane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,2-Dichlorobenzene	1.1	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,2-Dichloroethane	0.02	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,2-Dichloropropane	NS	700	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,3,5-Trimethylbenzene	8.4	8.4	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,3-Dichlorobenzene	2.4	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,4-Dichlorobenzene	1.8	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
1,4-Dioxane	0.1	NS	0.02 U	0.023 U	0.031 U	0.023 U	0.025 U
2-Butanone (MEK)	0.12	0.3	0.0049 U	0.0014 J	0.0077 U	0.0058 U	0.0063 U
2-Hexanone	NS	NS	0.0049 U	0.0057 U	0.0077 U	0.0058 U	0.0063 U
4-Isopropyltoluene	NS	10	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0049 U	0.0057 U	0.0077 U	0.0058 U	0.0063 U
Acetone	0.05	NS	0.0049 U	0.036	0.0077 U	0.0058 U	0.0063 U
Benzene	0.06	0.06	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Bromoform	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Bromomethane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Carbon disulfide	NS	2.7	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Carbon tetrachloride	0.76	NS	0.00098 U *	0.0011 U	0.0015 U *	0.0012 U	0.0013 U
Chlorobenzene	1.1	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Chlorobromomethane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Chlorodibromomethane	NS	10	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Chloroethane	NS	1.9	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Chloroform	0.37	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Chloromethane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
cis-1,2-Dichloroethene	0.25	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
cis-1,3-Dichloropropene	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Cyclohexane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Dichlorobromomethane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Dichlorodifluoromethane	NS	NS	0.00098 U *	0.0011 U	0.0015 U *	0.0012 U	0.0013 U
Ethylbenzene	1	1	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Ethylene Dibromide	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Isopropylbenzene	NS	2.3	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Methyl acetate	NS	NS	0.0049 U	0.0057 U	0.0077 U	0.0058 U	0.0063 U
Methyl tert-butyl ether	0.93	0.93	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Methylcyclohexane	NS	NS	0.00098 U *	0.0011 U	0.0015 U *	0.00028 J B	0.00025 J B
Methylene Chloride	0.05	NS	0.00037 J B	0.00062 J B	0.0015 U	0.0012 U	0.0013 U
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.00098 U	0.0011 U	0.0015 U	0.00059 J B	0.00058 J B
Naphthalene	12	12	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
n-Butylbenzene	12	12	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
N-Propylbenzene	3.9	3.9	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
o-Xylene	0.26 TS	0.26 TS	0.00098 U	0.0011 U	0.0015 U	0.00017 J B	0.00018 J B
sec-Butylbenzene	11	11	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Styrene	NS	300	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
tert-Butylbenzene	5.9	5.9	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Tetrachloroethene	1.3	2	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Toluene	0.7	0.7	0.00098 U	0.0011 U	0.0015 U	0.00091 J B	0.00084 J B
trans-1,2-Dichloroethene	0.19	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
trans-1,3-Dichloropropene	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Trichloroethene	0.47	NS	0.00098 U	0.0011 U	0.0015 U	0.00055 J B	0.00046 J B
Trichlorofluoromethane	NS	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Vinyl chloride	0.02	NS	0.00098 U	0.0011 U	0.0015 U	0.0012 U	0.0013 U
Xylenes, Total	0.26	0.26	0.002 U	0.0023 U	0.0031 U	0.00076 J B	0.00076 J B
Total Conc	NS	NS	0.00037	0.03802	0	0.00392	0.0032

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-ES2(0-2) 460-144928-3 11/11/2017	SB-ES2(8-10) 460-144928-4 11/11/2017	SB-ES3(0-2) 460-144928-5 11/11/2017	SB-ES3(8-10) 460-144928-6 11/11/2017	SB-GA1(0-2) 460-144928-7 11/11/2017
1,1,1-Trichloroethane	0.68	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.00094 U	0.001 U	0.0011 U	0.001 U	0.00044 J B
1,1,2-Trichloroethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,1-Dichloroethane	0.27	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,1-Dichloroethene	0.33	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,2,3-Trichlorobenzene	NS	20	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,2,4-Trichlorobenzene	NS	3.4	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,2,4-Trimethylbenzene	3.6	3.6	0.00011 J B	0.001 U	0.0011 U	0.00015 J B	0.0011 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,2-Dichlorobenzene	1.1	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,2-Dichloroethane	0.02	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,2-Dichloropropane	NS	700	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,3,5-Trimethylbenzene	8.4	8.4	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,3-Dichlorobenzene	2.4	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,4-Dichlorobenzene	1.8	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
1,4-Dioxane	0.1	NS	0.019 U	0.021 U	0.023 U	0.02 U	0.023 U
2-Butanone (MEK)	0.12	0.3	0.0047 U	0.0052 U	0.0057 U	0.005 U	0.0057 U
2-Hexanone	NS	NS	0.0047 U	0.0052 U	0.0057 U	0.005 U	0.0057 U
4-Isopropyltoluene	NS	10	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0047 U	0.0052 U	0.0057 U	0.005 U	0.0057 U
Acetone	0.05	NS	0.0047 U	0.0052 U	0.0057 U	0.005 U	0.0057 U
Benzene	0.06	0.06	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Bromoform	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Bromomethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Carbon disulfide	NS	2.7	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Carbon tetrachloride	0.76	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Chlorobenzene	1.1	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Chlorobromomethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Chlorodibromomethane	NS	10	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Chloroethane	NS	1.9	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Chloroform	0.37	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Chloromethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
cis-1,2-Dichloroethene	0.25	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
cis-1,3-Dichloropropene	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Cyclohexane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Dichlorobromomethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Dichlorodifluoromethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Ethylbenzene	1	1	0.00019 J B	0.001 U	0.0011 U	0.0042 B	0.0011 U
Ethylene Dibromide	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Isopropylbenzene	NS	2.3	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Methyl acetate	NS	NS	0.0047 U	0.0052 U	0.0057 U	0.005 U	0.0057 U
Methyl tert-butyl ether	0.93	0.93	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Methylcyclohexane	NS	NS	0.00094 U	0.00019 J B	0.00018 J B	0.00022 J B	0.00023 J B
Methylene Chloride	0.05	NS	0.00094 U	0.001 U	0.0011 U	0.00019 J	0.0011 U
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.00073 J B	0.00043 J B	0.00049 J B	0.019 B	0.00047 J B
Naphthalene	12	12	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
n-Butylbenzene	12	12	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
N-Propylbenzene	3.9	3.9	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
o-Xylene	0.26 TS	0.26 TS	0.00033 J B	0.00011 J B	0.00014 J B	0.012 B	0.00015 J B
sec-Butylbenzene	11	11	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Styrene	NS	300	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
tert-Butylbenzene	5.9	5.9	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Tetrachloroethene	1.3	2	0.00094 U	0.001 U	0.0011 U	0.00025 J	0.0011 U
Toluene	0.7	0.7	0.00094 U	0.00066 J B	0.0011 U	0.00073 J B	0.00077 J B
trans-1,2-Dichloroethene	0.19	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
trans-1,3-Dichloropropene	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Trichloroethene	0.47	NS	0.00027 J B	0.00039 J B	0.0004 J B	0.00044 J B	0.00042 J B
Trichlorofluoromethane	NS	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Vinyl chloride	0.02	NS	0.00094 U	0.001 U	0.0011 U	0.001 U	0.0011 U
Xylenes, Total	0.26	0.26	0.0011 J B	0.00053 J B	0.00063 J B	0.031 B	0.00062 J B
Total Conc	NS	NS	0.00273	0.00231	0.00184	0.06818	0.0031

Table 2
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-GA1(8-10) 460-144928-8 11/11/2017	SB-GA2(0-2) 460-144928-9 11/11/2017	SB-GA2(13-15) 460-144928-10 11/11/2017
1,1,1-Trichloroethane	0.68	NS	0.0013 U	0.0011 U	0.0012 U
1,1,2,2-Tetrachloroethane	NS	0.6	0.0013 U	0.0011 U	0.0012 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	6	0.0013 U	0.00043 J B	0.0012 U
1,1,2-Trichloroethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
1,1-Dichloroethane	0.27	NS	0.0013 U	0.0011 U	0.0012 U
1,1-Dichloroethene	0.33	NS	0.0013 U	0.0011 U	0.0012 U
1,2,3-Trichlorobenzene	NS	20	0.0013 U	0.0011 U	0.0012 U
1,2,4-Trichlorobenzene	NS	3.4	0.0013 U	0.0011 U	0.0012 U
1,2,4-Trimethylbenzene	3.6	3.6	0.0013 U	0.0011 U	0.0012 U
1,2-Dibromo-3-Chloropropane	NS	NS	0.0013 U	0.0011 U	0.0012 U
1,2-Dichlorobenzene	1.1	NS	0.0013 U	0.0011 U	0.0012 U
1,2-Dichloroethane	0.02	NS	0.0013 U	0.0011 U	0.0012 U
1,2-Dichloropropane	NS	700	0.0013 U	0.0011 U	0.0012 U
1,3,5-Trimethylbenzene	8.4	8.4	0.0013 U	0.0011 U	0.0012 U
1,3-Dichlorobenzene	2.4	NS	0.0013 U	0.0011 U	0.0012 U
1,4-Dichlorobenzene	1.8	NS	0.0013 U	0.0011 U	0.0012 U
1,4-Dioxane	0.1	NS	0.026 U	0.022 U	0.025 U
2-Butanone (MEK)	0.12	0.3	0.0065 U	0.0055 U	0.0062 U
2-Hexanone	NS	NS	0.0065 U	0.0055 U	0.0062 U
4-Isopropyltoluene	NS	10	0.0013 U	0.0011 U	0.0012 U
4-Methyl-2-pentanone (MIBK)	NS	1	0.0065 U	0.0055 U	0.0062 U
Acetone	0.05	NS	0.0065 U	0.0055 U	0.0062 U
Benzene	0.06	0.06	0.0013 U	0.0011 U	0.0012 U
Bromoform	NS	NS	0.0013 U	0.0011 U	0.0012 U
Bromomethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
Carbon disulfide	NS	2.7	0.0013 U	0.0011 U	0.0012 U
Carbon tetrachloride	0.76	NS	0.0013 U	0.0011 U	0.0012 U
Chlorobenzene	1.1	NS	0.0013 U	0.0011 U	0.0012 U
Chlorobromomethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
Chlorodibromomethane	NS	10	0.0013 U	0.0011 U	0.0012 U
Chloroethane	NS	1.9	0.0013 U	0.0011 U	0.0012 U
Chloroform	0.37	NS	0.0013 U	0.0011 U	0.0012 U
Chloromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
cis-1,2-Dichloroethene	0.25	NS	0.0013 U	0.0011 U	0.0012 U
cis-1,3-Dichloropropene	NS	NS	0.0013 U	0.0011 U	0.0012 U
Cyclohexane	NS	NS	0.0013 U	0.0011 U	0.0012 U
Dichlorobromomethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
Ethylbenzene	1	1	0.0013 U	0.0011 U	0.00025 J B
Ethylene Dibromide	NS	NS	0.0013 U	0.0011 U	0.0012 U
Isopropylbenzene	NS	2.3	0.0013 U	0.0011 U	0.0012 U
Methyl acetate	NS	NS	0.0065 U	0.0055 U	0.0062 U
Methyl tert-butyl ether	0.93	0.93	0.0013 U	0.0011 U	0.0012 U
Methylcyclohexane	NS	NS	0.00028 J B	0.00023 J B	0.00027 J B
Methylene Chloride	0.05	NS	0.00024 J	0.00022 J	0.0012 U
m-Xylene & p-Xylene	0.26 TS	0.26 TS	0.00059 J B	0.00047 J B	0.00069 J B
Naphthalene	12	12	0.0013 U	0.0011 U	0.0012 U
n-Butylbenzene	12	12	0.0013 U	0.0011 U	0.0012 U
N-Propylbenzene	3.9	3.9	0.0013 U	0.0011 U	0.0012 U
o-Xylene	0.26 TS	0.26 TS	0.00017 J B	0.00015 J B	0.00021 J B
sec-Butylbenzene	11	11	0.0013 U	0.0011 U	0.0012 U
Styrene	NS	300	0.0013 U	0.0011 U	0.0012 U
tert-Butylbenzene	5.9	5.9	0.0013 U	0.0011 U	0.0012 U
Tetrachloroethene	1.3	2	0.0013 U	0.0011 U	0.0012 U
Toluene	0.7	0.7	0.00084 J B	0.00081 J B	0.00088 J B
trans-1,2-Dichloroethene	0.19	NS	0.0013 U	0.0011 U	0.0012 U
trans-1,3-Dichloropropene	NS	NS	0.0013 U	0.0011 U	0.0012 U
Trichloroethene	0.47	NS	0.00045 J B	0.00051 J B	0.00051 J B
Trichlorofluoromethane	NS	NS	0.0013 U	0.0011 U	0.0012 U
Vinyl chloride	0.02	NS	0.0013 U	0.0011 U	0.0012 U
Xylenes, Total	0.26	0.26	0.00076 J B	0.00062 J B	0.0009 J B
Total Conc	NS	NS	0.00333	0.00344	0.00371

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-1(1-3') 460-138369-1 8/1/2017	SB-1(10-12') 460-138369-2 8/1/2017	SB-2(1-3') 460-138284-1 7/31/2017	SB-2(10-12') 460-138284-2 7/31/2017	SB-3(1-3') 460-138284-11 7/31/2017	SB-3(10-12') 460-138284-12 7/31/2017
1,1'-Biphenyl	NS	60	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2,4,5-Trichlorophenol	NS	0.1	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2,4,6-Trichlorophenol	NS	10	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	0.40	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2,4-Dinitrophenol	NS	0.2	0.28 U	0.29 U	0.28 U	0.27 U	0.31 U	0.29 U
2,4-Dinitrotoluene	NS	NS	0.07 U	0.072 U	0.07 U	0.069 U	0.077 U	0.074 U
2,6-Dinitrotoluene	NS	1	0.07 U	0.072 U	0.07 U	0.069 U	0.077 U	0.074 U
2-Chloronaphthalene	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2-Chlorophenol	NS	0.8	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2-Methylnaphthalene	NS	0.41	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2-Methylphenol	0.33	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2-Nitroaniline	NS	0.4	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
2-Nitrophenol	NS	0.3	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
3-Nitroaniline	NS	0.5	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4,6-Dinitro-2-methylphenol	NS	NS	0.28 U	0.29 U	0.28 U	0.27 U	0.31 U	0.29 U
4-Bromophenyl phenyl ether	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4-Chloro-3-methylphenol	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4-Chloroaniline	NS	0.22	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4-Chlorophenyl phenyl ether	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4-Methylphenol	0.33	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4-Nitroaniline	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
4-Nitrophenol	NS	0.1	0.7 U	0.72 U	0.7 U	0.69 U	0.77 U	0.74 U
Acenaphthene	20	20	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Acenaphthylene	100	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Acetophenone	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Anthracene	100	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Atrazine	NS	NS	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Benzo[a]anthracene	1	1	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Benzo[a]pyrene	1	1	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Benzo[b]fluoranthene	1	1	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Benzo[g,h,i]perylene	100	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Benzo[k]fluoranthene	0.8	0.8	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Bis(2-chloroethoxy)methane	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Bis(2-chloroethyl)ether	NS	NS	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Bis(2-ethylhexyl) phthalate	NS	50	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Butyl benzyl phthalate	NS	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Caprolactam	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Carbazole	NS	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Chrysene	1	1	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Dibenz(a,h)anthracene	0.33	0.33	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Dibenzofuran	7	6.2	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Diethyl phthalate	NS	7.1	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Dimethyl phthalate	NS	27	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Di-n-butyl phthalate	NS	0.014	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Di-n-octyl phthalate	NS	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Fluoranthene	100	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Fluorene	30	30	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Hexachlorobenzene	0.33	0.41	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Hexachlorobutadiene	NS	NS	0.07 U	0.072 U	0.07 U	0.069 U	0.077 U	0.074 U
Hexachlorocyclopentadiene	NS	10	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Hexachloroethane	NS	NS	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
Isophorone	NS	4.4	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U
Naphthalene	12	12	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Nitrobenzene	NS	0.17	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
N-Nitrosodi-n-propylamine	NS	NS	0.035 U	0.036 U	0.034 U	0.034 U	0.038 U	0.037 U
N-Nitrosodiphenylamine	NS	20	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Pentachlorophenol	0.8	NS	0.28 U	0.29 U	0.28 U	0.27 U	0.31 U	0.29 U
Phenanthrene	100	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Phenol	0.33	NS	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Pyrene	100	100	0.35 U	0.36 U	0.34 U	0.34 U	0.38 U	0.37 U
Total Conc	NS	NS	0	0	0	0	0	0

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-4(1-3') 460-138284-13 7/31/2017	SB-4(10-12') 460-138284-14 7/31/2017	SB-5(1-3') 460-138465-5 8/2/2017	SB-5(10-12') 460-138465-6 8/2/2017	SB-6(1-3') 460-138284-3 7/31/2017	SB-6(10-12') 460-138284-4 7/31/2017
1,1'-Biphenyl	NS	60	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2,4,5-Trichlorophenol	NS	0.1	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2,4,6-Trichlorophenol	NS	10	0.16 U	0.14 U	0.16 U	0.15 U	0.14 U	0.14 U
2,4-Dichlorophenol	NS	0.40	0.16 U	0.14 U	0.16 U	0.15 U	0.14 U	0.14 U
2,4-Dimethylphenol	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2,4-Dinitrophenol	NS	0.2	0.32 U	0.29 U	0.31 U	0.31 U	0.28 U	0.28 U
2,4-Dinitrotoluene	NS	NS	0.08 U	0.073 U	0.079 U	0.077 U	0.071 U	0.072 U
2,6-Dinitrotoluene	NS	1	0.08 U	0.073 U	0.079 U	0.077 U	0.071 U	0.072 U
2-Chloronaphthalene	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2-Chlorophenol	NS	0.8	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2-Methylnaphthalene	NS	0.41	0.4 U	0.36 U	0.021 J	0.38 U	0.35 U	0.35 U
2-Methylphenol	0.33	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2-Nitroaniline	NS	0.4	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
2-Nitrophenol	NS	0.3	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
3,3'-Dichlorobenzidine	NS	NS	0.16 U	0.14 U	0.16 U	0.15 U	0.14 U	0.14 U
3-Nitroaniline	NS	0.5	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4,6-Dinitro-2-methylphenol	NS	NS	0.32 U	0.29 U	0.31 U	0.31 U	0.28 U	0.28 U
4-Bromophenyl phenyl ether	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4-Chloro-3-methylphenol	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4-Chloroaniline	NS	0.22	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4-Chlorophenyl phenyl ether	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4-Methylphenol	0.33	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4-Nitroaniline	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
4-Nitrophenol	NS	0.1	0.8 U	0.73 U	0.79 U	0.77 U	0.71 U	0.72 U
Acenaphthene	20	20	0.4 U	0.36 U	0.39 U	0.021 J	0.35 U	0.35 U
Acenaphthylene	100	100	0.4 U	0.015 J	0.39 U	0.38 U	0.35 U	0.35 U
Acetophenone	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Anthracene	100	100	0.4 U	0.36 U	0.39 U	0.078 J	0.35 U	0.35 U
Atrazine	NS	NS	0.16 U	0.14 U	0.16 U	0.15 U	0.14 U	0.14 U
Benzaldehyde	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Benzo[a]anthracene	1	1	0.04 U	0.037	0.039 U	0.42	0.035 U	0.035 U
Benzo[a]pyrene	1	1	0.019 J	0.04	0.039 U	0.45	0.035 U	0.035 U
Benzo[b]fluoranthene	1	1	0.042	0.07	0.039 U	0.76	0.035 U	0.035 U
Benzo[g,h,i]perylene	100	100	0.4 U	0.031 J	0.39 U	0.21 J	0.35 U	0.35 U
Benzo[k]fluoranthene	0.8	0.8	0.018 J	0.036 U	0.039 U	0.3	0.035 U	0.035 U
Bis(2-chloroethoxy)methane	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Bis(2-chloroethyl)ether	NS	NS	0.04 U	0.036 U	0.039 U	0.038 U	0.035 U	0.035 U
Bis(2-ethylhexyl) phthalate	NS	50	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Butyl benzyl phthalate	NS	100	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Caprolactam	NS	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Carbazole	NS	NS	0.4 U	0.36 U	0.39 U	0.12 J	0.35 U	0.35 U
Chrysene	1	1	0.036 J	0.05 J	0.39 U	0.52	0.35 U	0.35 U
Dibenz(a,h)anthracene	0.33	0.33	0.04 U	0.036 U	0.039 U	0.038 U	0.035 U	0.035 U
Dibenzofuran	7	6.2	0.4 U	0.36 U	0.39 U	0.022 J	0.35 U	0.35 U
Diethyl phthalate	NS	7.1	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Dimethyl phthalate	NS	27	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Di-n-butyl phthalate	NS	0.014	0.4 U	0.015 J	0.39 U	0.38 U	0.35 U	0.35 U
Di-n-octyl phthalate	NS	100	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Fluoranthene	100	100	0.039 J	0.1 J	0.39 U	1.4	0.35 U	0.35 U
Fluorene	30	30	0.4 U	0.36 U	0.39 U	0.02 J	0.35 U	0.35 U
Hexachlorobenzene	0.33	0.41	0.04 U	0.036 U	0.039 U	0.038 U	0.035 U	0.035 U
Hexachlorobutadiene	NS	NS	0.08 U	0.073 U	0.079 U	0.077 U	0.071 U	0.072 U
Hexachlorocyclopentadiene	NS	10	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Hexachloroethane	NS	NS	0.04 U	0.036 U	0.039 U	0.038 U	0.035 U	0.035 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.04 U	0.032 J	0.039 U	0.33	0.035 U	0.035 U
Isophorone	NS	4.4	0.16 U	0.052 J	0.16 U	0.023 J	0.14 U	0.14 U
Naphthalene	12	12	0.4 U	0.36 U	0.036 J	0.38 U	0.35 U	0.35 U
Nitrobenzene	NS	0.17	0.04 U	0.036 U	0.039 U	0.038 U	0.035 U	0.035 U
N-Nitrosodi-n-propylamine	NS	NS	0.04 U	0.036 U	0.039 U	0.038 U	0.035 U	0.035 U
N-Nitrosodiphenylamine	NS	20	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Pentachlorophenol	0.8	NS	0.32 U	0.29 U	0.31 U	0.31 U	0.28 U	0.28 U
Phenanthrene	100	100	0.4 U	0.031 J	0.028 J	0.66	0.35 U	0.35 U
Phenol	0.33	NS	0.4 U	0.36 U	0.39 U	0.38 U	0.35 U	0.35 U
Pyrene	100	100	0.034 J	0.055 J	0.39 U	0.9	0.35 U	0.35 U
Total Conc	NS	NS	0.188	0.528	0.085	6.234	0	0

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-7(1-3') 460-138284-5 7/31/2017	SB-7(5-7') 460-138284-6 7/31/2017	SB-8(1-3') 460-138284-7 7/31/2017	SB-8(5-7') 460-138284-8 7/31/2017	SB-9(1-3') 460-138284-9 7/31/2017	SB-9(5-7') 460-138284-10 7/31/2017
1,1'-Biphenyl	NS	60	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2,4,5-Trichlorophenol	NS	0.1	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2,4,6-Trichlorophenol	NS	10	0.15 U	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U
2,4-Dichlorophenol	NS	0.40	0.15 U	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U
2,4-Dimethylphenol	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2,4-Dinitrophenol	NS	0.2	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
2,4-Dinitrotoluene	NS	NS	0.073 U	0.072 U	0.074 U	0.074 U	0.073 U	0.076 U
2,6-Dinitrotoluene	NS	1	0.073 U	0.072 U	0.074 U	0.074 U	0.073 U	0.076 U
2-Chloronaphthalene	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2-Chlorophenol	NS	0.8	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2-Methylnaphthalene	NS	0.41	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2-Methylphenol	0.33	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2-Nitroaniline	NS	0.4	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
2-Nitrophenol	NS	0.3	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
3,3'-Dichlorobenzidine	NS	NS	0.15 U	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U
3-Nitroaniline	NS	0.5	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4,6-Dinitro-2-methylphenol	NS	NS	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
4-Bromophenyl phenyl ether	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4-Chloro-3-methylphenol	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4-Chloroaniline	NS	0.22	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4-Chlorophenyl phenyl ether	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4-Methylphenol	0.33	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4-Nitroaniline	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
4-Nitrophenol	NS	0.1	0.73 U	0.72 U	0.74 U	0.74 U	0.73 U	0.76 U
Acenaphthene	20	20	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Acenaphthylene	100	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Acetophenone	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Anthracene	100	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Atrazine	NS	NS	0.15 U	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U
Benzaldehyde	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Benzo[a]anthracene	1	1	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Benzo[a]pyrene	1	1	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Benzo[b]fluoranthene	1	1	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Benzo[g,h,i]perylene	100	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Benzo[k]fluoranthene	0.8	0.8	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Bis(2-chloroethoxy)methane	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Bis(2-chloroethyl)ether	NS	NS	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Bis(2-ethylhexyl) phthalate	NS	50	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Butyl benzyl phthalate	NS	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Caprolactam	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Carbazole	NS	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Chrysene	1	1	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Dibenz(a,h)anthracene	0.33	0.33	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Dibenzofuran	7	6.2	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Diethyl phthalate	NS	7.1	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Dimethyl phthalate	NS	27	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Di-n-butyl phthalate	NS	0.014	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Di-n-octyl phthalate	NS	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Fluoranthene	100	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Fluorene	30	30	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Hexachlorobenzene	0.33	0.41	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Hexachlorobutadiene	NS	NS	0.073 U	0.072 U	0.074 U	0.074 U	0.073 U	0.076 U
Hexachlorocyclopentadiene	NS	10	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Hexachloroethane	NS	NS	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
Isophorone	NS	4.4	0.15 U	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U
Naphthalene	12	12	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Nitrobenzene	NS	0.17	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
N-Nitrosodi-n-propylamine	NS	NS	0.036 U	0.036 U	0.037 U	0.036 U	0.036 U	0.038 U
N-Nitrosodiphenylamine	NS	20	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Pentachlorophenol	0.8	NS	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.3 U
Phenanthrene	100	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Phenol	0.33	NS	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Pyrene	100	100	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.38 U
Total Conc	NS	NS	0	0	0	0	0	0

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-10(1-3') 460-138465-7 8/2/2017	SB-10(10-12') 460-138465-8 8/2/2017	SB-11(1-3') 460-138465-9 8/2/2017	SB-11(10-12') 460-138465-10 8/2/2017	SB-12(1-3') 460-138465-11 8/2/2017	SB-12(10-12') 460-138465-12 8/2/2017
1,1'-Biphenyl	NS	60	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2,4,5-Trichlorophenol	NS	0.1	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2,4,6-Trichlorophenol	NS	10	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	0.40	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2,4-Dinitrophenol	NS	0.2	0.29 U	0.3 U	0.29 U	0.28 U	0.29 U	0.3 U
2,4-Dinitrotoluene	NS	NS	0.073 U	0.075 U	0.073 U	0.072 U	0.074 U	0.077 U
2,6-Dinitrotoluene	NS	1	0.073 U	0.075 U	0.073 U	0.072 U	0.074 U	0.077 U
2-Chloronaphthalene	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2-Chlorophenol	NS	0.8	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2-Methylnaphthalene	NS	0.41	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2-Methylphenol	0.33	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2-Nitroaniline	NS	0.4	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
2-Nitrophenol	NS	0.3	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U
3-Nitroaniline	NS	0.5	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4,6-Dinitro-2-methylphenol	NS	NS	0.29 U	0.3 U	0.29 U	0.28 U	0.29 U	0.3 U
4-Bromophenyl phenyl ether	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4-Chloro-3-methylphenol	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4-Chloroaniline	NS	0.22	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4-Chlorophenyl phenyl ether	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4-Methylphenol	0.33	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4-Nitroaniline	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
4-Nitrophenol	NS	0.1	0.73 U	0.75 U	0.73 U	0.72 U	0.74 U	0.77 U
Acenaphthene	20	20	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Acenaphthylene	100	100	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Acetophenone	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Anthracene	100	100	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Atrazine	NS	NS	0.14 U	0.15 U	0.15 U	0.14 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Benzo[a]anthracene	1	1	0.036 U	0.037 U	0.042	0.035 U	0.092	0.038 U
Benzo[a]pyrene	1	1	0.036 U	0.022 J	0.034 J	0.035 U	0.1	0.038 U
Benzo[b]fluoranthene	1	1	0.036 U	0.033 J	0.051	0.035 U	0.16	0.038 U
Benzo[g,h,i]perylene	100	100	0.36 U	0.37 U	0.026 J	0.35 U	0.041 J	0.38 U
Benzo[k]fluoranthene	0.8	0.8	0.036 U	0.037 U	0.036 U	0.035 U	0.056	0.038 U
Bis(2-chloroethoxy)methane	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Bis(2-chloroethyl)ether	NS	NS	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U	0.038 U
Bis(2-ethylhexyl) phthalate	NS	50	0.36 U	0.016 J	0.029 J	0.35 U	0.082 J	0.38 U
Butyl benzyl phthalate	NS	100	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Caprolactam	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Carbazole	NS	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Chrysene	1	1	0.36 U	0.031 J	0.037 J	0.35 U	0.093 J	0.38 U
Dibenz(a,h)anthracene	0.33	0.33	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U	0.038 U
Dibenzofuran	7	6.2	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Diethyl phthalate	NS	7.1	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Dimethyl phthalate	NS	27	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Di-n-butyl phthalate	NS	0.014	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Di-n-octyl phthalate	NS	100	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Fluoranthene	100	100	0.36 U	0.05 J	0.065 J	0.35 U	0.17 J	0.38 U
Fluorene	30	30	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Hexachlorobenzene	0.33	0.41	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U	0.038 U
Hexachlorobutadiene	NS	NS	0.073 U	0.075 U	0.073 U	0.072 U	0.074 U	0.077 U
Hexachlorocyclopentadiene	NS	10	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Hexachloroethane	NS	NS	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U	0.038 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.036 U	0.037 U	0.036 U	0.035 U	0.1	0.038 U
Isophorone	NS	4.4	0.14 U	0.15 U	0.034 J	0.14 U	0.15 U	0.15 U
Naphthalene	12	12	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Nitrobenzene	NS	0.17	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U	0.038 U
N-Nitrosodi-n-propylamine	NS	NS	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U	0.038 U
N-Nitrosodiphenylamine	NS	20	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Pentachlorophenol	0.8	NS	0.29 U	0.3 U	0.29 U	0.28 U	0.29 U	0.3 U
Phenanthrene	100	100	0.36 U	0.025 J	0.035 J	0.35 U	0.082 J	0.38 U
Phenol	0.33	NS	0.36 U	0.37 U	0.36 U	0.35 U	0.36 U	0.38 U
Pyrene	100	100	0.36 U	0.044 J	0.065 J	0.35 U	0.14 J	0.38 U
Total Conc	NS	NS	0	0.221	0.418	0	1.116	0

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-13(1-3') 460-138465-13 8/2/2017	SB-13(10-12') 460-138465-14 8/2/2017	SB-14(1-3') 460-138369-3 8/1/2017	SB-14(10-12') 460-138369-4 8/1/2017	SB-15(1-3') 460-138369-5 8/1/2017	SB-15(10-12') 460-138369-6 8/1/2017
1,1'-Biphenyl	NS	60	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2,4,5-Trichlorophenol	NS	0.1	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2,4,6-Trichlorophenol	NS	10	0.14 U	0.14 U	0.15 U	0.17 U	0.15 U	0.14 U
2,4-Dichlorophenol	NS	0.40	0.14 U	0.14 U	0.15 U	0.17 U	0.15 U	0.14 U
2,4-Dimethylphenol	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2,4-Dinitrophenol	NS	0.2	0.28 U	0.28 U	0.3 U	0.34 U	0.3 U	0.28 U
2,4-Dinitrotoluene	NS	NS	0.071 U	0.07 U	0.076 U	0.086 U	0.075 U	0.07 U
2,6-Dinitrotoluene	NS	1	0.071 U	0.07 U	0.076 U	0.086 U	0.075 U	0.07 U
2-Chloronaphthalene	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2-Chlorophenol	NS	0.8	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2-Methylnaphthalene	NS	0.41	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2-Methylphenol	0.33	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2-Nitroaniline	NS	0.4	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
2-Nitrophenol	NS	0.3	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
3,3'-Dichlorobenzidine	NS	NS	0.14 U	0.14 U	0.15 U	0.17 U	0.15 U	0.14 U
3-Nitroaniline	NS	0.5	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4,6-Dinitro-2-methylphenol	NS	NS	0.28 U	0.28 U	0.3 U	0.34 U	0.3 U	0.28 U
4-Bromophenyl phenyl ether	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4-Chloro-3-methylphenol	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4-Chloroaniline	NS	0.22	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4-Chlorophenyl phenyl ether	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4-Methylphenol	0.33	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4-Nitroaniline	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
4-Nitrophenol	NS	0.1	0.71 U	0.7 U	0.76 U	0.86 U	0.75 U	0.7 U
Acenaphthene	20	20	0.35 U	0.34 U	0.37 U	0.42 U	0.061 J	0.34 U
Acenaphthylene	100	100	0.35 U	0.34 U	0.37 U	0.42 U	0.023 J	0.34 U
Acetophenone	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Anthracene	100	100	0.35 U	0.34 U	0.37 U	0.42 U	0.6	0.34 U
Atrazine	NS	NS	0.14 U	0.14 U	0.15 U	0.17 U	0.15 U	0.14 U
Benzaldehyde	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Benzo[a]anthracene	1	1	0.035 U	0.034 U	0.037 U	0.035 J	**2.5**	0.034 U
Benzo[a]pyrene	1	1	0.035 U	0.032 J	0.037 U	0.032 J	**1.8**	0.034 U
Benzo[b]fluoranthene	1	1	0.035 U	0.034 U	0.037 U	0.055	**3.1**	0.034 U
Benzo[g,h,i]perylene	100	100	0.35 U	0.34 U	0.37 U	0.42 U	0.89	0.34 U
Benzo[k]fluoranthene	0.8	0.8	0.035 U	0.042	0.037 U	0.022 J	**1.1**	0.034 U
Bis(2-chloroethoxy)methane	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Bis(2-chloroethyl)ether	NS	NS	0.035 U	0.034 U	0.037 U	0.042 U	0.037 U	0.034 U
Bis(2-ethylhexyl) phthalate	NS	50	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Butyl benzyl phthalate	NS	100	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Caprolactam	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Carbazole	NS	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.32 J	0.34 U
Chrysene	1	1	0.35 U	0.029 J	0.37 U	0.043 J	**2.2**	0.34 U
Dibenz(a,h)anthracene	0.33	0.33	0.035 U	0.034 U	0.037 U	0.042 U	0.28	0.034 U
Dibenzofuran	7	6.2	0.35 U	0.34 U	0.37 U	0.42 U	0.063 J	0.34 U
Diethyl phthalate	NS	7.1	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Dimethyl phthalate	NS	27	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Di-n-butyl phthalate	NS	0.014	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Di-n-octyl phthalate	NS	100	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Fluoranthene	100	100	0.35 U	0.037 J	0.37 U	0.069 J	6.1	0.34 U
Fluorene	30	30	0.35 U	0.34 U	0.37 U	0.42 U	0.13 J	0.34 U
Hexachlorobenzene	0.33	0.41	0.035 U	0.034 U	0.037 U	0.042 U	0.037 U	0.034 U
Hexachlorobutadiene	NS	NS	0.071 U	0.07 U	0.076 U	0.086 U	0.075 U	0.07 U
Hexachlorocyclopentadiene	NS	10	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Hexachloroethane	NS	NS	0.035 U	0.034 U	0.037 U	0.042 U	0.037 U	0.034 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.035 U	0.034 U	0.037 U	0.068	**1.4**	0.034 U
Isophorone	NS	4.4	0.14 U	0.14 U	0.15 U	0.17 U	0.15 U	0.14 U
Naphthalene	12	12	0.35 U	0.34 U	0.37 U	0.42 U	0.013 J	0.34 U
Nitrobenzene	NS	0.17	0.035 U	0.034 U	0.037 U	0.042 U	0.037 U	0.034 U
N-Nitrosodi-n-propylamine	NS	NS	0.035 U	0.034 U	0.037 U	0.042 U	0.037 U	0.034 U
N-Nitrosodiphenylamine	NS	20	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Pentachlorophenol	0.8	NS	0.28 U	0.28 U	0.3 U	0.34 U	0.3 U	0.28 U
Phenanthrene	100	100	0.35 U	0.017 J	0.37 U	0.032 J	3.2	0.34 U
Phenol	0.33	NS	0.35 U	0.34 U	0.37 U	0.42 U	0.37 U	0.34 U
Pyrene	100	100	0.35 U	0.028 J	0.37 U	0.058 J	5.6	0.34 U
Total Conc	NS	NS	0	0.185	0	0.414	29.38	0

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-16(1-3') 460-138369-7 8/1/2017	SB-16(10-12') 460-138369-8 8/1/2017	SB-17(1-3') 460-138369-9 8/1/2017	SB-17(10-12') 460-138369-10 8/1/2017	SB-18(0-2') 460-138465-1 8/2/2017	SB-18(3-5') 460-138465-2 8/2/2017
1,1'-Biphenyl	NS	60	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2,4,5-Trichlorophenol	NS	0.1	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2,4,6-Trichlorophenol	NS	10	0.15 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U
2,4-Dichlorophenol	NS	0.40	0.15 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U
2,4-Dimethylphenol	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2,4-Dinitrophenol	NS	0.2	0.3 U	0.28 U	0.29 U	0.29 U	0.3 U	0.31 U
2,4-Dinitrotoluene	NS	NS	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U	0.077 U
2,6-Dinitrotoluene	NS	1	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U	0.077 U
2-Chloronaphthalene	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2-Chlorophenol	NS	0.8	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2-Methylnaphthalene	NS	0.41	0.37 U	0.35 U	0.018 J	0.35 U	0.37 U	0.38 U
2-Methylphenol	0.33	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2-Nitroaniline	NS	0.4	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
2-Nitrophenol	NS	0.3	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
3,3'-Dichlorobenzidine	NS	NS	0.15 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U
3-Nitroaniline	NS	0.5	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4,6-Dinitro-2-methylphenol	NS	NS	0.3 U	0.28 U	0.29 U	0.29 U	0.3 U	0.31 U
4-Bromophenyl phenyl ether	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4-Chloro-3-methylphenol	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4-Chloroaniline	NS	0.22	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4-Chlorophenyl phenyl ether	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4-Methylphenol	0.33	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4-Nitroaniline	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
4-Nitrophenol	NS	0.1	0.76 U	0.72 U	0.74 U	0.72 U	0.76 U	0.77 U
Acenaphthene	20	20	0.37 U	0.35 U	0.36 U	0.35 U	0.02 J	0.38 U
Acenaphthylene	100	100	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Acetophenone	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.0095 J
Anthracene	100	100	0.37 U	0.35 U	0.36 U	0.35 U	0.04 J	0.38 U
Atrazine	NS	NS	0.15 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Benzo[a]anthracene	1	1	0.084	0.035 U	0.036 U	0.035 U	0.24	0.038 U
Benzo[a]pyrene	1	1	0.11	0.011 J	0.03 J	0.035 U	0.19	0.016 J
Benzo[b]fluoranthene	1	1	0.17	0.016 J	0.048	0.035 U	0.34	0.044
Benzo[g,h,i]perylene	100	100	0.062 J	0.35 U	0.03 J	0.35 U	0.23 J	0.38 U
Benzo[k]fluoranthene	0.8	0.8	0.068	0.035 U	0.036 U	0.035 U	0.17	0.038 U
Bis(2-chloroethoxy)methane	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Bis(2-chloroethyl)ether	NS	NS	0.037 U	0.035 U	0.036 U	0.035 U	0.037 U	0.038 U
Bis(2-ethylhexyl) phthalate	NS	50	0.37 U	0.35 U	0.36 U	0.35 U	0.08 J	0.38 U
Butyl benzyl phthalate	NS	100	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Caprolactam	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Carbazole	NS	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.029 J	0.38 U
Chrysene	1	1	0.12 J	0.017 J	0.042 J	0.35 U	0.33 J	0.039 J
Dibenz(a,h)anthracene	0.33	0.33	0.037 U	0.035 U	0.041	0.035 U	0.054	0.038 U
Dibenzofuran	7	6.2	0.37 U	0.35 U	0.36 U	0.35 U	0.011 J	0.38 U
Diethyl phthalate	NS	7.1	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Dimethyl phthalate	NS	27	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Di-n-butyl phthalate	NS	0.014	0.37 U	0.35 U	0.36 U	0.35 U	0.026 J	0.38 U
Di-n-octyl phthalate	NS	100	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Fluoranthene	100	100	0.13 J	0.029 J	0.042 J	0.35 U	0.52	0.082 J
Fluorene	30	30	0.37 U	0.35 U	0.36 U	0.35 U	0.024 J	0.38 U
Hexachlorobenzene	0.33	0.41	0.037 U	0.035 U	0.036 U	0.035 U	0.037 U	0.038 U
Hexachlorobutadiene	NS	NS	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U	0.077 U
Hexachlorocyclopentadiene	NS	10	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Hexachloroethane	NS	NS	0.037 U	0.035 U	0.036 U	0.035 U	0.037 U	0.038 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.13	0.035 U	0.066	0.035 U	0.22	0.038 U
Isophorone	NS	4.4	0.15 U	0.032 J	4.5	0.14 U	0.15 U	0.28
Naphthalene	12	12	0.37 U	0.35 U	0.016 J	0.35 U	0.37 U	0.38 U
Nitrobenzene	NS	0.17	0.037 U	0.035 U	0.036 U	0.035 U	0.037 U	0.038 U
N-Nitrosodi-n-propylamine	NS	NS	0.037 U	0.035 U	0.036 U	0.035 U	0.037 U	0.038 U
N-Nitrosodiphenylamine	NS	20	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Pentachlorophenol	0.8	NS	0.3 U	0.28 U	0.29 U	0.29 U	0.3 U	0.31 U
Phenanthrene	100	100	0.048 J	0.015 J	0.034 J	0.35 U	0.37	0.068 J
Phenol	0.33	NS	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.38 U
Pyrene	100	100	0.15 J	0.024 J	0.039 J	0.35 U	0.58	0.05 J
Total Conc	NS	NS	1.072	0.144	4.906	0	3.474	0.5885

Table 3
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-19(0-2') 460-138465-3 8/2/2017	SB-19(3-5') 460-138465-4 8/2/2017	SB-GA1(0-2) 460-144928-7 11/11/2017	SB-GA1(8-10) 460-144928-8 11/11/2017	SB-GA2(0-2) 460-144928-9 11/11/2017	SB-GA2(13-15) 460-144928-10 11/11/2017
1,1'-Biphenyl	NS	60	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
1,2,4,5-Tetrachlorobenzene	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2,2'-oxybis[1-chloropropane]	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2,4,5-Trichlorophenol	NS	0.1	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2,4,6-Trichlorophenol	NS	10	0.15 U	0.15 U	0.15 U	0.18 U	0.16 U	0.17 U
2,4-Dichlorophenol	NS	0.40	0.15 U	0.15 U	0.15 U	0.18 U	0.16 U	0.17 U
2,4-Dimethylphenol	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2,4-Dinitrophenol	NS	0.2	0.3 U	0.31 U	0.3 U	0.37 U	0.32 U	0.35 U
2,4-Dinitrotoluene	NS	NS	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
2,6-Dinitrotoluene	NS	1	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
2-Chloronaphthalene	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2-Chlorophenol	NS	0.8	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2-Methylnaphthalene	NS	0.41	0.37 U	0.0087 J	0.37 U	0.45 U	0.39 U	0.43 U
2-Methylphenol	0.33	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2-Nitroaniline	NS	0.4	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
2-Nitrophenol	NS	0.3	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
3,3'-Dichlorobenzidine	NS	NS	0.15 U	0.15 U	0.15 U	0.18 U	0.16 U	0.17 U
3-Nitroaniline	NS	0.5	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4,6-Dinitro-2-methylphenol	NS	NS	0.3 U	0.31 U	0.3 U	0.37 U	0.32 U	0.35 U
4-Bromophenyl phenyl ether	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4-Chloro-3-methylphenol	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4-Chloroaniline	NS	0.22	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4-Chlorophenyl phenyl ether	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4-Methylphenol	0.33	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4-Nitroaniline	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
4-Nitrophenol	NS	0.1	0.75 U	0.77 U	0.75 U	0.92 U	0.8 U	0.88 U
Acenaphthene	20	20	0.021 J	0.026 J	0.37 U	0.45 U	0.39 U	0.43 U
Acenaphthylene	100	100	0.02 J	0.023 J	0.37 U	0.45 U	0.39 U	0.43 U
Acetophenone	NS	NS	0.37 U	0.012 J	0.37 U	0.45 U	0.39 U	0.43 U
Anthracene	100	100	0.085 J	0.1 J	0.37 U	0.45 U	0.39 U	0.43 U
Atrazine	NS	NS	0.15 U	0.15 U	0.15 U	0.18 U	0.16 U	0.17 U
Benzaldehyde	NS	NS	0.37 U	0.04 J	0.37 U	0.45 U	0.39 U	0.43 U
Benzo[a]anthracene	1	1	0.51	0.64	0.037 U	0.045 U	0.039 U	0.043 U
Benzo[a]pyrene	1	1	0.59	0.72	0.037 U	0.045 U	0.039 U	0.043 U
Benzo[b]fluoranthene	1	1	1	1.2	0.037 U	0.045 U	0.039 U	0.043 U
Benzo[g,h,i]perylene	100	100	0.25 J	0.3 J	0.37 U	0.45 U	0.39 U	0.43 U
Benzo[k]fluoranthene	0.8	0.8	0.35	0.47	0.037 U	0.045 U	0.039 U	0.043 U
Bis(2-chloroethoxy)methane	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Bis(2-chloroethyl)ether	NS	NS	0.037 U	0.038 U	0.037 U	0.045 U	0.039 U	0.043 U
Bis(2-ethylhexyl) phthalate	NS	50	0.18 J	0.32 J	0.37 U	0.45 U	0.39 U	0.43 U
Butyl benzyl phthalate	NS	100	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Caprolactam	NS	NS	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Carbazole	NS	NS	0.043 J	0.048 J	0.37 U	0.45 U	0.39 U	0.43 U
Chrysene	1	1	0.61	0.75	0.37 U	0.016 J	0.39 U	0.43 U
Dibenz(a,h)anthracene	0.33	0.33	0.11	0.12	0.037 U	0.045 U	0.039 U	0.043 U
Dibenzofuran	7	6.2	0.012 J	0.015 J	0.37 U	0.45 U	0.39 U	0.43 U
Diethyl phthalate	NS	7.1	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Dimethyl phthalate	NS	27	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Di-n-butyl phthalate	NS	0.014	0.37 U	0.38 U	0.019 J	0.45 U	0.39 U	0.43 U
Di-n-octyl phthalate	NS	100	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Fluoranthene	100	100	1	1.2	0.37 U	0.028 J	0.39 U	0.43 U
Fluorene	30	30	0.026 J	0.03 J	0.37 U	0.45 U	0.39 U	0.43 U
Hexachlorobenzene	0.33	0.41	0.037 U	0.038 U	0.037 U	0.045 U	0.039 U	0.043 U
Hexachlorobutadiene	NS	NS	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Hexachlorocyclopentadiene	NS	10	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Hexachloroethane	NS	NS	0.037 U	0.038 U	0.037 U	0.045 U	0.039 U	0.043 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.43	0.49	0.037 U	0.045 U	0.039 U	0.043 U
Isophorone	NS	4.4	0.15 U	0.15 U	0.15 U	0.18 U	0.16 U	0.17 U
Naphthalene	12	12	0.017 J	0.014 J	0.37 U	0.45 U	0.39 U	0.43 U
Nitrobenzene	NS	0.17	0.037 U	0.038 U	0.037 U	0.045 U	0.039 U	0.043 U
N-Nitrosodi-n-propylamine	NS	NS	0.037 U	0.038 U	0.037 U	0.045 U	0.039 U	0.043 U
N-Nitrosodiphenylamine	NS	20	0.37 U	0.38 U	0.37 U	0.45 U	0.39 U	0.43 U
Pentachlorophenol	0.8	NS	0.3 U	0.31 U	0.3 U	0.37 U	0.32 U	0.35 U
Phenanthrene	100	100	0.41	0.46	0.37 U	0.02 J	0.39 U	0.43 U
Phenol	0.33	NS	0.028 J	0.067 J	0.37 U	0.45 U	0.39 U	0.43 U
Pyrene	100	100	0.71	0.81	0.37 U *	0.021 J *	0.39 U *	0.43 U *
Total Conc	NS	NS	6.402	7.8637	0.019	0.085	0	0

Table 4
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Polychlorinated Biphenyls (PCBs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-1(1-3') 460-138369-1 8/1/2017	SB-1(10-12') 460-138369-2 8/1/2017	SB-2(1-3') 460-138284-1 7/31/2017	SB-2(10-12') 460-138284-2 7/31/2017	SB-3(1-3') 460-138284-11 7/31/2017	SB-3(10-12') 460-138284-12 7/31/2017	SB-4(1-3') 460-138284-13 7/31/2017
Aroclor 1016	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1221	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1232	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1242	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1248	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1254	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1260	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1262	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Aroclor 1268	**NS**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
Polychlorinated biphenyls, Total	**0.1**	**NS**	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U

Table 4
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Polychlorinated Biphenyls (PCBs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-4(10-12') 460-138284-14 7/31/2017	SB-5(1-3') 460-138465-5 8/2/2017	SB-5(10-12') 460-138465-6 8/2/2017	SB-6(1-3') 460-138284-3 7/31/2017	SB-6(10-12') 460-138284-4 7/31/2017	SB-7(1-3') 460-138284-5 7/31/2017	SB-7(5-7') 460-138284-6 7/31/2017
Aroclor 1016	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1221	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1232	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1242	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1248	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1254	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1260	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1262	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Aroclor 1268	**NS**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
Polychlorinated biphenyls, Total	**0.1**	**NS**	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U

Table 4
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Polychlorinated Biphenyls (PCBs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-8(1-3') 460-138284-7 7/31/2017	SB-8(5-7') 460-138284-8 7/31/2017	SB-9(1-3') 460-138284-9 7/31/2017	SB-9(5-7') 460-138284-10 7/31/2017	SB-10(1-3') 460-138465-7 8/2/2017	SB-10(10-12') 460-138465-8 8/2/2017	SB-11(1-3') 460-138465-9 8/2/2017
Aroclor 1016	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1221	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1232	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1242	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1248	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1254	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1260	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1262	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Aroclor 1268	**NS**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
Polychlorinated biphenyls, Total	**0.1**	**NS**	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U

Table 4
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Polychlorinated Biphenyls (PCBs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-11(10-12') 460-138465-10 8/2/2017	SB-12(1-3') 460-138465-11 8/2/2017	SB-12(10-12') 460-138465-12 8/2/2017	SB-13(1-3') 460-138465-13 8/2/2017	SB-13(10-12') 460-138465-14 8/2/2017	SB-14(1-3') 460-138369-3 8/1/2017	SB-14(10-12') 460-138369-4 8/1/2017
Aroclor 1016	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1221	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1232	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1242	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1248	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1254	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1260	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1262	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Aroclor 1268	**NS**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
Polychlorinated biphenyls, Total	**0.1**	**NS**	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U

Table 4
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Polychlorinated Biphenyls (PCBs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-15(1-3') 460-138369-5 8/1/2017	SB-15(10-12') 460-138369-6 8/1/2017	SB-16(1-3') 460-138369-7 8/1/2017	SB-16(10-12') 460-138369-8 8/1/2017	SB-17(1-3') 460-138369-9 8/1/2017	SB-17(10-12') 460-138369-10 8/1/2017	SB-18(0-2') 460-138465-1 8/2/2017
Aroclor 1016	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1221	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1232	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1242	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1248	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1254	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1260	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1262	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Aroclor 1268	**NS**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
Polychlorinated biphenyls, Total	**0.1**	**NS**	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U

Table 4
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Polychlorinated Biphenyls (PCBs) in Soil

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-18(3-5') 460-138465-2 8/2/2017	SB-19(0-2') 460-138465-3 8/2/2017	SB-19(3-5') 460-138465-4 8/2/2017	SB-GA1(0-2) 460-144928-7 11/11/2017	SB-GA1(8-10) 460-144928-8 11/11/2017	SB-GA2(0-2) 460-144928-9 11/11/2017	SB-GA2(13-15) 460-144928-10 11/11/2017
Aroclor 1016	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1221	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1232	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1242	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1248	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1254	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1260	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.041 J	0.092 U	0.08 U	0.088 U
Aroclor 1262	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Aroclor 1268	**NS**	**NS**	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U
Polychlorinated biphenyls, Total	**0.1**	**NS**	0.077 U	0.075 U	0.077 U	0.041 J	0.092 U	0.08 U	0.088 U

Table 5
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Pesticides and Herbicides in Soil

Client ID Lab Sample ID Date Sampled Pesticides	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-1(1-3') 460-138369-1 8/1/2017	SB-1(10-12') 460-138369-2 8/1/2017	SB-2(1-3') 460-138284-1 7/31/2017	SB-2(10-12') 460-138284-2 7/31/2017	SB-3(1-3') 460-138284-11 7/31/2017	SB-3(10-12') 460-138284-12 7/31/2017	SB-4(1-3') 460-138284-13 7/31/2017
4,4'-DDD	0.0033	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
4,4'-DDE	0.0033	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
4,4'-DDT	0.0033	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Aldrin	0.005	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
alpha-BHC	0.02	NS	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0022 U	0.0024 U
beta-BHC	0.036	NS	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0022 U	0.0024 U
Chlordane (technical)	NS	NS	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U
delta-BHC	0.04	NS	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0022 U	0.0024 U
Dieldrin	0.005	NS	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0022 U	0.0024 U
Endosulfan I	2.4 TS	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Endosulfan II	2.4 TS	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Endosulfan sulfate	2.4 TS	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Endrin	0.014	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Endrin aldehyde	NS	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Endrin ketone	NS	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
gamma-BHC (Lindane)	0.1	NS	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0022 U	0.0024 U
Heptachlor	0.042	NS	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Heptachlor epoxide	NS	0.02	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Methoxychlor	NS	1.2	0.007 U	0.0073 U	0.007 U	0.0069 U	0.0077 U	0.0074 U	0.0081 U
Toxaphene	NS	NS	0.07 U	0.073 U	0.07 U	0.069 U	0.077 U	0.074 U	0.081 U

Herbicides	mg/kg	mg/kg							
2,4,5-T	NS	1.9	0.018 U	0.018 U	0.018 U	0.018 U	0.02 U	0.019 U	0.02 U
2,4-D	NS	0.5	0.018 U	0.018 U	0.018 U	0.018 U	0.02 U	0.019 U	0.02 U
Silvex (2,4,5-TP)	3.8	NS	0.018 U	0.018 U	0.018 U	0.018 U	0.02 U	0.019 U	0.02 U

Table 5
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Pesticides and Herbicides in Soil

Client ID Lab Sample ID Date Sampled Pesticides	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-4(10-12') 460-138284-14 7/31/2017	SB-5(1-3') 460-138465-5 8/2/2017	SB-5(10-12') 460-138465-6 8/2/2017	SB-6(1-3') 460-138284-3 7/31/2017	SB-6(10-12') 460-138284-4 7/31/2017	SB-7(1-3') 460-138284-5 7/31/2017	SB-7(5-7') 460-138284-6 7/31/2017
4,4'-DDD	0.0033	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
4,4'-DDE	0.0033	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
4,4'-DDT	0.0033	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Aldrin	0.005	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
alpha-BHC	0.02	NS	0.0022 U	0.0024 U	0.0023 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U
beta-BHC	0.036	NS	0.0022 U	0.0024 U	0.0023 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U
Chlordane (technical)	NS	NS	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U
delta-BHC	0.04	NS	0.0022 U	0.0024 U	0.0023 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U
Dieldrin	0.005	NS	0.0022 U	0.0024 U	0.0023 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U
Endosulfan I	2.4 TS	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Endosulfan II	2.4 TS	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Endosulfan sulfate	2.4 TS	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Endrin	0.014	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Endrin aldehyde	NS	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Endrin ketone	NS	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
gamma-BHC (Lindane)	0.1	NS	0.0022 U	0.0024 U	0.0023 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U
Heptachlor	0.042	NS	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Heptachlor epoxide	NS	0.02	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Methoxychlor	NS	1.2	0.0073 U	0.0079 U	0.0077 U	0.0072 U	0.0072 U	0.0073 U	0.0072 U
Toxaphene	NS	NS	0.073 U	0.079 U	0.077 U	0.072 U	0.072 U	0.073 U	0.072 U

Herbicides	mg/kg	mg/kg							
2,4,5-T	NS	1.9	0.019 U	0.019 U	0.018 U	0.018 U	0.018 U	0.019 U	0.018 U
2,4-D	NS	0.5	0.019 U	0.019 U	0.018 U	0.018 U	0.018 U	0.019 U	0.018 U
Silvex (2,4,5-TP)	3.8	NS	0.019 U	0.019 U	0.018 U	0.018 U	0.018 U	0.019 U	0.018 U

Table 5
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Pesticides and Herbicides in Soil

Client ID Lab Sample ID Date Sampled Pesticides	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-8(1-3') 460-138284-7 7/31/2017	SB-8(5-7') 460-138284-8 7/31/2017	SB-9(1-3') 460-138284-9 7/31/2017	SB-9(5-7') 460-138284-10 7/31/2017	SB-10(1-3') 460-138465-7 8/2/2017	SB-10(10-12') 460-138465-8 8/2/2017	SB-11(1-3') 460-138465-9 8/2/2017
4,4'-DDD	0.0033	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
4,4'-DDE	0.0033	NS	0.0074 U	0.0074 U	**0.0036 J**	0.0076 U	0.0073 U	0.0075 U	0.0073 U
4,4'-DDT	0.0033	NS	0.0074 U	0.0074 U	**0.0035 J**	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Aldrin	0.005	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
alpha-BHC	0.02	NS	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0022 U
beta-BHC	0.036	NS	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0022 U
Chlordane (technical)	NS	NS	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U
delta-BHC	0.04	NS	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0022 U
Dieldrin	0.005	NS	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0022 U
Endosulfan I	2.4 TS	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Endosulfan II	2.4 TS	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Endosulfan sulfate	2.4 TS	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Endrin	0.014	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Endrin aldehyde	NS	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Endrin ketone	NS	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
gamma-BHC (Lindane)	0.1	NS	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0022 U	0.0022 U	0.0022 U
Heptachlor	0.042	NS	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Heptachlor epoxide	NS	0.02	0.003 J	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0026 J
Methoxychlor	NS	1.2	0.0074 U	0.0074 U	0.0073 U	0.0076 U	0.0073 U	0.0075 U	0.0073 U
Toxaphene	NS	NS	0.074 U	0.074 U	0.073 U	0.076 U	0.073 U	0.075 U	0.073 U

Herbicides	mg/kg	mg/kg							
2,4,5-T	NS	1.9	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.018 U	0.019 U
2,4-D	NS	0.5	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.018 U	0.019 U
Silvex (2,4,5-TP)	3.8	NS	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.018 U	0.019 U

Table 5
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Pesticides and Herbicides in Soil

Client ID Lab Sample ID Date Sampled Pesticides	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-11(10-12') 460-138465-10 8/2/2017	SB-12(1-3') 460-138465-11 8/2/2017	SB-12(10-12') 460-138465-12 8/2/2017	SB-13(1-3') 460-138465-13 8/2/2017	SB-13(10-12') 460-138465-14 8/2/2017	SB-14(1-3') 460-138369-3 8/1/2017	SB-14(10-12') 460-138369-4 8/1/2017
4,4'-DDD	0.0033	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
4,4'-DDE	0.0033	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
4,4'-DDT	0.0033	NS	0.0071 U	**0.024**	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Aldrin	0.005	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
alpha-BHC	0.02	NS	0.0021 U	0.0022 U	0.0023 U	0.0021 U	0.0021 U	0.0023 U	0.0026 U
beta-BHC	0.036	NS	0.0021 U	0.0022 U	0.0023 U	0.0021 U	0.0021 U	0.0023 U	0.0026 U
Chlordane (technical)	NS	NS	0.071 U	0.22	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U
delta-BHC	0.04	NS	0.0021 U	0.0022 U	0.0023 U	0.0021 U	0.0021 U	0.0023 U	0.0026 U
Dieldrin	0.005	NS	0.0021 U	0.0022 U	0.0023 U	0.0021 U	0.0021 U	0.0023 U	0.0026 U
Endosulfan I	2.4 TS	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Endosulfan II	2.4 TS	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Endosulfan sulfate	2.4 TS	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Endrin	0.014	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Endrin aldehyde	NS	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Endrin ketone	NS	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
gamma-BHC (Lindane)	0.1	NS	0.0021 U	0.0022 U	0.0023 U	0.0021 U	0.0021 U	0.0023 U	0.0026 U
Heptachlor	0.042	NS	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Heptachlor epoxide	NS	0.02	0.0071 U	0.0085	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Methoxychlor	NS	1.2	0.0071 U	0.0074 U	0.0077 U	0.0071 U	0.007 U	0.0076 U	0.0086 U
Toxaphene	NS	NS	0.071 U	0.074 U	0.077 U	0.071 U	0.07 U	0.076 U	0.086 U

Herbicides	mg/kg	mg/kg							
2,4,5-T	NS	1.9	0.018 U	0.019 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
2,4-D	NS	0.5	0.018 U	0.019 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Silvex (2,4,5-TP)	3.8	NS	0.018 U	0.019 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U

Table 5
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Pesticides and Herbicides in Soil

Client ID Lab Sample ID Date Sampled Pesticides	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-15(1-3') 460-138369-5 8/1/2017	SB-15(10-12') 460-138369-6 8/1/2017	SB-16(1-3') 460-138369-7 8/1/2017	SB-16(10-12') 460-138369-8 8/1/2017	SB-17(1-3') 460-138369-9 8/1/2017	SB-17(10-12') 460-138369-10 8/1/2017	SB-18(0-2') 460-138465-1 8/2/2017
4,4'-DDD	0.0033	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
4,4'-DDE	0.0033	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0021 J	0.0072 U	**0.0058 J**
4,4'-DDT	0.0033	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	**0.0073 J**
Aldrin	0.005	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
alpha-BHC	0.02	NS	0.0022 U	0.0021 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
beta-BHC	0.036	NS	0.0022 U	0.0021 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
Chlordane (technical)	NS	NS	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U
delta-BHC	0.04	NS	0.0022 U	0.0021 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
Dieldrin	0.005	NS	0.0022 U	0.0021 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
Endosulfan I	2.4 TS	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Endosulfan II	2.4 TS	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Endosulfan sulfate	2.4 TS	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Endrin	0.014	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Endrin aldehyde	NS	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Endrin ketone	NS	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
gamma-BHC (Lindane)	0.1	NS	0.0022 U	0.0021 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U
Heptachlor	0.042	NS	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Heptachlor epoxide	NS	0.02	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Methoxychlor	NS	1.2	0.0075 U	0.007 U	0.0076 U	0.0072 U	0.0074 U	0.0072 U	0.0076 U
Toxaphene	NS	NS	0.075 U	0.07 U	0.076 U	0.072 U	0.074 U	0.072 U	0.076 U

Herbicides	mg/kg	mg/kg							
2,4,5-T	NS	1.9	0.018 U	0.019 U	0.019 U	0.018 U	0.019 U	0.019 U	0.018 U
2,4-D	NS	0.5	0.018 U	0.019 U	0.019 U	0.018 U	0.019 U	0.019 U	0.018 U
Silvex (2,4,5-TP)	3.8	NS	0.018 U	0.019 U	0.019 U	0.018 U	0.019 U	0.019 U	0.018 U

Table 5
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Pesticides and Herbicides in Soil

Client ID Lab Sample ID Date Sampled Pesticides	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-18(3-5') 460-138465-2 8/2/2017	SB-19(0-2') 460-138465-3 8/2/2017	SB-19(3-5') 460-138465-4 8/2/2017	SB-GA1(0-2) 460-144928-7 11/11/2017	SB-GA1(8-10) 460-144928-8 11/11/2017	SB-GA2(0-2) 460-144928-9 11/11/2017	SB-GA2(13-15) 460-144928-10 11/11/2017
4,4'-DDD	0.0033	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
4,4'-DDE	0.0033	NS	0.0077 U	**0.0069 J**	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
4,4'-DDT	0.0033	NS	0.0027 J	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Aldrin	0.005	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
alpha-BHC	0.02	NS	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0028 U	0.0024 U	0.0026 U
beta-BHC	0.036	NS	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0028 U	0.0024 U	0.0026 U
Chlordane (technical)	NS	NS	0.077 U	0.13	0.21	0.075 U	0.092 U	0.08 U	0.088 U
delta-BHC	0.04	NS	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0028 U	0.0024 U	0.0026 U
Dieldrin	0.005	NS	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0028 U	0.0024 U	0.0026 U
Endosulfan I	2.4 TS	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Endosulfan II	2.4 TS	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Endosulfan sulfate	2.4 TS	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Endrin	0.014	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Endrin aldehyde	NS	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Endrin ketone	NS	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
gamma-BHC (Lindane)	0.1	NS	0.0023 U	0.0022 U	0.0023 U	0.0022 U	0.0028 U	0.0024 U	0.0026 U
Heptachlor	0.042	NS	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Heptachlor epoxide	NS	0.02	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Methoxychlor	NS	1.2	0.0077 U	0.0075 U	0.0077 U	0.0075 U	0.0092 U	0.008 U	0.0088 U
Toxaphene	NS	NS	0.077 U	0.075 U	0.077 U	0.075 U	0.092 U	0.08 U	0.088 U

Herbicides	mg/kg	mg/kg							
2,4,5-T	NS	1.9	0.018 U	0.019 U	0.022 U	0.019 U	0.023 U	0.02 U	0.022 U
2,4-D	NS	0.5	0.018 U	0.019 U	0.022 U	0.019 U	0.023 U	0.02 U	0.022 U
Silvex (2,4,5-TP)	3.8	NS	0.018 U	0.019 U	0.022 U	0.019 U	0.023 U	0.02 U	0.022 U

Table 6
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Metals in Soil

Client ID Lab Sample ID Date Sampled Dilution Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-1(1-3') 460-138369-1 8/1/2017 1/4 †	SB-1(10-12') 460-138369-2 8/1/2017 1/4 †	SB-2(1-3') 460-138284-1 7/31/2017 1/4 †	SB-2(10-12') 460-138284-2 7/31/2017 1/4 †	SB-3(1-3') 460-138284-11 7/31/2017 1/4 †	SB-3(10-12') 460-138284-12 7/31/2017 1/4 †	SB-4(1-3') 460-138284-13 7/31/2017 1/4 †	SB-4(10-12') 460-138284-14 7/31/2017 1/4 †
Antimony	**NS**	**12**	4 U	4.2 U	3.9 U	4 U	4.4 U	4.1 U	4.8 U	4.2 U
Arsenic	**13**	**NS**	1.7 J	3.1	1.3 J	3 U	6.3	6	5.8	3.4
Barium	**350**	**NS**	25.6 J	59	17 J	23.1 J	57.4	78.2	75.7	44.5
Beryllium	**7.2**	**NS**	0.27 J	0.51	0.2 J	0.19 J	0.52	0.7	0.55	0.42
Cadmium	**2.5**	**NS**	0.79 U	0.83 U	0.79 U	0.79 U	0.89 U	0.82 U	0.96 U	0.85 U
Chromium	**30*** **	**NS**	14.7	23.2	10	8.6	29.7	28.4	18.5	17.6
Cobalt	**NS**	**20**	8.4 J	7.9 J	4.9 J	4.9 J	8.6 J	13	6.4 J	8.4 J
Copper	**50**	**NS**	15.7	33.4	9.1	9.3	43.3	**57**	31.8	**131**
Lead	**63**	**NS**	8.8	13.8	3.4	2.4	16.1	13.6	**63.2**	14
Lead (TCLP)**	**NA**	**NA**	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	**1,600**	**NS**	171	460	195	229	377	630	287	563
Mercury	**0.18**	**NS**	0.02	0.017 U	0.017 U	0.017 U	0.019 U	0.018 U	0.038	0.018 U
Nickel	**30**	**NS**	**47.2**	**38.6**	**45.4**	**61.4**	**65.1**	**58**	26.9	26.8
Selenium	**3.9**	**NS**	4 U	4.2 U	3.9 U	4 U	4.4 U	4.1 U	4.8 U	4.2 U
Silver	**2**	**NS**	2 U	2.1 U	2 U	2 U	2.2 U	2 U	2.4 U	2.1 U
Thallium	**NS**	**5**	4 U	4.2 U	3.9 U	4 U	4.4 U	4.1 U	4.8 U	4.2 U
Vanadium	**NS**	**39**	17.7	26.2	13	11.8	43.2	42.3	19.3	25.5
Zinc	**109**	**NS**	27.8	46.8	15.4	17.1	52.5	64.2	77.3	32.9

† Dilution factor varies

**** mg/L**

Table 6
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Metals in Soil

Client ID Lab Sample ID Date Sampled Dilution Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-5(1-3') 460-138465-5 8/2/2017 1/4 †	SB-5(10-12') 460-138465-6 8/2/2017 1/4 †	SB-6(1-3') 460-138284-3 7/31/2017 1/4 †	SB-6(10-12') 460-138284-4 7/31/2017 1/4 †	SB-7(1-3') 460-138284-5 7/31/2017 1/4 †	SB-7(5-7') 460-138284-6 7/31/2017 1/4 †	SB-8(1-3') 460-138284-7 7/31/2017 1/4 †	SB-8(5-7') 460-138284-8 7/31/2017 1/4 †
Antimony	**NS**	**12**	3.6 U	3.7 U	4 U	4.1 U	4 U	4.1 U	4.2 U	4.2 U
Arsenic	**13**	**NS**	5.9	4.8	6.4	0.79 J	1.8 J	2.5 J	0.98 J	2.4 J
Barium	**350**	**NS**	81.9	40.4	39.5 J	15 J	34.3 J	35.2 J	59.2	44.2
Beryllium	**7.2**	**NS**	0.48	0.67	0.26 J	0.16 J	0.26 J	0.37 J	0.42	0.35 J
Cadmium	**2.5**	**NS**	0.72 U	0.73 U	0.8 U	0.83 U	0.81 U	0.82 U	0.83 U	0.84 U
Chromium	**30*** **	**NS**	17	19.4	11.9	8	12.3	11.1	12.2	17.1
Cobalt	**NS**	**20**	8.1 J	5.5 J	5.6 J	3.7 J	6.1 J	5.6 J	6.6 J	7.7 J
Copper	**50**	**NS**	49.9	42.2	17.7	9.3	22.6	10.9	10.4	14.3
Lead	**63**	**NS**	**87.7**	8.3	27.9	2.7	22.3	11.1	13.9	**71.8**
Lead (TCLP)**	**NA**	**NA**	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	**1,600**	**NS**	444	234	202	151	211	272	544	298
Mercury	**0.18**	**NS**	0.015 J	0.019 U	0.024	0.017 U	0.018	0.022	0.024	0.042
Nickel	**30**	**NS**	**37.2**	24.9	**37.9**	**37**	**47.7**	27.8	**42.5**	**59.6**
Selenium	**3.9**	**NS**	3.6 U	3.7 U	4 U	4.1 U	4 U	4.1 U	4.2 U	4.2 U
Silver	**2**	**NS**	1.8 U	1.8 U	2 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U
Thallium	**NS**	**5**	3.6 U	3.7 U	4 U	4.1 U	4 U	4.1 U	4.2 U	4.2 U
Vanadium	**NS**	**39**	23.9	23	13.8	10.3	15.1	14.3	15.8	16.9
Zinc	**109**	**NS**	**113**	33	30.9	15	34.9	29.4	28	49.4

† Dilution factor varies

**** mg/L**

Table 6
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Metals in Soil

Client ID Lab Sample ID Date Sampled Dilution Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-9(1-3') 460-138284-9 7/31/2017 1/4 †	SB-9(5-7') 460-138284-10 7/31/2017 1/4 †	SB-10(1-3') 460-138465-7 8/2/2017 1/4 †	SB-10(10-12') 460-138465-8 8/2/2017 1/4 †	SB-11(1-3') 460-138465-9 8/2/2017 1/4 †	SB-11(10-12') 460-138465-10 8/2/2017 1/4 †	SB-12(1-3') 460-138465-11 8/2/2017 1/4 †	SB-12(10-12') 460-138465-12 8/2/2017 1/4 †
Antimony	**NS**	**12**	4.4 U	4.2 U	3.6 U	3.4 U	3.4 U	3.3 U	3.3 U	3.4 U
Arsenic	**13**	**NS**	2.6 J	1.5 J	1.7 J	3	2.5 J	0.78 J	2 J	2.7
Barium	**350**	**NS**	24.5 J	55.6	35.6	43	46.6	18.4 J	33.5	32.2 J
Beryllium	**7.2**	**NS**	0.31 J	0.46	0.33 J	0.36	0.36	0.22 J	0.31 J	0.47
Cadmium	**2.5**	**NS**	0.87 U	0.84 U	0.71 U	0.67 U	0.68 U	0.65 U	0.66 U	0.69 U
Chromium	**30*** **	**NS**	12.8	12.4	13.1	14.7	16.3	13.4	13	20.2
Cobalt	**NS**	**20**	7 J	4.7 J	11.9	6.9 J	7.2 J	4.6 J	6.5 J	8.4 J
Copper	**50**	**NS**	8.2	7.4	12.1	21	22.8	10.5	21.7	11
Lead	**63**	**NS**	5.9	9.4	14.7	**64**	**104**	4.2	23.4	7
Lead (TCLP)**	**NA**	**NA**	NA	NA	NA	NA	0.033 J	NA	NA	NA
Manganese	**1,600**	**NS**	240	294	373	273	236	197	267	264
Mercury	**0.18**	**NS**	0.018 U	0.013 J	0.018 U	0.048	0.073	0.018 U	0.049	0.018 U
Nickel	**30**	**NS**	**61.7**	**38.4**	**67.9**	**53.6**	**62.3**	**34.3**	**52.5**	**43.9**
Selenium	**3.9**	**NS**	4.4 U	4.2 U	3.6 U	3.4 U	1 J	3.3 U	1.1 J	3.4 U
Silver	**2**	**NS**	2.2 U	2.1 U	1.8 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U
Thallium	**NS**	**5**	4.4 U	4.2 U	3.6 U	3.4 U	3.4 U	3.3 U	3.3 U	3.4 U
Vanadium	**NS**	**39**	11.7	15.4	13.1	17.8	17.8	13.2	14.9	26.9
Zinc	**109**	**NS**	24.1	25	26.7	51.5	48.2	17.9	36.4	32.9

† Dilution factor varies

**** mg/L**

Table 6
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Metals in Soil

Client ID Lab Sample ID Date Sampled Dilution Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-13(1-3') 460-138465-13 8/2/2017 1/4 †	SB-13(10-12') 460-138465-14 8/2/2017 1/4 †	SB-14(1-3') 460-138369-3 8/1/2017 1/4 †	SB-14(10-12') 460-138369-4 8/1/2017 1/4 †	SB-15(1-3') 460-138369-5 8/1/2017 1/4 †	SB-15(10-12') 460-138369-6 8/1/2017 1/4 †	SB-16(1-3') 460-138369-7 8/1/2017 1/4 †	SB-16(10-12') 460-138369-8 8/1/2017 1/4 †
Antimony	**NS**	**12**	3.2 U	3.2 U	4.5 U	4.9 U	4.1 U	4.1 U	4.2 U	4 U
Arsenic	**13**	**NS**	1.7 J	1.1 J	3 J	3 J	2.8 J	1.4 J	**83.5**	2.4 J
Barium	**350**	**NS**	22.5 J	19.1 J	59.2	38.4 J	35.1 J	8.9 J	208	20.9 J
Beryllium	**7.2**	**NS**	0.37	0.17 J	0.57	0.52	0.27 J	0.21 J	0.39 J	0.37 J
Cadmium	**2.5**	**NS**	0.63 U	0.63 U	0.9 U	0.98 U	0.83 U	0.81 U	0.26 J	0.81 U
Chromium	**30*** **	**NS**	9.7	8.7	13.1	25.2	11.8	8.5	14.4	14.1
Cobalt	**NS**	**20**	6.1 J	4.4 J	5.4 J	14.7	5.5 J	4.4 J	5.1 J	5.7 J
Copper	**50**	**NS**	12.3	9.1	18.4	12.1	19.8	5.8	49.9	7.2
Lead	**63**	**NS**	5	2.2	34.8	6.5	47.6	2.2	**963**	4.8
Lead (TCLP)**	**NA**	**NA**	NA	NA	NA	NA	NA	NA	0.833	NA
Manganese	**1,600**	**NS**	225	242	465	550	256	136	377	251
Mercury	**0.18**	**NS**	0.018 U	0.016 U	0.025	0.021 U	0.028	0.017 U	0.13	0.018 U
Nickel	**30**	**NS**	**50.1**	11.2	**36.3**	**102**	**32.5**	22.6	28.7	16.5
Selenium	**3.9**	**NS**	3.2 U	3.2 U	4.5 U	4.9 U	4.1 U	4.1 U	4.2 U	4 U
Silver	**2**	**NS**	1.6 U	1.6 U	2.2 U	2.4 U	2.1 U	2 U	2.1 U	2 U
Thallium	**NS**	**5**	3.2 U	3.2 U	4.5 U	4.9 U	4.1 U	4.1 U	4.2 U	4 U
Vanadium	**NS**	**39**	17	15	14.6	20.3	15.6	8.7 J	17	15.2
Zinc	**109**	**NS**	18.7	15.3	42.9	39.4	52	14.7	**183**	25.8

† Dilution factor varies

**** mg/L**

Table 6
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Metals in Soil

Client ID Lab Sample ID Date Sampled Dilution Analyte	NYSDEC Part 375 Unrestricted SCO mg/kg	CP-51 Supplemental SCO mg/kg	SB-17(1-3') 460-138369-9 8/1/2017 1/4 †	SB-17(10-12') 460-138369-10 8/1/2017 1/4 †	SB-18(0-2') 460-138465-1 8/2/2017 1/4 †	SB-18(3-5') 460-138465-2 8/2/2017 1/4 †	SB-19(0-2') 460-138465-3 8/2/2017 1/4 †	SB-19(3-5') 460-138465-4 8/2/2017 1/4 †
Antimony	**NS**	**12**	4.2 U	4.2 U	3.6 U	3.4 U	3.5 U	3.6 U
Arsenic	**13**	**NS**	3.7	2 J	7.1	5.9	3.2	4.9
Barium	**350**	**NS**	78.1	16.8 J	64.5	67.6	61	75
Beryllium	**7.2**	**NS**	0.41 J	0.27 J	0.54	0.58	0.35	0.37
Cadmium	**2.5**	**NS**	0.85 U	0.84 U	0.72 U	0.67 U	0.13 J	0.33 J
Chromium	**30*** **	**NS**	11.4	15.5	25	23	16.3	18.8
Cobalt	**NS**	**20**	5.1 J	9.2 J	6.9 J	6.7 J	5.9 J	8.1 J
Copper	**50**	**NS**	20.7	6.5	29.5	30.1	33.8	49.4
Lead	**63**	**NS**	33.8	2.6	**63.3**	35.3	**81.9**	**144**
Lead (TCLP)**	**NA**	**NA**	NA	NA	NA	NA	NA	0.033 J
Manganese	**1,600**	**NS**	195	205	268	239	272	368
Mercury	**0.18**	**NS**	0.038	0.017 U	0.074	0.037	**0.32**	**0.27**
Nickel	**30**	**NS**	15	**58.9**	**36**	**32.3**	**33.5**	**49.6**
Selenium	**3.9**	**NS**	4.2 U	4.2 U	1.8 J	1.4 J	1.2 J	1.1 J
Silver	**2**	**NS**	2.1 U	2.1 U	1.8 U	1.7 U	1.8 U	1.8 U
Thallium	**NS**	**5**	4.2 U	4.2 U	3.6 U	3.4 U	3.5 U	3.6 U
Vanadium	**NS**	**39**	20.9	11.6	41.5	26.2	19.5	24.6
Zinc	**109**	**NS**	**147**	20.3	69.2	50.5	**113**	**204**

† Dilution factor varies

**** mg/L**

Table 7
St. John Villa Campus
Staten Island, New York

Phase II Investigation Analytical Results

Hexavalent Chromium, Cyanide, and Waste Characterization Parameters in Soil

Client ID	NYSDEC	CP-51	SB-1WC	SB-8WC	SB-15WC	SB-17WC	SB-18(0-2')
Lab Sample ID	Part 375	Supplemental	460-138369-11	460-138284-15	460-138369-12	460-138369-13	460-138465-1
Date Sampled	Unrestricted	SCO	8/1/2017	7/31/2017	8/1/2017	8/1/2017	8/2/2017
Dilution	SCO		1/50 †	1/50 †	1/50 †	1/50 †	1/50 †
Analyte	mg/kg	mg/kg					
DRO	NS	NS	26	40	14	40	15
C10-C44	NS	NS	110	83	32	260	34
Chromium, hexavalent	1	NS	2.2 U	2.2 U	2.3 U	2.2 U	2.3 U
Cyanide, Total	27	NS	1 U	1.1 U	1.1 U	0.69 J	1.1 U
GRO	NS	NS	3.4 U	2.7 U	2.2 U	2.7 U	2.5 U

† *Dilution factor varies*

Table 8
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds (VOCs) in Groundwater

Client ID	NYSDEC	GW-15	Trip Blank
Lab Sample ID	Class GA	460-138369-14	460-138369-15
Date Sampled	Ambient	8/1/2017	8/1/2017
	Standard		
Analyte	µg/L		
1,1,1-Trichloroethane	5	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U
1,2,3-Trichlorobenzene	5	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U
1,2,4-Trimethylbenzene	5	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U
1,3,5-Trimethylbenzene	5	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U
1,4-Dioxane	NS	50 U	50 U
2-Butanone (MEK)	50	5 U	5 U
2-Hexanone	50	5 U	5 U
4-Isopropyltoluene	5	1 U	1 U
4-Methyl-2-pentanone (MIBK)	NS	5 U	5 U
Acetone	50	7.9	19
Benzene	1	1 U	1 U
Bromoform	50	1 U	1 U
Bromomethane	5	1 U	1 U
Carbon disulfide	60	1 U	1 U
Carbon tetrachloride	5	1 U	1 U
Chlorobenzene	5	1 U	1 U
Chlorobromomethane	5	1 U	1 U
Chlorodibromomethane	50	1 U	1 U
Chloroethane	5	1 U	1 U
Chloroform	7	1 U	1 U
Chloromethane	5	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U
cis-1,3-Dichloropropene	0.4 TS	1 U	1 U
Cyclohexane	NS	1 U	1 U
Dichlorobromomethane	50	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U
Ethylbenzene	5	1 U	1 U
Ethylene Dibromide	0.0006	1 U	1 U
Isopropylbenzene	5	1 U	1 U
Methyl acetate	NS	5 U	5 U
Methyl tert-butyl ether	10	1 U	1 U
Methylcyclohexane	NS	1 U	1 U
Methylene Chloride	5	1 U	0.54 J
m-Xylene & p-Xylene	5	1 U	1 U
Naphthalene	NS	1 U	1 U
n-Butylbenzene	5	1 U	1 U
N-Propylbenzene	5	1 U	1 U
o-Xylene	5	1 U	1 U
sec-Butylbenzene	5	1 U	1 U
Styrene	5	1 U	1 U
tert-Butylbenzene	5	1 U	1 U
Tetrachloroethene	5	1 U	1 U
Toluene	5	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U
trans-1,3-Dichloropropene	0.4 TS	1 U	1 U
Trichloroethene	5	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U
Vinyl chloride	2	1 U	1 U
Xylenes, Total	NS	2 U	2 U
Total Conc	NS	7.9	19.54

Table 9
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Semivolatile Organic Compounds (SVOCs) in Groundwater

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Class GA Ambient Standard µg/L	GW-15 460-138369-14 8/1/2017
1,1'-Biphenyl	5	10 U
1,2,4,5-Tetrachlorobenzene	5	10 U
2,2'-oxybis[1-chloropropane]	5	10 U
2,3,4,6-Tetrachlorophenol	NS	10 U
2,4,5-Trichlorophenol	NS	10 U
2,4,6-Trichlorophenol	NS	10 U
2,4-Dichlorophenol	5	10 U
2,4-Dimethylphenol	50	10 U
2,4-Dinitrophenol	10	20 U
2,4-Dinitrotoluene	5	2 U
2,6-Dinitrotoluene	5	2 U
2-Chloronaphthalene	NS	10 U
2-Chlorophenol	NS	10 U
2-Methylnaphthalene	NS	10 U
2-Methylphenol	NS	10 U
2-Nitroaniline	5	10 U
2-Nitrophenol	NS	10 U
3,3'-Dichlorobenzidine	5	10 U
3-Nitroaniline	5	10 U
4,6-Dinitro-2-methylphenol	NS	20 U
4-Bromophenyl phenyl ether	NS	10 U
4-Chloro-3-methylphenol	NS	10 U
4-Chloroaniline	5	10 U
4-Chlorophenyl phenyl ether	NS	10 U
4-Methylphenol	NS	10 U
4-Nitroaniline	5	10 U
4-Nitrophenol	NS	20 U
Acenaphthene	NS	10 U
Acenaphthylene	NS	10 U
Acetophenone	NS	10 U
Anthracene	50	10 U
Atrazine	7.5	2 U
Benzaldehyde	NS	10 U
Benzo[a]anthracene	0.002	1 U
Benzo[a]pyrene	ND	1 U
Benzo[b]fluoranthene	0.002	1 U
Benzo[g,h,i]perylene	NS	10 U
Benzo[k]fluoranthene	0.002	1 U
Bis(2-chloroethoxy)methane	5	10 U
Bis(2-chloroethyl)ether	1	1 U
Bis(2-ethylhexyl) phthalate	5	2 U
Butyl benzyl phthalate	50	10 U
Caprolactam	NS	4.5 J
Carbazole	NS	10 U
Chrysene	0.002	2 U
Dibenz(a,h)anthracene	NS	1 U
Dibenzofuran	NS	10 U
Diethyl phthalate	50	10 U
Dimethyl phthalate	50	10 U
Di-n-butyl phthalate	50	1.3 J
Di-n-octyl phthalate	50	10 U
Fluoranthene	50	10 U
Fluorene	50	10 U
Hexachlorobenzene	0.04	1 U
Hexachlorobutadiene	0.5	1 U
Hexachlorocyclopentadiene	5	10 U
Hexachloroethane	5	1 U
Indeno[1,2,3-cd]pyrene	0.002	1 U
Isophorone	50	10 U
Naphthalene	NS	10 U
Nitrobenzene	0.4	1 U
N-Nitrosodi-n-propylamine	NS	1 U
N-Nitrosodiphenylamine	50	10 U
Pentachlorophenol	NS	20 U
Phenanthrene	50	10 U
Phenol	NS	10 U
Pyrene	50	10 U
Total Conc	NS	5.8

Table 10
St. John Villa Campus
Staten Island, New York

Phase II Investigation Analytical Results

Metals in Groundwater

Client ID	NYSDEC	GW-15
Lab Sample ID	Class GA	460-138369-14
Date Sampled	Ambient	8/1/2017
Dilution	Standard	1/2 †
Analyte	µg/L	
Antimony	3	2 U
Arsenic	25	8.9
Barium	1,000	45.6
Beryllium	3	0.85
Cadmium	5	2 U
Chromium	50	16.4
Cobalt	NS	6.6
Copper	200	14.6
Lead	25	7.8
Manganese	NS	674
Mercury	0.7	0.2 U
Nickel	100	19.3
Selenium	10	10 U
Silver	50	38.1
Thallium	0.5	0.8 U
Vanadium	NS	14.9
Zinc	2,000	61.4

† *Dilution factor varies*

Table 11
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Volatile Organic Compounds in Sub-Slab Vapor and Ambient Air at Elementary School

Client ID Lab Sample ID Date Sampled Dilution Units = µg/m3	EPA 2001 BASE 90th Percentile		NYSDOH 2003 Soil Vapor Upper Fence		NYSDOH 2005 HEI RIOPA 95th Percentile		NYSDOH 2006 Air Guidance Value	SV-ES1 200-40953-1 11/11/2017 1	SV-ES2 200-40953-3 11/11/2017 1	AA-1 200-40953-5 11/11/2017 1
	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor				
1,1-Dichloroethene	<1.4	<1.4	0.4	0.4	NS	NS	NS	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	<1.9	<1.8	0.4	0.4	NS	NS	NS	**3.7**	0.11 U	0.11 U
Tetrachloroethene	15.9	6.5	2.5	0.7	6.01	3.17	30	**18**	0.55	0.23 J
trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	0.20 U	0.20 U	0.20 U
Trichloroethene	4.2	1.3	0.5	0.4	1.36	0.79	2	3.3	0.049 U	0.049 U
Vinyl chloride	<1.9	<1.8	0.4	0.4	NS	NS	NS	0.046 U	0.046 U	0.046 U

Tables 1-11
St. John Villa Campus
Staten Island, New York
Phase II Investigation Analytical Results
Notes

GENERAL

NS : No standard.

NA : Not applicable.

U : The analyte was not detected at the indicated concentration.

J : The concentration given is an estimated value.

TS : Value represents a sum total standard.

B : The analyte was found in an associated blank, as well as in the sample.

*** :** RPD of the LCS and LCSD exceeds the control limits.

SOIL

CP-51 Soil Cleanup Objectives : Supplemental Soil Clean-up Objectives listed in Table 1 of NYSDEC "CP-51/Soil Cleanup Guidance."

Part 375 Soil Cleanup Objectives : Soil Cleanup Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Part 375).

mg/kg : milligrams per kilogram = parts per million (ppm)

Metals

***** :** Standard reflects trivalent, not total, Chromium.

Exceedances of Part 375 Unrestricted Soil Cleanup Objectives (UUSCO) are highlighted in bold font.
Exceedances of CP-51 Supplemental Soil Cleanup Objectives are highlighted in gray.

GROUNDWATER

NYSDEC Class GA Ambient Standard : New York State Department of Environmental Conservation Technical and Operational Guidance Series (1.1.1): Class GA Ambient Water Quality Standards and Guidance Values.

µg/L : micrograms per Liter = parts per billion (ppb)

ND : The standard is No Detect.

Exceedances of NYSDEC Class GA Ambient Standards are highlighted in bold font.

SOIL VAPOR

EPA 2001 BASE 90th percentile : 90th Percentile indoor air values from “Table C-2. EPA 2001: Building Assessment and Survey Evaluation (BASE) Database, SUMMA canister method”, published in the NYSDOH Soil Vapor Intrusion Guidance Document, Appendix C” (October 2006).

NYSDOH 2003 Soil Vapor Indoor Upper Fence : Upper fence indoor air values from "Table C1. NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes", published in the NYSDOH Soil Vapor Intrusion Guidance Document, Appendix C” (October 2006).

HEI RIOPA 2005 95th percentile : 95th Percentile Indoor Air Values from Table C-5, Health Effects Institute (HEI) 2005: Relationship of Indoor, Outdoor and Personal Air, published in the NYSDOH Soil Vapor Intrusion Guidance Document, Appendix C” (October 2006).

NYSDOH Soil Vapor Intrusion Air Guidance Value : NYSDOH Air Guidance Values (AGVs) presented in the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (“NYSDOH Vapor Intrusion Guidance Document”), updated September 2013 for change of AGV for PCE and August 2015 for TCE.

µg/m^3 : micrograms per cubic meter of air

NC : Upper fence not calculated.

Exceedances of NYSDOH Background Ranges are highlighted in bold font.
Exceedances of NYSDOH Air Guidance Values are highlighted in gray.

Appendix A
Photographic Log

Photograph 1: Geophysical survey conducted at SB-4.

Photograph 2: Geophysical survey conducted in Convent basement.

Photograph 3: Geophysical survey at 2,000-gallon #2 Fuel Oil UST by SB-5.

Photograph 4: Geoprobe rig advancing SB-4.

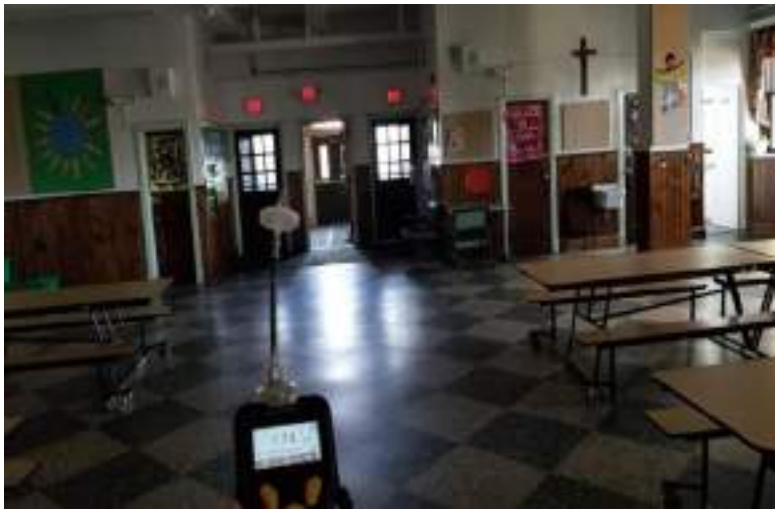
Photograph 5: Macro core samples at SB-3

Photograph 6: Observational note-taking, soil boring logs and sample collection.

Photograph 7: Soil vapor sample collection at SV-3.

Photograph 8: Geoprobe rig advancing soil boring SB-13

Photograph 5: Supplemental geophysical survey to clear soil borings surrounding a previously discovered metallic anomaly at maintenance garage.



Photograph 6: PPBRae reading during indoor air screening survey of the cafeteria/auditorium in the elementary school.

Photograph 7: Soil vapor sample collection at SV-ES1 in the elementary school boiler.

Photograph 8: Geoprobe rig advancing supplemental soil boring SB-ES3.

Appendix B

Pre-Probe Asbestos Report and Geophysical Survey Reports

AIRTEK ENVIRONMENTAL CORP.

39-37 29th Street, Long Island City, NY 11101
Tel: 718-937-3720 Fax: 718-937-3721
www.airtekenv.com

July 20, 2017

Mr. Yujaya Mikkilineni
New York City School Construction Authority
Industrial and Environmental Hygiene
30-30 Thomson Avenue
Long Island City, NY 11101

RE: St. John Villa Campus (R031B)
57 Cleveland Pl, Staten Island, NY 10305
LLW #107932, SID #67196

Dear Mr. Mikkilineni:

In response to your request for bulk sampling of materials at the above referenced project for the Proposed Exploratory Borings, Airtek Environmental Corp. has conducted an asbestos inspection at St. John Villa Campus, Staten Island, NY on 07/6/117 & 7/7/17, based upon the Boring Request and Plan dated 06/05/17.

The following areas were tested and/or surveyed:

Location	Material	# of Samples	Results	Comments / Boring Locations
Grounds	Grass & Soil	0	Non-suspect	SV-2, SV-3, SV-4, SB-4, SV-5, SB/TW-5, SB-6, SB-7, SB-8, SB-9, SB-10, SB-11, SB/TW-12, SB-13, SB-14, SB/TW-17, SB-18, SB-19
Parking Lot & Roadway	Asphalt	3	Non-ACM	SB/TW-1, SV-1, SB-2, SB-3, SB/TW-15, SB-16
High School	1x1 Pink Ceramic Tile	3	Non-ACM	SV-8
High School	**Terrazzo**	**0**	**Assumed ACM**	**SV-7**
High School	Terrazzo Mortar Bed	3	Non-ACM	SV-7
High School	1x1 Orange VFT & Mastic	6	Non-ACM	SV-6
High School	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-6, SV-7, SV-8**
Chapel	1x1 Tan VFT & Mastic	6	Non-ACM	**SV-9**
Chapel	**9x9 Green VAT**	**3**	**ACM**	
Chapel	9x9 Mastic	3	Non-ACM	
Chapel	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-9**
Convent	Orange Brick Mortar	3	Non-ACM	SV-10
Convent	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-10**
Elementary School	Gray Painted Concrete	3	Non-ACM	SV-11
Elementary School	**Terrazzo**	**0**	**Assumed ACM**	**SV-12**

Elementary School	Terrazzo Mortar Bed	3	Non-ACM	SV-12
Elementary School	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-11, SV-12**
CD Center-UPK	**9x9 Gray VAT**	**3**	**ACM**	**SV-13**
CD Center-UPK	**9x9 Green VAT**	**3**	**ACM**	
CD Center-UPK	**9x9 VAT Mastic**	**3**	**ACM**	
CD Center-UPK	1x1 Beige VFT (Top Layer)	3	Non-ACM	SV-14
CD Center-UPK	**1x1 Beige VFT Mastic**	**0**	**Assumed ACM**	**SV-14**
CD Center-UPK	**9x9 Blue VAT (Bottom Layer)**	**3**	**ACM**	**SV-14**
CD Center-UPK	**9x9 Blue VAT Mastic**	**0**	**Assumed ACM**	**SV-14. Mastic is assumed – too thin to sample**
CD Center-UPK	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-13, SV-14**
Annex – Shop	1x1 Red VFT & Mastic	6	Non-ACM	SV-15
Annex – Storage	**Terrazzo**	**0**	**Assumed ACM**	**SV-16**
Annex – Storage	Terrazzo Mortar Bed	3	Non-ACM	SV-16
Annex	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-15, SV-16**
Gym / Aud	**1x1 Orange VAT**	**3**	**ACM**	**SV-17**
Gym / Aud	**1x1 Orange VAT Mastic**	**0**	**Assumed ACM**	**SV-17. Mastic is assumed – too thin to sample**
Gym / Aud	Gray Painted Concrete	3	Non-ACM	SV-18
Gym / Aud	**Floor Fill/Underlayment**	**0**	**Assumed ACM**	**SV-17, SV-18**

Note: All boring locations were on the ground level.

Any material not mentioned above shall be assumed ACM.

The **Exploratory Exterior Borings** that are proposed can be conducted without utilizing asbestos abatement procedures. The Contractor is required to contact Airtek Environmental Corp. **at least 24hrs prior to conducting the Exploratory Exterior Borings** in order for Airtek Environmental Corp. to assign a certified New York City Asbestos Investigator to identify and collect samples and submit for analysis for ACM content, if necessary, of additional suspect building materials if observed during the probes.

The **Exploratory Interior Borings** that are proposed **must be** conducted utilizing asbestos abatement procedures utilizing an NYC SCA IEH approved contractor. The Contractor is required to contact Airtek Environmental Corp. **two (2) weeks prior to conducting the Interior Borings** in order for Airtek Environmental Corp. to assign a Project Monitor to collect air samples and submit for analysis du ring the probes.

Thank you for granting Airtek the opportunity to be of service. Please do not hesitate to contact our office if you have any questions.

Sincerely yours,
Airtek Environmental Corp.

Michael Porter,
Senior Project Manager

Enayat Nassry,
NYC Investigator

Cc: 17-0460

APPENDIX A

Bulk Sample Results

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: _____

LOCATION(S) SURVEYED: Proposed Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/12/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	1	17-0328	Asphalt	Parking Lot SB-2	10000 SF	1,2,3,4,5,6,7 G MD P	Y N	NAD	HVD
	2		↓	SB/TW-1	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	3		↓	SV-1	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	4		Pink (6"x1") Ceramic Tile	High School SV-8	10 SF	1,2,3,4,5,6,7 G MD P	Y N	NAD	↓
	5		↓ ↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	6		↓ ↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	7		Terra220M/mortarbed	SV-7	10 SF	1,2,3,4,5,6,7 G MD P	Y N	NAD	↓
	8		↓ ↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	9		↓ ↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Remaining Friable or Suspect ACBM
G – Good / MD – Minor Damage / P -Poor

FRIABLE
Yes (Y)
No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Moyna Ali / Moyna Ali DATE: 7/12/17 TIME: 1800hrs
RECEIVED BY: _____ DATE: _____ TIME: _____
ANALYZED BY: EMLAP Labs DATE: 7-17-17 TIME: _____
CHECKED BY: _____ DATE: _____ TIME: _____

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO. : (718) 937-3720
ADDRESS: Alitek Environmental Corp.
39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
2. Collect bulk samples of suspect building materials.
3. A physical "Hand Pressure" test for determining friability and condition.
4. Assessment of suspect friable and non-friable materials and locations.
5. Quantify the amount of suspect materials in their respective locations.
6. Submit bulk samples for analysis by PLM and/or TEM Method.
7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

FIELD NOTES:

ANALYZE: ☐ ALL ☒ STOP AT FIRST POSITIVE
☐ PLM ☐ TEM (If necessary)

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: _____

LOCATION(S) SURVEYED: Proposed Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/12/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	10	17-0339	Orange (6x1) VFT	High School SV-6	10 sf	1,2,3,4,5,6,7 G MD P	Y N	HAD Field	HAD
	11					1,2,3,4,5,6,7 G MD P	Y N		
	12					1,2,3,4,5,6,7 G MD P	Y N		
	13		mastic			1,2,3,4,5,6,7 G MD P	Y N	HAD Field	
	14					1,2,3,4,5,6,7 G MD P	Y N		
	15					1,2,3,4,5,6,7 G MD P	Y N		
	16		Tan (6x1) VFT (Top)	Chapel SV-9		1,2,3,4,5,6,7 G MD P	Y N	HAD Field	
	17					1,2,3,4,5,6,7 G MD P	Y N		
	18					1,2,3,4,5,6,7 G MD P	Y N		

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Reinstalling Friable or Suspect ACBM
G – Good / MD – Minor Damage / P -Poor

FRIABLE
Yes (Y)
No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED: Moyra Ali / Moyra Ali DATE: 7/12/17 TIME: 1800hrs
RECEIVED BY: _____ DATE: _____ TIME: _____
ANALYZED BY: EHSA Laboratory DATE: 7/17/17 TIME: _____
CHECKED BY: _____ DATE: _____ TIME: _____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☒ STOP AT FIRST POSITIVE ☐ TEM (if necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO.: (718) 937-3729
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
2. Collect bulk samples of suspect building materials.
3. A physical "Hand Pressure" test for determining friability and condition.
4. Assessment of suspect friable and non-friable materials and locations.
5. Quantify the amount of suspect materials in their respective locations.
6. Submit bulk samples for analysis by PLM and/or TEM Method.
7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: ____

LOCATION(S) SURVEYED: Proposed Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/12/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	19	17-0339	Green (9x9) VFT (bottom)	Chapel SV-9	5 sf	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	CH 11.2%	ND
	20					1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NH PS	
	21					1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NH PS	
	22		mastic			1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NAD (Jul	
	23					1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	N	
	24					1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)		
	25		Orange brick mortar	Convent SV-10		1, 2, 3, 4, 5, 6, 7 G MD P	(Y) N	NAD	
	26					1, 2, 3, 4, 5, 6, 7 G MD P	(Y) N		
	27					1, 2, 3, 4, 5, 6, 7 G MD P	(Y) N		

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Reinstitute Friable or Suspect ACBM
G – Good / MD – Minor Damage / P- Poor

FRIABLE: Yes (Y) / No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Moyra Ali/Mgm Ali DATE: 7/12/17 TIME: 1800hrs
RECEIVED BY: ____ DATE: ____ TIME: ____
ANALYZED BY: Elissa Lahe V&A DATE: 17-17-17 TIME: ____
CHECKED BY: ____ DATE: ____ TIME: ____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☐ STOP AT FIRST POSITIVE ☐ TEM (If necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO. : (718) 937-3720
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
2. Collect bulk samples of suspect building materials.
3. A physical "Hand Pressure" test for determining friability and condition.
4. Assessment of suspect friable and non-friable materials and locations.
5. Quantify the amount of suspect materials in their respective locations.
6. Submit bulk samples for analysis by PLM and/or TEM Method.
7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: _____

LOCATION(S) SURVEYED: Proposed Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/13/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	28		Grey paint (on concrete)	Elementary School SV-11	5 SF	1,2,3,4,5,6,7 G M D P	Y (N)	NAD/Bkg	NAD
	29		↓	↓	↓	1,2,3,4,5,6,7 G M D P	Y (N)	↓	↓
	30		↓	↓	↓	1,2,3,4,5,6,7 G M D P	Y (N)	↓	↓
	31		Terrazzo w/ mortarbed	SV-12	↓	1,2,3,4,5,6,7 G M D P	(Y) N	~~CH~~ NAD	↓
	32		↓	↓	↓	1,2,3,4,5,6,7 G M D P	(Y) N	↓	↓
	33		↓	↓	↓	1,2,3,4,5,6,7 G M D P	(Y) N	↓	↓
	34		Grey (9x9) VFT	CO Center SV-13	5 SF	1,2,3,4,5,6,7 G M D P	Y (N)	CH 7.6%	↓
	35		↓	↓	↓	1,2,3,4,5,6,7 G M D P	Y (N)	NA/BS	↓
	36		↓	↓	↓	1,2,3,4,5,6,7 G M D P	Y (N)	NA/BS	↓

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Remaining Friable or Suspect ACBM
G – Good / MD – Minor Damage / P -Poor

FRIABLE
Yes (Y)
No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Bryan Ali/Mgo Ali DATE: 7/13/17 TIME: 1800hrs
RECEIVED BY: _____ DATE: _____ TIME: _____
ANALYZED BY: Enrico Labelle/Ali DATE: 7-17-17 TIME: _____
CHECKED BY: _____ DATE: _____ TIME: _____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☒ STOP AT FIRST POSITIVE ☐ TEM (if necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO.: (718) 937-3720
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
2. Collect bulk samples of suspect building materials.
3. A physical "Hand Pressure" test for determining friability and condition.
4. Assessment of suspect friable and non-friable materials and locations.
5. Quantify the amount of suspect materials in their respective locations.
6. Submit bulk samples for analysis by PLM and/or TEM Method.
7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☐ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: ____

LOCATION(S) SURVEYED: Prepared Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/13/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	37		Green (9x9) VFT	C-D Center SV-13	5 sf	1,2,3,4,5,6,7 G MD P	Y N	CH 7.4%	ND
	38		↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	CHRYS	↓
	39		↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	CHRYS	↓
	40		Grey/Green (9x9) mastic	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	NAD/Trc	↓
	41		↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	42		↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	43		Beige (1x1) VFT (Top)	C-D Center SV-14	↓	1,2,3,4,5,6,7 G MD P	Y N	NAD/Trc	↓
	44		↓ ↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓
	45		↓ ↓ ↓	↓ ↓	↓	1,2,3,4,5,6,7 G MD P	Y N	↓	↓

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Remaining Friable or Suspect ACBM
G – Good / MD – Minor Damage / P - Poor

FRIABLE: Yes (Y) / No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Mujeeb Ali / Mujeeb Ali DATE: 7/13/17 TIME: 180 hrs
RECEIVED BY: ____ DATE: ____ TIME: ____
ANALYZED BY: [illegible] Lahiri DATE: 7-17 TIME: ____
CHECKED BY: ____ DATE: ____ TIME: ____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☒ STOP AT FIRST POSITIVE ☐ TEM (if necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO.: (718) 937-3720
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
2. Collect bulk samples of suspect building materials.
3. A physical "Hand Pressure" test for determining friability and condition.
4. Assessment of suspect friable and non-friable materials and locations.
5. Quantify the amount of suspect materials in their respective locations.
6. Submit bulk samples for analysis by PLM and/or TEM Method.
7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: _____

LOCATION(S) SURVEYED: Prepared Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/13/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	46		Blue (9x9) VFT (Cutter)	C-D Center SV-14	5 sf	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	CH 9.2%	ND
	47		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NA/PS	
	48		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NA/PS	
	49		Red (1x1) VFT	Annex (Slope) SV-15		1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NAD/PLM	
	50		↓	↓		1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	↓	
	51		↓	↓		1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	↓	
	52		↓ mastic	↓		1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NAD/PLM	
	53		↓	↓		1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	↓	
	54		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	↓	↓

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Remaining Friable or Suspect ACBM
G – Good / MD – Minor Damage / P -Poor

FRIABLE
Yes (Y)
No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Boyce Ali / Mgr ALI DATE: 7/13/17 TIME: 1800hrs
RECEIVED BY: _____ DATE: _____ TIME: _____
ANALYZED BY: ELISA LOPEZ DATE: 7-17-17 TIME: _____
CHECKED BY: _____ DATE: _____ TIME: _____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☒ STOP AT FIRST POSITIVE ☐ TEM (if necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO.: (718) 937-3720
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
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6. Submit bulk samples for analysis by PLM and/or TEM Method.
7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

Airtek

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: _____

LOCATION(S) SURVEYED: Proposed Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/13/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	55		Terrazzo W/disturbed	Annex (Storage) SV-16	5 sf	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	NATO	
	56		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	↓	
	57		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	↓	
	58		Orange (1x1) VFT	Gym/Auditorium SV-17	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	CH <1%	Trace
	59		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	↓	
	60		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	↓	
	61		~~Mastic~~	VOID	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	~~Not~~ VOID	
	62		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	↓	
	63		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G M D P	Y N	↓	

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Remaining Friable or Suspect ACBM
G - Good / MD - Minor Damage / P - Poor

FRIABLE
Yes (Y)
No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Bryan Ali / Mgmt DATE: 7/13/17 TIME: 1800hrs
RECEIVED BY: _____ DATE: _____ TIME: _____
ANALYZED BY: EMSA Labs DATE: 7-17-17 TIME: _____
CHECKED BY: _____ DATE: _____ TIME: _____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☒ STOP AT FIRST POSITIVE ☐ TEM (if necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO.: (718) 937-3720
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
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7. Bulk Sample locations and suspect materials were identified on the appropriate building floor plan diagram with the sample number.
8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

TURN AROUND TIME:
☐ RUSH ☐ 6 HRS ☒ 24 HRS ☐ OTHER

ASBESTOS FIELD SURVEY DATA SHEET / BULK SAMPLE LOG

PAGE ____ OF ____

PROJECT NO.: 17-0460
CLIENT: SCA
PROJECT SITE: St John Villa Campus Staten Island, N.Y.
INVESTIGATOR: ____

LOCATION(S) SURVEYED: Proposed Sample Locations
SCOPE OF WORK: Renovation
INSPECTOR: M. ALI DATE(S) OF INSPECTION: 7/13/17

	Sample #	Lab #	Material Description	Sample Location	QUANTITY (LF/SF)	ASSESSMENT COND	ASSESSMENT FRIAB	Asbestos %	Vermiculite* %
	64		Grey paint (on concrete)	Gym/Auditorium SV-18	5 SF	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	NAD/Trace	NAD
	65		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	↓	↓
	66		↓	↓	↓	1, 2, 3, 4, 5, 6, 7 G MD P	Y (N)	↓	↓
						1, 2, 3, 4, 5, 6, 7 G MD P	Y N		
						1, 2, 3, 4, 5, 6, 7 G MD P	Y N		
						1, 2, 3, 4, 5, 6, 7 G MD P	Y N		
						1, 2, 3, 4, 5, 6, 7 G MD P	Y N		
						1, 2, 3, 4, 5, 6, 7 G MD P	Y N		
						1, 2, 3, 4, 5, 6, 7 G MD P	Y N		

PHYSICAL CONDITION ASSESSMENT
1 Damaged or Significantly Damaged Friable TSI
2 Damaged Friable Surfacing ACM
3 Significantly Damaged Friable Surfacing ACM
4 Damaged or Significantly Damaged Friable Misc. ACM
5 ACBM with potential for Damage
6 ACBM with potential for Significant Damage
7 Remaining Friable or Suspect ACBM
G – Good / MD – Minor Damage / P -Poor

FRIABLE
Yes (Y)
No (N)

PLM - POLARIZED LIGHT MICROSCOPY TEM - TRANSMISSION ELECTRON MICROSCOPY

RELINQUISHED BY: Boyd Ali / Moyn Ali DATE: 7/13/17 TIME: 1810hrs
RECEIVED BY: ____ DATE: ____ TIME: ____
ANALYZED BY: Emily Lyle DATE: 7-17-17 TIME: ____
CHECKED BY: ____ DATE: ____ TIME: ____

FIELD NOTES:

ANALYZE: ☐ ALL ☐ PLM ☒ STOP AT FIRST POSITIVE ☐ TEM (If necessary)

NYSDOL INSPECTOR: M. ALI
CERTIFICATE NO.: 89-01641
TELEPHONE NO.: (718) 937-3720
ADDRESS: Airtek Environmental Corp. 39-37 29th Street, L.I.C., NY 11101

1. A visual determination of accessible suspect materials and condition.
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8. A Chain of Custody record accompanied the samples to the laboratory.
9. Any inconclusive result for a NOB must be confirmed by TEM or assumed ACM.

AIRTEK ENVIRONMENTAL CORP
39-37 29th Street, Long Island City, NY 11101
Phone: 718-937-3720 Fax: 718-937-3721
www.airtekenv.com

BULK (NOB) ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY & TRANSMISSION ELECTRON MICROSCOPY

CLIENT/ADDRESS: SCA	PROJECT: 7-9 & 6th
ANALYTICAL METHODOLOGIES: ELAP 198.4	LAB ID #: 11040
DATE OF ANALYSIS: 7-18-17	DATE OF REPORT: 7-18-17

LABORATORY RESULTS

SAMPLE #	LAB ID #	MATERIALS & LOCATION	INSOLUBLE NON ASBESTOS INORGANIC %	PLM RESULTS	TYPE OF ASBESTOS	TEM RESULTS	TYPE OF ASBESTOS	POS/NEG.	
1	11039	Asphalt	72.17	NAD/LMC	0	NAD	0	NEG	B×270
2		↓	52.34	↓	0	↓	0	↓	2D
3		↓	56.13		0		0		2E
10		VFT	43.11		0		0		3A
11		↓	44.69		0		0		3B
12		↓	68.01		0		0		3C
13		mastic	4.24		0		0		3D
14		↓	56.85		0		0		3E
15		↓	38.07		0		0		4A
16		VFT	49.20		0		0		4B
17		↓	60.85		0		0		4C
18		↓	26.75		0		0		4D
22		mastic	2.20		0		0		4E
23		↓	15.10		0		0		5A
24		↓	30.34		0		0		5B
28		paint	32.85		0	↓	0	↓	5C
39		↓	21.28		0	Anth 2%	Anthophyllite	NEG	5D
30		↓	31.31		0	Anth 2%	↓	↓	5E
40		mastic	3.16		0	Chr 3.0%	Chrysotile	POS	6A
41		↓	29.41		0	X	X	X	6B
42		↓	19.85		0	X	X	X	6C
43		VFT	49.45		0	Chr	0	NEG	6D
44		↓	46.63		0	↓	0	↓	6E
45	↓	↓	35.62	↓	0	↓	0	↓	7A
									7B

ANALYST: Zelun Sun

APPROVED SIGNATORY

Microscope: JEOL 100CXII

This report relates only to the samples reported above and must not be reproduced except in full with the approval of the laboratory. Samples will be stored for sixty (60) days. Airtek Inc. should be notified within this time frame for a true duplicate analysis. The report related only to items tested. This report must not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. Test report may not be reproduced except in full and with prior approval of Airtek, Inc.

NAD: No Asbestos Detected

The liability of Airtek Inc. with repect to the services charge, shall in no event exceed the amount of the invoice.

AIRTEK ENVIRONMENTAL CORP.
39-37 29th Street, Long Island City, NY 11101
Phone: 718-937-3720 Fax: 718-937-3721
www.airtekenv.com

BULK (NOB) ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY & TRANSMISSION ELECTRON MICROSCOPY

CLIENT/ADDRESS: SCA	PROJECT: 17-096
ANALYTICAL METHODOLOGIES: ELAP 198.4	LAB ID #: 11040
DATE OF ANALYSIS: 7-18-17	DATE OF REPORT: 7-18-17

LABORATORY RESULTS

SAMPLE #	LAB ID #	MATERIALS & LOCATION	INSOLUBLE NON ASBESTOS INORGANIC %	PLM RESULTS	TYPE OF ASBESTOS	TEM RESULTS	TYPE OF ASBESTOS	POS./NEG.	
49	7209	VFT	48.24	NAD/TR	0	NAD	0	NEG	7C
50		↓	51.97		0		0		7D
51		↓	44.97		0		0		7E
52		MASTIC	13.12		0		0		8A
53		↓	30.82		0		0		8B
54		↓	28.50	↓	0	↓	0	↓	8C
58		VFT	17.31	CHRYSOTILE	Chrysotile	CHRYSOTILE	Chrysotile	POS	8D
59		↓	27.56	↓	↓	↓	↓	↓	8E
60	↓	↓		↓	↓	↓	↓	↓	9A

ANALYST: Zelun Sun

APPROVED SIGNATORY:

Microscope: JEOL 100CXII

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NAD: No Asbestos Detected

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AIRTEK ENVIRONMENTAL CORP.
39 – 37 29th Street, Long Island City, New York, 11101
Phone (718) 937-3720/Fax (718) 937-3721

NOB'S

Project#: 17-0460
Project Name: SCA
Date Received: 7/14/2017

Furnace time on: 7:30pm
Furnace time off: 10:30pm
Date: 7/14/2017

Crucible #	samples #	lab ID	A	B	B-A=W1	D	D-A	C	C-F=W2	W2/W1X100
			Crucible weight	samples+Crucible weight	sample weight	crucibles & Ash samples weight	Acide Digestion	Post Ash Weight	Final Post Ash Weight	% Residue
114	1	17-0339	8.807	9.796	0.989	9.707	0.900	0.770	0.694	70.17%
115	2	17-0339	12.522	13.378	0.856	13.323	0.801	0.524	0.448	52.34%
116	3	17-0339	8.556	9.421	0.865	9.354	0.798	0.568	0.492	56.88%
117	10	17-0339	12.225	13.206	0.981	13.015	0.790	0.548	0.472	48.11%
118	11	17-0339	12.513	13.408	0.895	13.202	0.689	0.476	0.400	44.69%
119	12	17-0339	12.862	13.812	0.950	13.623	0.761	0.538	0.462	48.63%
120	13	17-0339	13.253	13.508	0.255	13.385	0.132	0.160	0.084	32.94%
121	14	17-0339	11.835	12.041	0.206	11.934	0.099	0.148	0.072	34.95%
122	15	17-0339	10.440	10.554	0.114	10.496	0.056	0.121	0.045	39.47%
123	16	17-0339	12.194	13.129	0.935	12.957	0.763	0.536	0.460	49.20%
124	17	17-0339	13.301	14.3	0.999	14.120	0.819	0.585	0.509	50.95%
125	18	17-0339	13.663	14.411	0.748	14.270	0.607	0.261	0.185	24.73%
126	19	17-0339	13.680	14.509	0.829	14.301	0.621	0.564	0.488	58.87%
127	20	17-0339	13.044	13.982	0.938	13.719	0.675	0.459	0.383	40.83%
128	21	17-0339	8.982	9.868	0.886	9.631	0.649	0.511	0.435	49.10%
129	22	17-0339	14.262	15.074	0.812	14.615	0.353	0.095	0.019	2.34%
130	23	17-0339	12.637	13.317	0.680	12.899	0.262	0.316	0.240	35.29%
131	24	17-0339	13.066	13.859	0.793	13.391	0.325	0.364	0.288	36.32%
132	28	17-0339	13.191	13.888	0.697	13.551	0.360	0.291	0.215	30.85%
133	29	17-0339	11.409	12.352	0.943	11.945	0.536	0.371	0.295	31.28%
134	30	17-0339	13.026	13.869	0.843	13.505	0.479	0.340	0.264	31.32%
135	34	17-0339	13.442	14.349	0.907	14.121	0.679	0.422	0.346	38.15%

Analyst: _____ **Date Analysed:** _____

AIRTEK ENVIROMENTAL CORP.
39 - 37 29th Street, Long Island City, New York, 11101
Phone (718) 937-3720/Fax (718) 937-3721

NOB'S

Project#: 17-0460
Project Name: SCA/St. Johns Village Campus
Date Received: 7/14/2017

Furnace time on: 7:30pm
Furnace time off: 10:30pm
Date: 7/14/2017

Crucible #	samples #	lab ID	A	B	B-A=W1	D	D-A	C	C-F=W2	W2/W1X100
			Crucible weight	samples+Crucible weight	sample weight	crucibles & Ash samples weight	Acide Digestion	Post Ash Weight	Final Post Ash Weight	% Residue
136	35	17-0339	12.071	12.853	0.782	12.645	0.574	0.339	0.263	33.63%
137	36	17-0339	12.708	13.510	0.802	13.314	0.606	0.346	0.270	33.67%
138	37	17-0339	12.000	12.918	0.918	12.660	0.660	0.412	0.336	36.60%
139	38	17-0339	12.127	13.031	0.904	12.787	0.660	0.428	0.352	38.94%
140	39	17-0339	12.709	13.540	0.831	13.318	0.609	0.381	0.305	36.70%
141	40	17-0339	13.537	13.610	0.073	13.547	0.010	0.098	0.022	30.14%
142	41	17-0339	11.715	11.919	0.204	11.797	0.082	0.136	0.060	29.41%
143	42	17-0339	12.758	12.845	0.087	12.783	0.025	0.102	0.026	29.89%
144	43	17-0339	12.979	13.849	0.870	13.678	0.699	0.506	0.430	49.43%
145	44	17-0339	11.652	12.608	0.956	12.420	0.768	0.518	0.442	46.23%
146	45	17-0339	13.489	14.192	0.703	14.060	0.571	0.325	0.249	35.42%
147	46	17-0339	13.203	14.111	0.908	13.848	0.645	0.493	0.417	45.93%
148	47	17-0339	12.521	13.481	0.960	13.223	0.702	0.569	0.493	51.35%
149	48	17-0339	13.200	14.195	0.995	13.928	0.728	0.601	0.525	52.76%
150	49	17-0339	12.725	13.633	0.908	13.528	0.803	0.512	0.436	48.02%
151	50	17-0339	14.397	15.259	0.862	15.142	0.745	0.524	0.448	51.97%
152	51	17-0339	9.706	10.64	0.934	10.517	0.811	0.468	0.392	41.97%
153	52	17-0339	13.590	13.816	0.226	13.713	0.123	0.142	0.066	29.20%
154	53	17-0339	11.925	12.195	0.270	12.070	0.145	0.157	0.081	30.00%
155	54	17-0339	12.802	13.104	0.302	12.968	0.166	0.163	0.087	28.81%
156	58	17-0339	11.991	12.763	0.772	12.540	0.549	0.287	0.211	27.33%
157	59	17-0339	12.874	13.7	0.826	13.493	0.619	0.302	0.226	27.36%

Analyst: EDSB Lolle **Date Analysed:** 7-17-17

AIRTEK ENVIROMENTAL CORP.
39 – 37 29th Street, Long Island City, New York, 11101
Phone (718) 937-3720/Fax (718) 937-3721

NOB'S

Project#: 17-0460
Project Name: SCA/St. Johns Village Campus
Date Received: ###### ######

Furnace time on: 7:30pm
Furnace time off: 10:30pm
Date: 7/14/2017

Crucible #	samples #	lab ID	A	B	B-A=W1	D	D-A	C	C-F=W2	W2/W1X100
			Crucible weight	Samples+Crucible weight	sample weight	crucibles & Ash samples weight	Acide Digestion	Post Ash Weight	Final Post Ash Weight	% Residue
158	60	17-0339	13.945	14.941	0.996	14.693	0.748	0.358	0.282	#DIV/0!
159	64	17-0339	12.615	13.013	0.393	12.780	0.165	0.130	0.054	#DIV/0!
160	65	17-0339	12.367	12.722	0.355	12.514	0.147	0.107	0.031	#DIV/0!
161	66	17-0339	14.492	14.874	0.382	14.661	0.169	0.152	0.076	#DIV/0!

Analyst: Elisa Jalic
Date Analysed: 7-17-17

APPENDIX B

WA / Probe Request

New York City
School Construction Authority
Industrial and Environmental Hygiene

CONSULTANT
WORK AUTHORIZATION

WA #: 872005 Initial
Date Issued: 07/11/2017 Initiation Date: 07/11/2017
Final WA: No

AIRTEK ENVIRONMENTAL CORPORATION
39-37 29TH STREET
Long Island City, NY, 11101
mzouak@airtekenv.com

Total Amount: $2,700.00
Contract Number: C000013543
Service ID/Service: 67196, ACM Services for IEH HMT
SCA Project ID: 107932 CAPACITY
SCA Project Description: FEASIBILITY STUDY
DOE Auth Const Amt: $47,745,000.00

DOE Work Order No(s):
Comments :

This document shall serve as notice that AIRTEK ENVIRONMENTAL CORPORATION is directed immediately to:

Building ID: R31B Building Name: PROJECT #4 - D31 - R
Address: Staten Island NY Boro: Staten Island Geo District: 31
Custodian:

and perform all necessary environmental-related work in accordance with SCA specifications, all applicable health and safety codes, and as directed by the Industrial and Environmental Hygiene Division. See the attachment to this document for detailed instructions.

Payment requests for work performed shall be prepared and submitted in accordance with the requirements specified within contract documents for contract C000013543 by and between New York City School Construction Authority and AIRTEK ENVIRONMENTAL CORPORATION. Payments will be approved only after receipt of a completed Request for Payment form and all appropriate documentation.

NOTE: NO WORK SHALL BE PERFORMED WHILE SCHOOL IS OCCUPIED, UNLESS OTHERWISE AUTHORIZED. No work shall commence without prior notification to the SCA representative and the school custodian.

Additional Instructions:

Submitted by:	Yujaya Mikkilineni	Approved by:	Fosu, Kwame
Telephone:	(718) 752-5042		(718) 472-8512

New York City
School Construction Authority
Industrial and Environmental Hygiene

CONSULTANT
WORK AUTHORIZATION SCOPE

WA #: 872005 Initial
Date Issued: 07/11/2017 Initiation Date: 07/11/2017
Final WA: No

Contract Number: C000013543 Contractor: AIRTEK ENVIRONMENTAL CORPORATION

Consultant shall furnish the services described in the areas identified below in accordance with the items of the contract, and will follow all legal requirements.

SCA Project ID: 107932 CAPACITY FEASIBILITY STUDY
Expedited: No Sampling Required: No
Project Level:

Work Type	Description	Amount
LAMP04	ACM Core Sampling Survey*	$1,200.00
		Project-Level Total: $1,200.00
		Grand Total: $2,700.00

Building ID: R31B Building Name: PROJECT #4 - D31 - R
Address: Staten Island NY Boro: Staten Island Geo District: 31

Building Level:

Work Type	Description	MOC	Location	Amount
LAMP04	ACM Core Sampling Survey*	FS		$0.00
Deliverable: Pre-Core Sampling Survey and Clearance Report				
Deliverable: Post-Core Sampling Survey and Clearance Report				
LAMP31	ACM Field Labor - Bulk Sample Collection	NTE		$1,000.00
LAMP30	ACM Lab Reimbursables	NTE		$500.00
				Building-Level Total: $1,500.00

PROPOSED SAMPLE LOCATIONS

St. John Villa Campus
Staten Island, New York

AKRF Engineering, P.C.
440 Park Avenue South, New York, N.Y. 10016

DATE
6/5/2017

PROJECT NO.
89215

FIGURE
1

HILLBROOK DRIVE
FINGERBOARD RD
CHICAGO ALLEY
CHICAGO AVE
CLEVELAND ALLEY
CLEVELAND PLACE
GARSON AVE
LANDIS AVE
KNAUTH PLACE
HASTINGS ST
SAVO LANE
NARROWS RD SOUTH
STATEN ISLAND EXPRESSWAY

3024 3023 3089 3087 3085 3081 3092 3095 3101 3102

Parking Lot
Residential
Geller House School (PBSs)
Chapel
Convent
Elementary School
Child Development Center-UPK
Annex
Garage
High School
Gymnasium/ Auditorium
St. Joseph Academy High School

SB-1 SB-2 SB-3 SB-4 SB-6 SB-7 SB-8 SB-9 SB-10 SB-11 SB-13 SB-14 SB-16 SB-18 SB-19
SB/TW-1 SB/TW-5 SB/TW-12 SB/TW-15 SB/TW-17
SV-1 SV-2 SV-3 SV-4 SV-5 SV-6 SV-7 SV-8 SV-9 SV-10 SV-11 SV-12 SV-13 SV-14 SV-15 SV-16 SV-17 SV-18

Approx.Location of Groudwater Monitoring Well
Inaccessible
Pool and Pool Shed
Approx. Location of Fill Port and Vent Pipe for 2,000-gallon No. 2 Fuel Oil UST
Approx. Location 275-Gallon No. 2 Fuel Oil AST
Assumed Remote Fill Line Location
Approx. Location of Vent Pipe for 2,000-Gallon No. 2 Fuel Oil UST
Approx. Location of Excavation for 2,000-Gallon No. 2 Fuel Oil UST
Approx. Location of Remote Fill Port for 6,000-Gallon No. 2 Fuel Oil UST
Approx. Location of Vent Pipe and Former Fill Port for 6,000-Gal No.2 Fuel Oil UST
55 Gallon Drum

LEGEND

- PROPOSED SOIL BORING
- PROPOSED SOIL BORING/TEMPORARY WELL
- PROPOSED SOIL VAPOR POINT
- PROJECT SITE BOUNDARY
- 1 LOT BOUNDARY AND TAX LOT NUMBER
- 3087 BLOCK NUMBER
- BUILDING
- ANTICIPATED GROUNDWATER FLOW
- UST UNDERGROUND STORAGE TANK
- AST ABOVEGROUND STORAGE TANK
- V VENT PIPE
- F FILL PORT

0 50 100 200
SCALE IN FEET

Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

©2017 AKRF W:\Projects\89215 - ST. JOHN VILLA\Technical\GIS and Graphics\Hazmat\89215 Figure 1 SOW Site Plan.mxd6/4/2017 10:08:05 PM mveilleux

APPENDIX C

Company & Personnel Certifications

New York State – Department of Labor

Division of Safety and Health
License and Certificate Unit
State Campus, Building 12
Albany, NY 12240

ASBESTOS HANDLING LICENSE

Airtek Environmental Corporation

39-37 29th Street

Long Island City, NY 11101

FILE NUMBER: 99-0589
LICENSE NUMBER: 28638
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 06/21/2017
EXPIRATION DATE: 06/30/2018

Duly Authorized Representative – Saad Zouak:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Eileen M. Franko, Director
For the Commissioner of Labor

SH 432 (8/12)

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2018
Issued April 01, 2017
Revised May 23, 2017

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. SAAD ZOUAK
AIRTEK ENVIRONMENT CORP
39-37 29TH STREET
LONG ISLAND CITY, NY 11101

NY Lab id No: 11040

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	Item 198.1 of Manual
	EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual
Asbestos-Vermiculite-Containing Material	Item 198.8 of Manual

Serial No.: 56539

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Airtek Environmental Corp.
39-37 29th Street
Long Island City, NY 11101
Mr. Saad Zouak
Phone: 718-937-3720 Fax: 718-937-3721
Email: mzouak@airtekenv.com
http://www.airtekenv.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 102011-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102011-0

Airtek Environmental Corp.

Long Island City, NY

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-04-01 through 2018-03-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

NYC DEP ASBESTOS CONTROL PROGRAM
ASBESTOS CERTIFICATE

NASSRY,
ENAYAT
INVESTIGATOR
114891

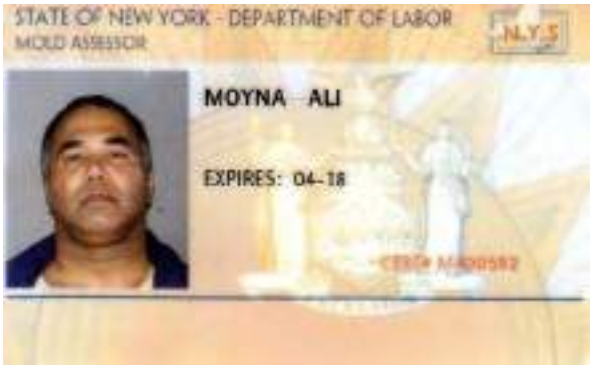
EXPIRES: 7/4/2019
DOB:

MUST BE CARRIED ON ALL ASBESTOS PROJECTS

STATE OF NEW YORK - DEPARTMENT OF LABOR
ASBESTOS CERTIFICATE

ENAYAT NASSARY
CLASS(EXPIRES)
C ATEC(07/18) D INSP(07/18)
E MGPL(07/18) H PM (07/18)
I PD (07/18)

MUST BE CARRIED ON ASBESTOS PROJECTS

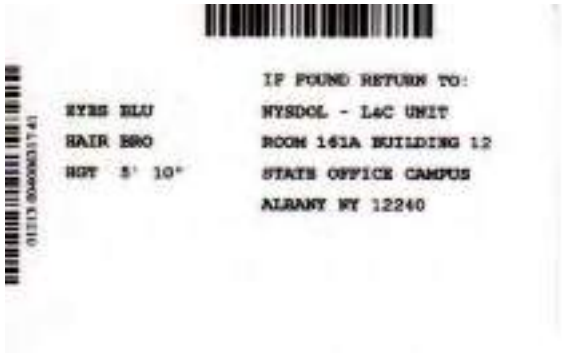

STATE OF NEW YORK - DEPARTMENT OF LABOR
MOLD ASSESSOR
N.Y.S.
MOYNA ALI
EXPIRES: 04-18

EYES BRN
HAIR BLK
HGT 5' 8 "
IF FOUND, RETURN TO:
NYSDOL - L&C UNIT
ROOM 161A BUILDING 12
STATE OFFICE CAMPUS
ALBANY NY 12240

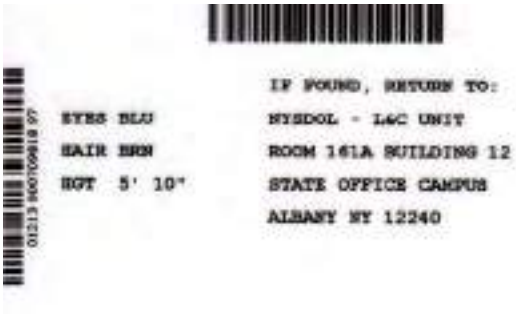
STATE OF NEW YORK - DEPARTMENT OF LABOR
ASBESTOS CERTIFICATE
N.Y.S.
MOYNA M ALI
CLASS(EXPIRES)
C ATEC(03/18) D INSP(03/18)
H PM (03/18)
MUST BE CARRIED ON ASBESTOS PROJECTS

EYES BRO
HAIR BLK
HGT 5' 08"
IF FOUND RETURN TO:
NYSDOL - L&C UNIT
ROOM 161A BUILDING 12
STATE OFFICE CAMPUS
ALBANY NY 12240

STATE OF NEW YORK - DEPARTMENT OF LABOR
ASBESTOS CERTIFICATE
N.Y.S.
MICHAEL E PORTER
CLASS(EXPIRES)
D INSP(10/17) 1 PD (10/17)
MUST BE CARRIED ON ASBESTOS PROJECTS

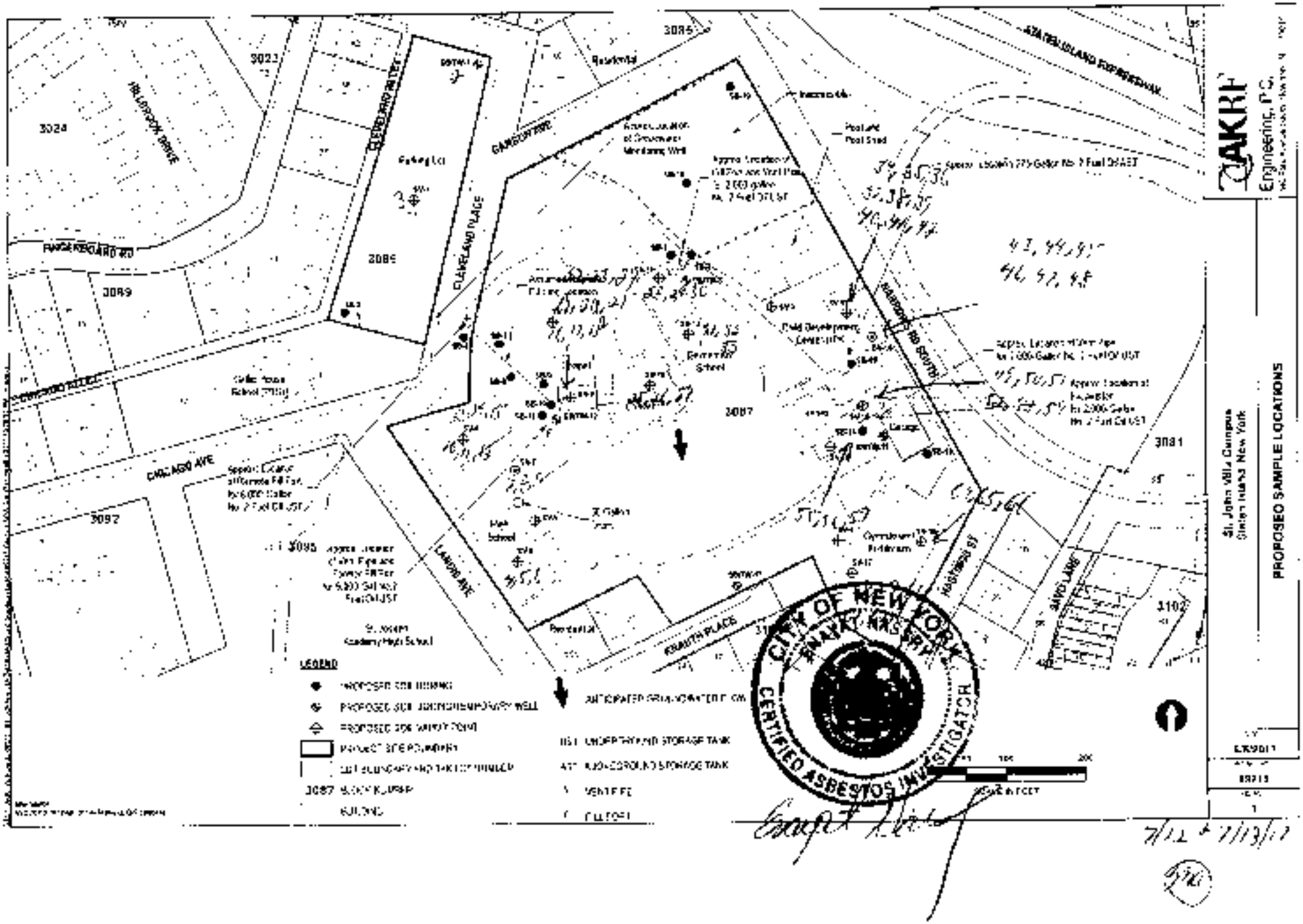

EYES BLU
HAIR BRO
HGT 5' 10"
IF FOUND RETURN TO:
NYSDOL - L&C UNIT
ROOM 161A BUILDING 12
STATE OFFICE CAMPUS
ALBANY NY 12240

STATE OF NEW YORK - DEPARTMENT OF LABOR
MOLD ASSESSOR
N.Y.S.
MICHAEL PORTER
EXPIRES: 03-18


EYES BLU
HAIR BRN
HGT 5' 10"
IF FOUND, RETURN TO:
NYSDOL - L&C UNIT
ROOM 161A BUILDING 12
STATE OFFICE CAMPUS
ALBANY NY 12240

APPENDIX D

Bulk Sample Location Drawing


PROPOSED SAMPLE LOCATIONS
St. John Villa Campus
Staten Island New York
LEGEND
BUILDING
CITY OF NEW YORK
CERTIFIED ASBESTOS INVESTIGATOR

DELTA Geophysics Inc.

GEOPHYSICAL INVESTIGATION REPORT

SITE LOCATION:

57 Cleveland Place
Staten Island, New York 10305

PREPARED FOR:

AKRF, Inc.

34 South Broadway, Suite 401
White Plains, New York 10601

PREPARED BY:

Dylan Morgenweck
Delta Geophysics Inc.
738 Front Street
Catasauqua, PA 18032

July 13, 2017

Delta Geophysics, Inc. (Delta) is pleased to provide the results of the geophysical survey conducted at 57 Cleveland Place Staten Island, New York 10305.

1.0 INTRODUCTION

On July 12 and 13, 2017 Delta Geophysics personnel performed a limited geophysical investigation at 57 Cleveland Place Staten Island, New York 10305. The areas of interest included various proposed boring locations throughout the campus of a school. Surface conditions consisted of asphalt, concrete, grass, and heavily wooded areas.

2.0 SCOPE OF WORK

The survey was conducted to locate and mark all utilities within proximity of the proposed boring locations. A secondary objective was to investigate the subsurface for anomalies consistent with USTs and/or excavations, and any other unknown anomalous features within proximity of proposed borings. Per the client's instructions, Delta personnel did not survey the entire property during this survey.

3.0 METHODOLOGY

Selection of survey equipment is dependent site conditions and project objectives. For this project the technician utilized the following equipment to survey the area of concern:

- Geophysical Survey Systems Inc. SIR-3000 cart-mounted Ground Penetrating Radar (GPR) unit with a 400 Mhz antenna.
- Radiodetection RD7000 precision utility locator.
- Fisher M-Scope TW-6 pipe and cable locator.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 1,000 MHz) to acquire subsurface information. Energy is propagated downward into the ground and is reflected back to the surface from boundaries at which there are electrical property contrasts. GPR is a method that is commonly used for environmental, engineering, archeological, and other shallow investigations.

The GSSI SIR-3000 GPR can accept a wide variety of antennas which provide various depths of penetration and levels of resolution. The 400 MHz antenna can achieve depths of penetration up to about 20 feet, but this depth may be greatly reduced due to site-specific conditions. Signal penetration decreases with increased soil conductivity. Conductive materials attenuate or absorb the GPR signal. As depth increases the return signal becomes weaker. Penetration is the greatest in unsaturated sands and fine gravels. Clayey, highly saline or saturated soils, areas covered by steel reinforced concrete, foundry slag, of other highly conductive materials significantly reduces GPR depth of penetration.

The GPR was configured to transmit to a depth of approximately 10 feet below the subsurface, but actual signal penetration was approximately 1-3 feet below ground surface (bgs). The limiting factor was signal attenuation from near surface soils.

The RD7000 precision utility locator uses radio emission to trace the location of metal bearing utilities. This radio emission can be active or passive. Active tracing requires the attachment of a radio transmitter to the utility, passive tracing uses radio emissions that are present on the utility. Underground electrical utilities typically emit radio signals that this device can detect.

The TW-6 is designed to find pipes, cables and other metallic objects such as underground storage tanks. One surveyor can carry both the transmitter and receiver together, making it ideally suited for exploration type searches of ferrous metal masses. Metal detectors of this type operate by generating a magnetic field at the transmitter which causes metallic objects in the subsurface to generate a secondary magnetic field. The induced secondary field is detected by the receiver, which generates an audible tone equal to the strength of the secondary field.

4.0 SURVEY FINDINGS

All accessible areas within proximity of the client-designated boring locations were examined during this investigation. Locations were surveyed with the RD-7000 for potential subsurface utilities, then surveyed with TW-6 and GPR for potential anomalous features. Delta personnel located four metallic anomalies, three known USTs, and utilities during the survey. The following sections detail the findings of the geophysical investigation.

Metallic Anomaly #1

Delta utilized the TW-6 and GPR to detect a metallic anomaly east of the fence on Cleveland Place, near SB-6 and SB-7. The anomaly is approximately 5 feet long and 5 feet wide. GPR transects imaged a flat feature approximately 2-3 feet bgs, however its specific identity is unknown.

Metallic Anomaly #2

Delta utilized the TW-6 and GPR to detect a metallic anomaly at the base of the stairs to the Chapel, near SB-9. GPR transects imaged a cylindrical feature approximately 6 feet long and 4 feet wide. Based upon TW-6 and GPR data collected, this feature is potentially a UST.

Metallic Anomaly #3

Delta utilized the TW-6 and GPR to detect a metallic anomaly east of the Garage. GPR transects imaged a cylindrical feature approximately 7 feet long and 5 feet wide, however the feature's proximity to a concrete wall and metal plate prevented an accurate delineation of its dimensions. Based upon TW-6 and GPR data collected, this feature is potentially a UST.

Metallic Anomaly #4

Delta utilized the TW-6 and GPR to detect a metallic anomaly southeast of the Garage, partially beneath the concrete path leading to the Gymnasium. GPR transects imaged a cylindrical feature approximately 9 feet long and 5 feet wide. Based upon TW-6 and GPR data collected, this feature is potentially a UST.

Known UST #1

Delta utilized the TW-6 and GPR to delineate a known 6,000-gallon No. 2 fuel oil UST in the path adjacent to the Chapel. A remote fill, vent, and product lines were located leading to the UST. The UST measures approximately 16 feet long and 8 feet wide.

Known UST #2

Delta utilized the TW-6 and GPR to delineate a known 2,000-gallon No. 2 fuel oil UST northeast of the Elementary School. Vent and product lines were located leading to the UST. The UST measures approximately 12 feet long and 5 feet wide.

Known UST #3

Delta utilized the TW-6 and GPR to delineate a known 2,000-gallon No. 2 fuel oil UST southeast of the Annex. Vent and product lines were located leading to the UST. The UST measures approximately 12 feet long and 5 feet wide.

Utility Survey

Delta personnel identified the following utilities during the survey: natural gas, electric, sanitary sewer, storm sewer, water, vent lines, fill lines, product lines, and unknown utilities. All located utilities were marked in the appropriate colors. Vent lines, fill lines, product lines, unknown utilities, metallic anomalies, and known USTs were marked in pink paint.

5.0 SURVEY LIMITATIONS

GPR depth of penetration was limited to approximately 1-3 feet bgs. The limiting factor was due to conductive soils. The TW-6 was unable to be used over areas of reinforced concrete or metal plating, and could not be utilized within proximity to metal fences, buildings, or parked cars. Reinforced concrete severely attenuated GPR signal penetration, reducing overall effectiveness.

6.0 WARRANTIES AND DISCLAIMER

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity to any anomalies indicated in this report. In addition, the absence of detected signatures does not preclude the possibility that targets may exist. To the extent the client desires more definitive conclusions than are warranted by the currently available facts; it is specifically Delta's intent that the conclusions stated herein will be intended as guidance.

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based on the facts currently available within the limit or scope of work, budget and schedule. Delta represents that the services were performed in a manner consistent with currently accepted professional practices employed by geophysical/geological consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

This report was prepared pursuant to the contract Delta has with the Client. That contractual relationship included an exchange of information about the property that was unique and between

Delta and its client and serves as the basis upon which this report was prepared. Because of the importance of the understandings between Delta and its client, reliance or any use of this report by anyone other than the Client, for whom it was prepared, is prohibited and therefore not foreseeable to Delta.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Delta's contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

GEOPHYSICAL ENGINEERING SURVEY REPORT

St. John Villa Academy

57 Cleveland Place
Staten Island, New York 10305

NOVA PROJECT NUMBER
17-0476

DATED
November 15, 2017

PREPARED FOR:

AKRF, INC.

Environmental, Planning, and Engineering Consultants
440 Park Ave South, 7th Floor
New York, NY 10016

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions

56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway, # 765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

November 15, 2017

Elizabeth Matamoros
Environmental Scientist/Planner
AKRF, INC.
34 South Broadway, Suite 401
White Plains, NY 10601
440 Park Avenue South
New York, NY 10016
P) 914.922.2397
C) 347.328.3567

Re: Geophysical Engineering Survey (GES) Report
St. John Villa Academy
57 Cleveland Place
Staten Island, New York 10305

Dear Ms. Matamoros:

Nova Geophysical Services (NOVA) is pleased to provide findings of the geophysical engineering survey (GES) at the above referenced project site: 57 Cleveland Place, Staten Island, New York 10305 (the "Site"). Please see attached Site Location and Survey Plan maps for more details.

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a Geophysical engineering surveys (GES) consisting of a Ground Penetrating Radar (GPR) survey at the site. The purpose of this survey is to locate and identify utilities and other substructures as well as clear boring locations on November 10th, 2017.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) shielded antenna and a Radio Detection R7100 electromagnetic utility locator.

A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

GEOPHYSICAL METHODS

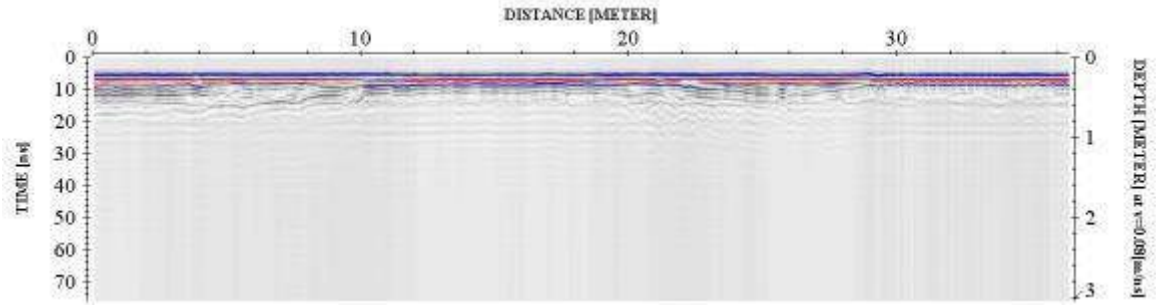
The project site was screened using the GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface.

GPR data profiles were collected for the areas of the Site specified by the client. The surveyed areas consisted of asphalt, concrete, and soil.

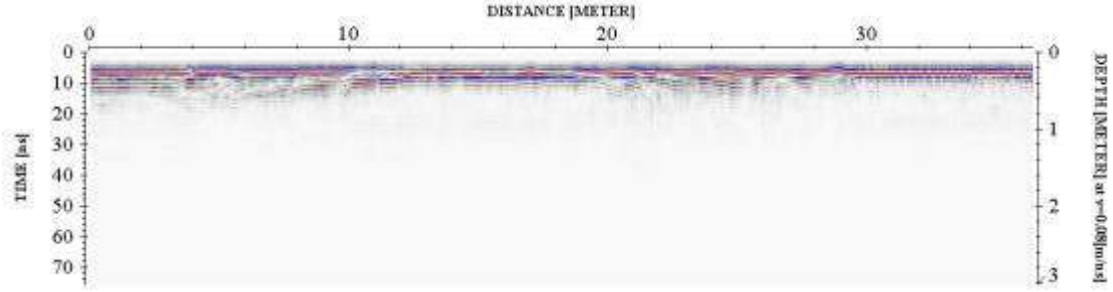
DATA PROCESSING

In order to improve the quality of the results and to better identify subsurface anomalies NOVA processed the collected data. The processes flow is briefly described in this section.

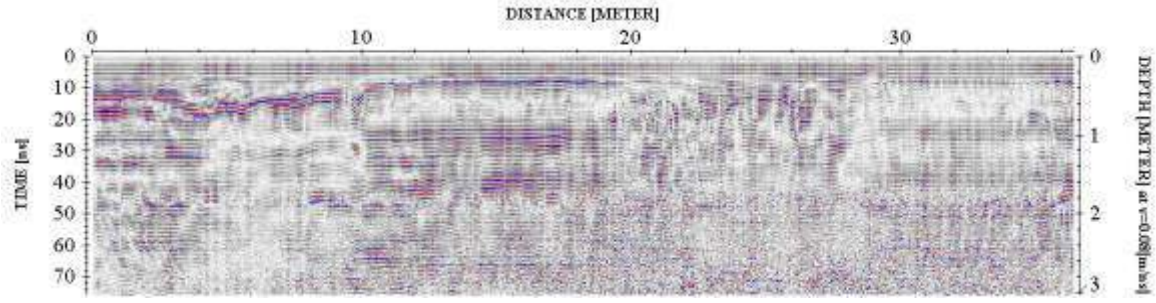
Step 1. Import raw RAMAC data to standard processing format



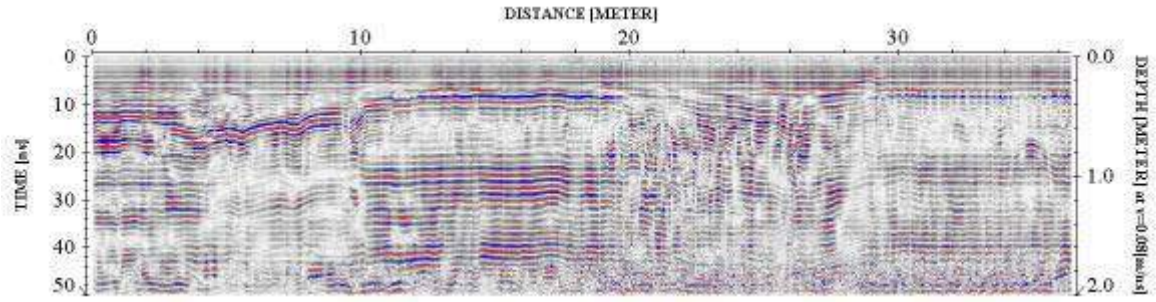
Step 2. Remove instrument noise *(dewow)*



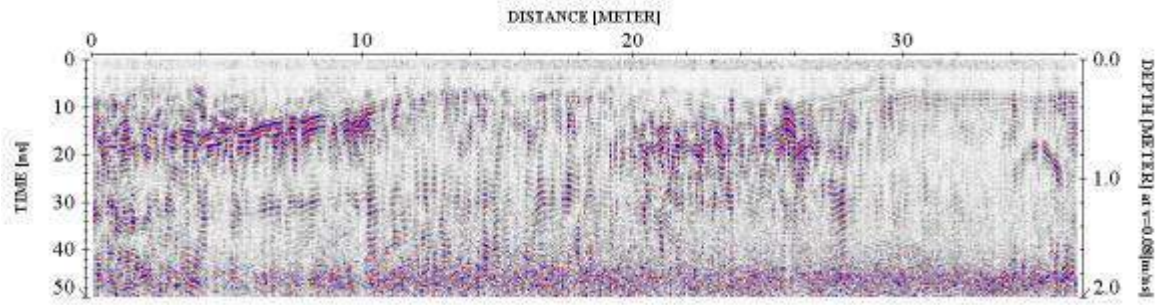
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and describes the subsurface anomalies more accurately.

PHYSICAL SETTINGS

NOVA observed following physical conditions at the time of the survey:

Weather: Sunny

Temperature: 30 Degrees (F)

Surface: Asphalt, concrete, soil

Geophysical Noise Level (GNL): Geophysical Noise Level (GNL) was medium at the site. The noise was a result of the site being located in a suburban environment.

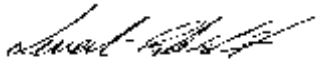
RESULTS

The results of the geophysical engineering survey (GES) identified following at the project Site:

- NOVA surveyed 3 discrete areas as depicted on the Survey Plan.
- The Survey Plan depicts the water, gas, electric, sanitary sewer and storm sewer lines found within the survey areas.
- NOVA identified two large geophysical anomalies. A vent pipe line, fuel oil feed and return lines, and a direct fill port were also identified corresponding to the anomaly in the North portion of the site.
- All detected subsurface anomalies were marked in the onsite mark out.
- Nova cleared and marked all of the proposed boring locations at the site.
- The Survey Plan portrays the subsurface areas investigated during the GES.

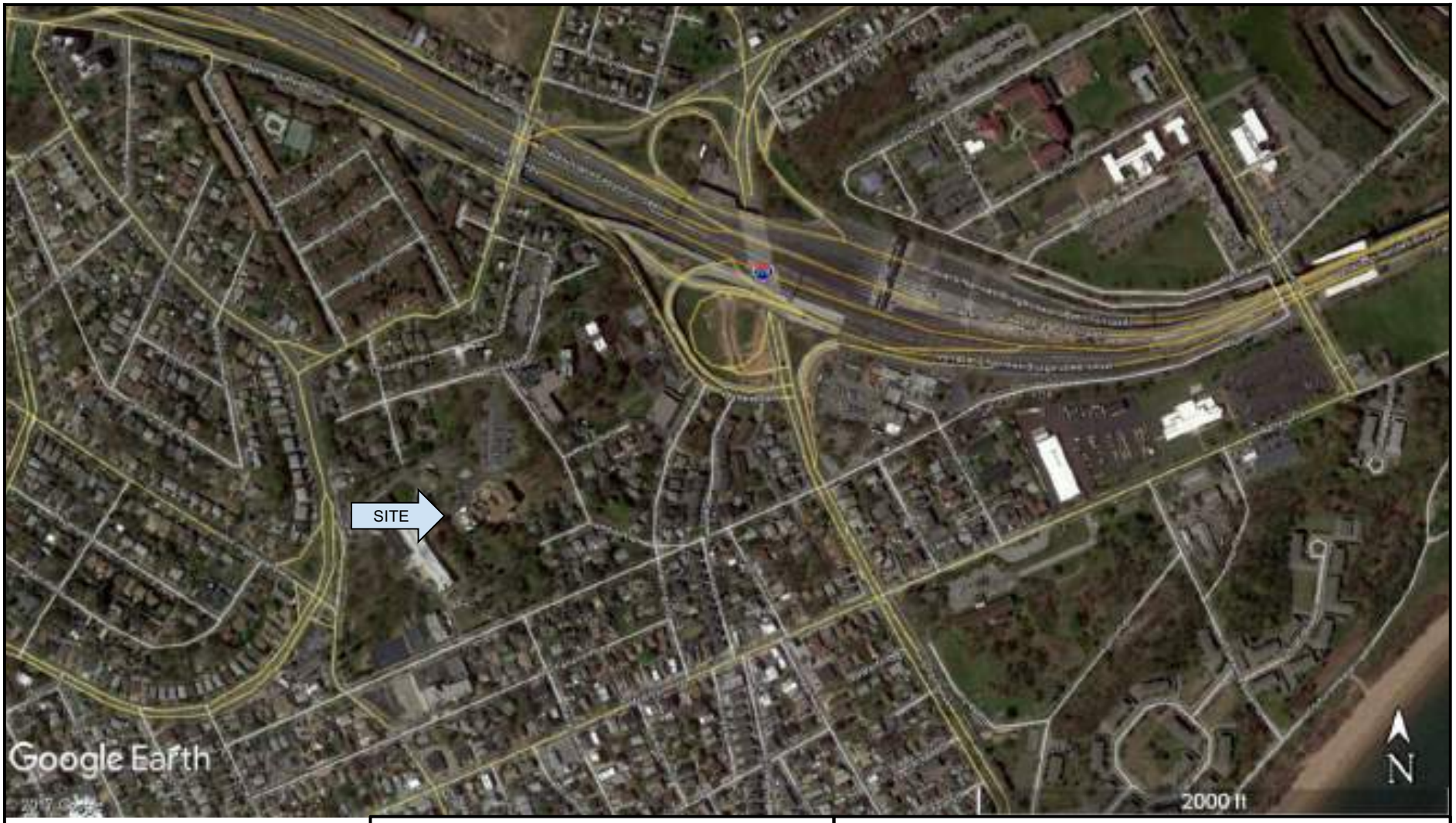
If you have any questions, please do not hesitate to contact the undersigned.
Sincerely,

NOVA Geophysical Services



Levent Eskicakit, P.G., E.P.
Project Engineer

Attachments:
Site Location Map
Survey Plan
Geophysical Images



NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

SITE LOCATION MAP

SITE: **St. John Villa Academy**
57 Cleveland Place
Staten Island, New York 10305

CLIENT: AKRF

DATE: November 10, 2017

AUTH: Chris Steinley

LEGEND

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www.nova-gsi.com

SURVEY PLAN

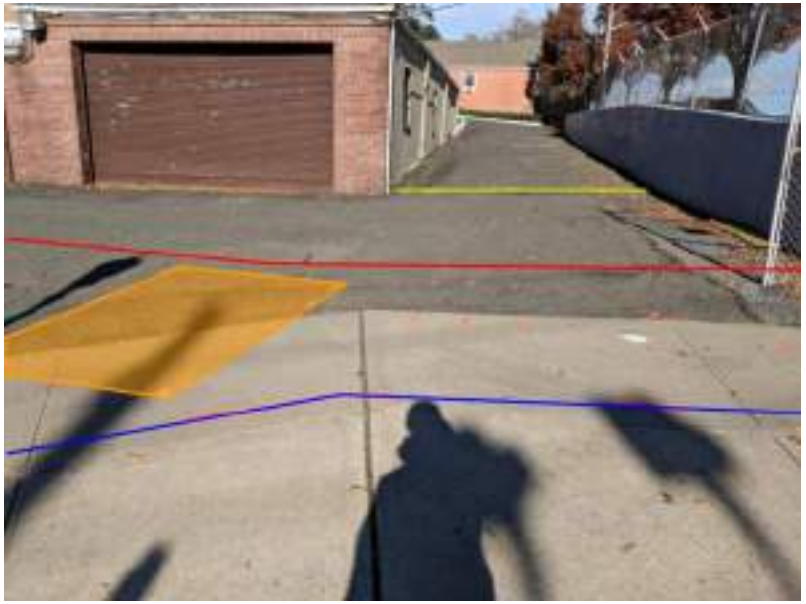
SITE:	**St. John Villa Academy** 57 Cleveland Place Staten Island, New York 10305
CLIENT:	AKRF
DATE:	November 10, 2017
AUTH:	Chris Steinley

LEGEND

- Survey Area
- Gas
- Storm Sewer
- Water
- Sanitary Sewer
- Electric
- Anomaly Area
- UST Lines

GEOPHYSICAL IMAGES

St. John Villa Academy
57 Cleveland Place
Staten Island, New York 10305
November 10, 2017



GEOPHYSICAL IMAGES

St. John Villa Academy
57 Cleveland Place
Staten Island, New York 10305
November 10, 2017

GEOPHYSICAL IMAGES

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GEOPHYSICAL IMAGES

St. John Villa Academy
57 Cleveland Place
Staten Island, New York 10305
November 10, 2017

Appendix C

Soil Boring, Soil Vapor, Indoor Air, Ambient Air, and Groundwater Sample Collection Logs

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Direct Push
Client:	SCA	**Sampled By:**	JM
Date:	8/3/2017	**Weather:**	Sunny 75 F

Sample Setup

Vapor Point Depth:	**60**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**47.12**	In^3	**Purge Volume:**	**2.1 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	8.6	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-1**	**SUMMA® Canister ID:**	**5131**
Flow Controller ID:	**3222**	**Soil Vapor Sample ID:**	**SV-1**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**10:00**	-28.00	ND	
Time Halfway:	**10:30**	-18.00	ND	
Time Stopped:	**10:58**	-6.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Direct Push
Client:	SCA	**Sampled By:**	JM
Date:	8/3/2017	**Weather:**	Sunny 75 F

Sample Setup

Vapor Point Depth:	**60**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**47.12**	In^3	**Purge Volume:**	**2.1 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	39.0	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-2**	**SUMMA® Canister ID:**	**5148**
Flow Controller ID:	**4188**	**Soil Vapor Sample ID:**	**SV-2**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**10:25**	-30.00	ND	
Time Halfway:	**10:52**	-20.00	ND	
Time Stopped:	**11:25**	-5.50	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Direct Push
Client:	SCA	**Sampled By:**	JM
Date:	8/3/2017	**Weather:**	Sunny 75 F

Sample Setup

Vapor Point Depth:	**60**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**47.12**	In^3	**Purge Volume:**	**2.1 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	4.6	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-3**	**SUMMA® Canister ID:**	**5025**
Flow Controller ID:	**4065**	**Soil Vapor Sample ID:**	**SV-3**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**12:00**	-30.00	ND	
Time Halfway:	**12:28**	-21.00	ND	
Time Stopped:	**13:00**	-7.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Direct Push
Client:	SCA	**Sampled By:**	JM
Date:	8/3/2017	**Weather:**	Sunny 85 F

Sample Setup

Vapor Point Depth:	**60**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**47.12**	In^3	**Purge Volume:**	**2.1 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	19.5	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-4**	**SUMMA® Canister ID:**	**4148**
Flow Controller ID:	**4193**	**Soil Vapor Sample ID:**	**SV-4**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**11:00**	-30.00	ND	
Time Halfway:	**11:30**	-20.00	ND	
Time Stopped:	**12:00**	-5.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample collected in a -L SUMMA® canister using a -hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Direct Push
Client:	SCA	**Sampled By:**	JM
Date:	8/3/2017	**Weather:**	Sunny 80 F

Sample Setup

Vapor Point Depth:	**60**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**47.12**	In^3	**Purge Volume:**	**2.1 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	9.1	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-5**	**SUMMA® Canister ID:**	**2521**
Flow Controller ID:	**4204**	**Soil Vapor Sample ID:**	**SV-5**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**11:30**	-25.00	ND	
Time Halfway:	**12:04**	-15.00	ND	
Time Stopped:	**12:24**	-7.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 77 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	19.8	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-6**	**SUMMA® Canister ID:**	**4794**
Flow Controller ID:	**3117**	**Soil Vapor Sample ID:**	**SV-6**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**10:59**	-28.50	ND	
Time Halfway:	**11:36**	-16.00	ND	
Time Stopped:	**12:00**	-6.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-6 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 77 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	333	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-7**	**SUMMA® Canister ID:**	**2535**
Flow Controller ID:	**5009**	**Soil Vapor Sample ID:**	**SV-7**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**10:32**	-30.00	ND	
Time Halfway:	**11:00**	-19.00	ND	
Time Stopped:	**11:33**	-6.00	1.3 ppm	Interior painting moved closer to soil vapor sample location.

Notes:	*Purge flow rate not to exceed 0.2 L/min.
	ND = non-detect ppm = parts per million L/min = Liters per minute
	Soil vapor sample SV-7 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 77 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	3.6	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-8**	**SUMMA® Canister ID:**	**3790**
Flow Controller ID:	**4188**	**Soil Vapor Sample ID:**	**SV-8**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**9:58**	-29.00	ND	
Time Halfway:	**10:20**	-17.00	ND	
Time Stopped:	**10:40**	-4.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-8 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 77 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	33.9	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-9**	**SUMMA® Canister ID:**	**2563**
Flow Controller ID:	**3999**	**Soil Vapor Sample ID:**	**SV-9**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**13:48**	-30.00	ND	
Time Halfway:	**14:21**	-16.50	ND	
Time Stopped:	**14:41**	-7.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-9 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 88 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	31.5	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-10**	**SUMMA® Canister ID:**	**3419**
Flow Controller ID:	**4511**	**Soil Vapor Sample ID:**	**SV-10**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**14:12**	-30.00	ND	
Time Halfway:	**14:38**	-18.00	ND	
Time Stopped:	**15:06**	-6.50	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-10 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 89 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	4.9	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-11**	**SUMMA® Canister ID:**	**3037**
Flow Controller ID:	**4505**	**Soil Vapor Sample ID:**	**SV-11**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**15:12**	-30.00	ND	**WD-40 stored in Boiler Room.**
Time Halfway:	**15:39**	-20.00	ND	
Time Stopped:	**16:10**	-6.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-11 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 88 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	6	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-12**	**SUMMA® Canister ID:**	**3659**
Flow Controller ID:	**4528**	**Soil Vapor Sample ID:**	**SV-12**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**14:50**	-30.00	ND	**n, Clorox stored near soil vapor sampl**
Time Halfway:	**15:20**	-20.00	ND	
Time Stopped:	**15:51**	-6.00	ND	

Notes:	*Purge flow rate not to exceed 0.2 L/min.
	ND = non-detect ppm = parts per million L/min = Liters per minute
	Soil vapor sample SV-12 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 77 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	2.4	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-13**	**SUMMA® Canister ID:**	**4308**
Flow Controller ID:	**2763**	**Soil Vapor Sample ID:**	**SV-13**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**9:07**	-30.00	0.9 ppm	**UPK building was cleaned 2 days prior to leak test on 8/22. Sample collected on 8/23.**
Time Halfway:	**9:51**	-12.00	0.5 ppm	
Time Stopped:	**10:06**	-5.00	0.5 ppm	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-13 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/22/2017	**Weather:**	Sunny 77 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	3.5	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-14**	**SUMMA® Canister ID:**	**2515**
Flow Controller ID:	**3384**	**Soil Vapor Sample ID:**	**SV-14**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**9:09**	-30.00	0.5 ppm	**UPK building was cleaned 2 days prior to leak test on 8/22. Sample collected on 8/23.**
Time Halfway:	**9:53**	-10.00	0.2 ppm	
Time Stopped:	**10:03**	-5.50	0.2 ppm	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-14 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/23/2017	**Weather:**	Sunny 74 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	241.7	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.01	%

Sample Identification

Soil Vapor Point ID:	**SV-16**	**SUMMA® Canister ID:**	**4343**
Flow Controller ID:	**4193**	**Soil Vapor Sample ID:**	**SV-16**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**9:48**	-30.00	ND	**Ajax cleaner and Wax stripper stored in Bathroom near soil vapor sample location.**
Time Halfway:	**10:42**	-16.00	ND	
Time Stopped:	**11:15**	-5.50	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-16 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/23/2017	**Weather:**	Sunny 82 F

Sample Setup

Vapor Point Depth:	**60**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**47.12**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	46.6	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-17**	**SUMMA® Canister ID:**	**2538**
Flow Controller ID:	**4720**	**Soil Vapor Sample ID:**	**SV-17**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**11:40**	-29.50	ND	
Time Halfway:	**12:15**	-12.00	ND	
Time Stopped:	**12:36**	-2.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-17 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	MJ
Project Location:	Staten Island, NY	**Installation Method:**	Manual
Client:	SCA	**Sampled By:**	MJ
Date:	8/23/2017	**Weather:**	Sunny 80 F

Sample Setup

Vapor Point Depth:	**12**	Inches	**Total Time of Purge:**	10 min.	
Tubing Volume:	**0.59**	In^3	**Purge Volume:**	**0.029 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	65	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-18**	**SUMMA® Canister ID:**	**4067**
Flow Controller ID:	**3932**	**Soil Vapor Sample ID:**	**SV-18**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**11:13**	-30.00	ND	
Time Halfway:	**11:40**	-17.00	ND	
Time Stopped:	**12:11**	-5.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-18 collected in a 6-L SUMMA® canister using a 1-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Hammer Drill
Client:	SCA	**Sampled By:**	MJ
Date:	11/11/2017	**Weather:**	Sunny, 36 F

Sample Setup

Vapor Point Depth:	**24**	Inches	**Total Time of Purge:**	5 min.	
Tubing Volume:	**1.178**	In^3	**Purge Volume:**	**0.8 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	1.7	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-ES1**	**SUMMA® Canister ID:**	**2511**
Flow Controller ID:	**5185**	**Soil Vapor Sample ID:**	**SV-ES1**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**10:00**	-30.00	ND	
Time Halfway:	**15:00**	-20.00	ND	
Time Stopped:	**18:30**	-2.50	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-ES1 collected in a 6-L SUMMA® canister using a 8-hour flow controller.

Soil Vapor Sample Log

AKRF Project No:	89215	**Point Installed By:**	Cascade
Project Location:	Staten Island, NY	**Installation Method:**	Hammer Drill
Client:	SCA	**Sampled By:**	MJ
Date:	11/11/2017	**Weather:**	Sunny, 36 F

Sample Setup

Vapor Point Depth:	**24**	Inches	**Total Time of Purge:**	5 min.	
Tubing Volume:	**1.178**	In^3	**Purge Volume:**	**0.9 Liters**	
Purging Pump:	Gilair Plus		**Purged Vapor PID:**	1.7	ppm
Pump Flow Rate*:	0.2	L/min	**Helium Concentration:**	0.0	%

Sample Identification

Soil Vapor Point ID:	**SV-ES2**	**SUMMA® Canister ID:**	**5465**
Flow Controller ID:	**3735**	**Soil Vapor Sample ID:**	**SV-ES2**

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Notes
Time Started:	**9:45**	-30.00	0.2 ppm	
Time Halfway:	**15:42**	-14.00	ND	
Time Stopped:	**18:04**	0.00	ND	

Notes:

*Purge flow rate not to exceed 0.2 L/min.

ND = non-detect ppm = parts per million L/min = Liters per minute

Soil vapor sample SV-ES1 collected in a 6-L SUMMA® canister using a 8-hour flow controller.

Indoor Air Sample Log

AKRF Project No:	89215	**Client:**	SCA
Project Location:	Staten Island, NY	**Sampled By:**	MJ
Date:	11/11/2017	**Weather:**	Sunny, 36 F

Sample Setup

Sample Identification

On-Site Location:	Inside Boiler Room	**SUMMA® Canister ID:**	2536
Flow Controller ID:	3719	**Ambient Air Sample ID:**	IA-ES1

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Potential VOC Sources/Notes
Time Started:	**10:00**	-30.00	ND	Fuel oil boiler currently on
Time:	**13:58**	-20.00	ND	Fuel oil boiler currently on
Time Halfway:	**15:30**	-16.00	ND	Fuel oil boiler currently on
Time:	**17:00**	-12.00	ND	Fuel oil boiler currently on
Time Stopped:	**18:20**	-8.50	ND	Fuel oil boiler currently on

Notes:	ND = non-detect	ppm = parts per million	L/min = Liters per minute
	Indoor air sample IA-ES1 collected in a 6-L SUMMA® canister using a 8-hour flow controller. IA-ES1 sample placed "On-Hold".		

Indoor Air Sample Log

AKRF Project No:	89215	**Client:**	SCA
Project Location:	Staten Island, NY	**Sampled By:**	MJ
Date:	11/11/2017	**Weather:**	Sunny, 36 F

Sample Setup

Sample Identification

On-Site Location:	Inside Cafeteria/Auditorium	**SUMMA® Canister ID:**	2595
Flow Controller ID:	5168	**Ambient Air Sample ID:**	IA-ES2

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Potential VOC Sources/Notes
Time Started:	**9:03**	-30.00	0.2 ppm	None
Time:	**11:58**	-21.00	ND	None
Time Halfway:	**14:00**	-14.00	ND	None
Time:	**15:42**	-9.00	ND	None
Time Stopped:	**16:45**	-5.50	ND	None

Notes:			
	ND = non-detect	ppm = parts per million	L/min = Liters per minute
	Indoor air sample IA-ES2 collected in a 6-L SUMMA® canister using a 8-hour flow controller. IA-ES2 sample placed "On-Hold".		

Indoor Air Sample Log

AKRF Project No:	89215	**Client:**	SCA
Project Location:	Staten Island, NY	**Sampled By:**	MJ
Date:	11/11/2017	**Weather:**	Sunny, 36 F

Sample Setup

Sample Identification

On-Site Location:	Outside Elementary School	**SUMMA® Canister ID:**	4095
Flow Controller ID:	2761	**Ambient Air Sample ID:**	AA-1

Sample Collection

Time		Vacuum (in/Hg)	Background PID	Potential VOC Sources/Notes
Time Started:	**9:06**	-30.00	0.1 ppm	None
Time:	**10:30**	-21.50	ND	None
Time Halfway:	**11:22**	-17.00	ND	None
Time:	**13:15**	-11.00	ND	None
Time Stopped:	**14:35**	-5.00	ND	None

Notes:	ND = non-detect	ppm = parts per million	L/min = Liters per minute
	Ambient air sample AA-1 collected in a 6-L SUMMA® canister using a 8-hour flow controller.		

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-1

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75 °F,
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 08:40 **Finish Time: 09:05**

Date: 8/1/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 2": ASPHALT.	ND	Dry	ND	ND	SB-1 (1-3')
2		Middle 6": Black coarse SAND and fine GRAVEL, trace Silt (FILL).	ND	Dry	ND	ND	
3		Bottom 32": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	SB-1 (0-7') Waste Class
4							
5							
6	48	Top 24": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	
7		Middle 12": White fine GRAVEL and SAND, some Silt (FILL).	ND	Dry	ND	ND	
8							
9		Bottom 12": Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
10							
11	48	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	SB-1 (10-12')
12							
13							
14							
15							
16	36	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Waste Class sample analyzed for Cyanide (EPA 9012), Hexavalent Chromium (EPA 7196), DRO/GRO TPH (EPA 8015)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-2

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 08:35 **Finish Time: 08:50**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 4": ASPHALT and GRAVEL.	ND	Dry	ND	ND	SB-2 (1-3')
2							
3		Bottom 36": Coarse Brown SAND (FILL).	ND	Dry	ND	ND	
4							
5							
6	36	Coarse Brown SAND (FILL).	ND	Dry	ND	ND	
7							
8							
9							
10							
11	36	Coarse Brown SAND (FILL).	ND	Dry	ND	ND	SB-2 (10-12')
12							
13							
14							
15							
16	44	Top 8": Light Brown SAND and fine GRAVEL, some Silt (Suspected FILL).	ND	Dry	ND	ND	
17							
18		Bottom 36": Coarse Brown SAND (Suspected FILL).	ND	Dry	ND	ND	
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-3

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	85°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 14:30 **Finish Time: 14:55**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	34	Top 2": ASPHALT.	ND	Dry	ND	ND	
		Middle 6": White SAND, some fine Gravel (FILL).	ND	Dry	ND	ND	SB-3 (1-3')
2		Middle 6": Brown-black-red Coarse SAND (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 20": Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
5							
6	40	Red-brown SAND, some fine Gravel, trace Silt (Suspect FILL).	ND	Dry	ND	ND	
7							
8							
9							
10							
11	40	Red-brown SAND, some fine Gravel, trace Silt (Suspect FILL).	ND	Dry	ND	ND	SB-3 (10-12')
12							
13							
14							
15							
16	36	Red-brown SAND, some fine Gravel, trace Silt (Suspect FILL).	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-4

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	85°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 15:00 **Finish Time: 15:20**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 2": ASPHALT.	ND	Dry	ND	ND	
2		Middle 2": CONCRETE.	ND	Dry	ND	ND	SB-4 (1-3")
3		Middle 2": Red-brown-black coarse SAND (FILL).	ND	Dry	ND	ND	
4		Middle 18": Brown-black SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
5		Bottom 12": Brown-red SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
6	18	Brown-red SAND, some silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
7							
8							
9							
10							
11	36	Top 16": Brown-red SAND, some silt, trace fine Gravel (Suspected FILL).	ND	Dry	ND	ND	SB-4 (10-12")
12							
13		Middle 4": White GRAVEL (COBBLE)	ND	Dry	ND	ND	
14							
15		Bottom 16": Brown-red SAND, some Silt, trace fine Gravel (Suspected FILL).	ND	Dry	ND	ND	
16	40	Top 20": Brown-red SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
17		Middle 2": Gray Coarse SAND and fine Gravel (FILL).	ND	Dry	ND	ND	
18		Middle 12": Brown-red SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
19		Middle 4": Gray Coarse SAND and fine Gravel (FILL).	ND	Dry	ND	ND	
20		Bottom 2": Brown-red SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-5

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Overcast
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 15:25 **Finish Time: 15:55**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	28	Top 4": ASPHALT.	ND	Dry	ND	ND	
2		Middle 4": Red GRAVEL and BLACK SAND (FILL).	ND	Dry	ND	ND	SB-5 (1-3')
3		Middle 4": Black-yellow coarse SAND, some fine Gravel (FILL).	ND	Dry	ND	ND	
4		Middle 2": Brown SAND and fine GRAVEL, some Silt (FILL).	ND	Dry	ND	ND	
5		Middle 4": Black SAND and SILT, some fine Gravel (FILL).	ND	Dry	ND	ND	
		Bottom 10": Brown SAND and SILT (FILL).	ND	Dry	ND	ND	
6	34	Top 4": Brown fine SAND and SILT (FILL).	ND	Dry	ND	ND	
7		Middle 4": Brown-black SAND and fine GRAVEL, some Silt (FILL).	ND	Dry	ND	ND	
8		Middle 12": Brown SAND and SILT (FILL).	ND	Dry	ND	ND	
9		Middle 2": White GRAVEL (COBBLE).	ND	Dry	ND	ND	
10		Bottom 12": Red-brown-orange SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
11	40	Top 16": Red-brown-orange SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	SB-5 (10-12')
12							
13		Middle 6": White GRAVEL and SAND, some Silt (COBBLE)	ND	Dry	ND	ND	
14		Bottom 18": Red-brown-orange SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
15							
16	40	Red-brown-orange SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-6

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 10:00 **Finish Time: 10:15**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 3": Brown SAND, some Roots, Organics (TOPSOIL).	ND	Dry	ND	ND	SB-6 (1-3')
2							
3		Bottom 33": Brown SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
4							
5							
6	36	Brown SAND, some Silt, trace fine Gravel (Suspected FILL).	ND	Dry	ND	ND	
7							
8							
9							
10							
11	36	Brown SAND, some Silt, trace fine Gravel.	ND	Dry	ND	ND	SB-6 (10-12')
12							
13							
14							
15							
16	40	Brown SAND, some Silt, trace fine Gravel.	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-7

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	80 °F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 10:25 **Finish Time: 10:50**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 4": Brown SAND, some Roots, Organics (TOPSOIL).	ND	Dry	ND	ND	SB-7 (1-3')
2		Middle 6": Black-brown SAND and fine GRAVEL (FILL).	ND	Dry	ND	ND	
3		Middle 2": Brown-black stained SAND and fine GRAVEL, trace Brick, Wood (FILL).	Mild Petroleum	Dry	ND	ND	
4		Middle 24": Black-brown SAND (FILL).	ND	Dry	ND	ND	
5		Bottom 4": Brown SAND, some fine Gravel (FILL).	ND	Dry	ND	ND	
6	40	Brown SAND, some fine Gravel (Suspected FILL).	ND	Dry	ND	ND	SB-7 (5-7')
7							
8							
9							
10							
11	40	Brown SAND, some fine Gravel.	ND	Dry	ND	ND	
12							
13							
14							
15							
16	40	Brown SAND, some fine Gravel.	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-8

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	80°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 11:45 **Finish Time: 12:05**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 6": Brown SAND, some Roots, Organics (Topsoil).	ND	Dry	ND	ND	
2		Middle 12": Dark Brown SAND, some Gravel (Fill).	ND	Dry	ND	ND	SB-8 (1-3')
3		Middle 6": Brown SAND, some Silt (Fill).	ND	Dry	ND	ND	
4		Bottom 12": Brown coarse SAND, trace Gravel (Fill).	ND	Dry	ND	ND	SB-8 (0-7') Waste Class
5							
6	36	Brown coarse SAND, trace fine Gravel (Suspected FILL).	ND	Dry	ND	ND	SB-8 (5-7')
7							
8							
9							
10							
11	36	Brown coarse SAND, trace fine Gravel.	ND	Dry	ND	ND	
12							
13							
14							
15							
16	36	Brown coarse SAND, trace fine Gravel.	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Waste Class sample analyzed for Cyanide (EPA 9012), Hexavalent Chromium (EPA 7196), DRO/GRO TPH (EPA 8015)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-9

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	80 °F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 12:10 **Finish Time: 12:20**

Date: 7/31/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 6": Brown SAND, some Roots, Organics (TOPSOIL).	ND	Dry	ND	ND	SB-9 (1-3')
2							
3		Bottom 30": Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
4							
5							
6	30		ND	Dry	ND	ND	SB-9 (5-7')
7							
8		Brown SAND, trace fine Gravel (FILL).	ND	Moist	ND	ND	
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 10 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-10

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 12:45 **Finish Time: 13:00**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 6": Brown SAND, some Roots, Silt (TOPSOIL).	ND	Dry	ND	ND	SB-10 (1-3')
2							
3		Bottom 30": Brown SAND and fine GRAVEL, some Silt (FILL).	ND	Dry	ND	ND	
4							
5							
6	36	Top 4": Brown SAND and fine GRAVEL, some Silt (FILL).	ND	Dry	ND	ND	
7							
8		Middle 12": Black-brown fine SAND, some Silt, trace Clay (FILL).	ND	Moist	ND	ND	
9							
10		Bottom 20: Brown SAND, some fine Gravel, trace Silt, Brick and fine black Sand (FILL).	ND	Dry	ND	ND	
11	40	Brown SAND, some fine Gravel, trace Silt, Brick, bands of fine black Sand (FILL).	ND	Dry	ND	ND	SB-10 (10-12')
12							
13							
14							
15							
16	40	Brown SAND, some fine Gravel, trace Silt, Brick, bands of fine black Sand (FILL).	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-11

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 12:15 **Finish Time: 12:45**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	34	Top 4": Brown SAND, some Roots, Organics (TOPSOIL).	ND	Dry	ND	ND	SB-11 (1-3')
2							
3		Bottom 30": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	
4							
5							
6	36	Top 24": Brown SAND, some fine Gravel, trace Silt, Brick, (FILL).	ND	Dry	ND	ND	
7							
8							
9		Bottom 12": Black-brown SAND, some Silt, trace Clay (FILL).	ND	Dry	ND	ND	
10							
11	36	Top 12": Black-brown SAND, some Silt, Clay (Suspected FILL).	ND	Dry	ND	ND	SB-11 (10-12')
12							
13							
14		Bottom 24": Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
15							
16	36	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-12

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 11:30 **Finish Time: 11:50**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 2": Organics, Roots, Brown SAND and SILT (TOPSOIL).	ND	Dry	ND	ND	SB-12 (1-3')
2							
3		Bottom 34": Orange-brown SAND, some Gravel and trace Silt (FILL).	ND	Dry	ND	ND	
4							
5							
6	50	Top 18": Orange-brown SAND, some fine Gravel and trace Silt (FILL).	ND	Dry	ND	ND	
7							
8		Middle 12": Brown SAND, trace Silt (FILL).	ND	Moist	ND	ND	
9							
10		Bottom 20": Brown SAND, some fine Gravel (FILL).	ND	Moist	ND	ND	
11	30	Top 10": Brown SAND, some fine Gravel (FILL).	ND	Moist	ND	ND	SB-12 (10-12')
12							
13		Middle 10": Brown fine SAND, some Clay, trace silt (Suspected FILL).	ND	Moist	ND	ND	
14		Bottom 10": Brown SAND, some fine Gravel, trace Silt, some bands of black fine Sand.	ND	Moist	ND	ND	
15							
16	40	Brown SAND, some Gravel, trace Silt, some bands of black fine Sand.	ND	Moist	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-13

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Rain
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 16:10 **Finish Time: 16:30**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	40	Top 3": ASPHALT.	ND	Dry	ND	ND	SB-13 (1-3')
2		Middle 3": Gray SAND and fine GRAVEL, trace Silt (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 34": Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
5							
6	40	Top 12": Brown SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
7		Middle 2": Black SAND (FILL).	ND	Dry	ND	ND	
8							
9		Bottom 26": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	
10							
11	40	Top 6": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	SB-13 (10-12)
12		Middle 4": Black-brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
13							
14		Bottom 30": Brown SAND, some fine Gravel, trace Silt.	ND	Dry	ND	ND	
15							
16	40	Brown SAND, some Gravel, trace Silt.	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-14

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 10:10 **Finish Time: 10:30**

Date: 8/1/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	30	Top 2": ASPHALT.	ND	Dry	ND	ND	SB-14 (1-3')
2		Middle 2": Gray SAND and fine GRAVEL (FILL).	ND	Dry	ND	ND	
3		Middle 4": White SAND and fine GRAVEL, some Silt (FILL).	ND	Dry	ND	ND	
4		Bottom 22": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	
5							
6	40	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	
7							
8							
9							
10							
11	48	Top 12": Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	SB-14 (10-12')
12							
13		Bottom 36": Light Brown-grey-orange (Mottled) CLAY, trace Silt.	ND	Dry	ND	ND	
14							
15							
16	48	Light Brown-grey-orange (Mottled) CLAY, trace Silt.	ND	Dry	ND	ND	
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	St. John Villa Academy AKRF Project Number: 89215	Groundwater Monitoring Well ID: Sheet 1 of 2	TW-15	Soil Boring ID:	SB-15

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged by:	Jacob Menken, AKRF

Drilling

Start Time: 10:35 | Finish Time: 11:20

Date: 8/1/2017

Surface Condition: Asphalt

Well Construction: 1" diameter PVC well casing: 0' to 20' below grade

Depth (feet)	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	30	Top 2": ASPHALT.	ND	Dry	ND	ND	
2		Middle 4": Gray SAND and fine GRAVEL, trace Silt (FILL).	ND	Dry	ND	ND	SB-15 (1-3')
3		Middle 4": White SAND and fine GRAVEL, trace Silt (FILL).	ND	Dry	ND	ND	
4		Bottom 20": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	
5							
6	24	Brown SAND, some Gravel, trace Silt (FILL).	ND	Dry	ND	ND	SB-15 (0-7') Waste Class @ 11:00
7							
8							
9							
10							
11	40	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	ND	SB-15 (10-12')
12							
13							
14							
15							
16	48	Top 44": Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Moist	ND	ND	
17							
18		Bottom 4": Orange-brown-gray (Mottled) CLAY, some Silt, trace Sand.	ND	Moist	ND	ND	
19							
20							

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 26.5 feet below grade

Groundwater monitoring well installed to 30 feet below grade.

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000) Waste Class sample analyzed for Cyanide (EPA 9012), Hexavalent Chromium (EPA 7196), DRO/GRO TPH (EPA 8015)

Groundwater encountered at approximately 26.5 feet below grade during soil boring.

End of soil boring at 30 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING AND WELL INSTALLATION LOG	St. John Villa Academy AKRF Project Number: 89215	Groundwater Monitoring Well ID: Sheet 2 of 2	TW-15	Soil Boring ID:	SB-15

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged by:	Jacob Menken, AKRF

Drilling

Start Time: 10:35 | Finish Time: 11:20

Date: 8/1/2017

Depth (feet)	Well Construction	Surface Condition: Asphalt	Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
21				No Samples Collected					
22									
23									
24									
25									
26									
27									
28									
29		0.020-inch slotted PVC well screen: 20' to 30' below grade							
30		End cap: 30' below grade							
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

Notes: ▼ Groundwater Depth Indicator

Groundwater measured at 26.5 feet below grade

Groundwater monitoring well installed to 30.0 feet below grade.

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000) Waste Class sample analyzed for Cyanide (EPA 9012), Hexavalent Chromium (EPA 7196), DRO/GRO TPH (EPA 8015)

Groundwater encountered at approximately 26.5 feet below grade during soil boring.

End of soil boring at 30 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-16

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 11:55 **Finish Time: 12:25**

Date: 8/1/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 8": Asphalt.	ND	Dry	ND	ND	SB-16 (1-3')
2		Middle 4": White SAND and fine GRAVEL, some Silt (FILL).	ND	Dry	ND	ND	
3		Bottom 24": Brown SAND, some fine Gravel, trace Silt, Brick (FILL).	ND	Dry	ND	ND	
4							
5							
6	36	Top 12": Brown SAND, some fine Gravel, trace Silt, Brick (FILL).	ND	Dry	ND	ND	
7		Middle 2": Gray fine GRAVEL AND SAND, some Silt (FILL).	ND	Dry	ND	ND	
8		Bottom 22": Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	
9							
10							
11	40	Brown SAND, some fine Gravel, trace Silt.	ND	Dry	ND	ND	SB-16 (10-12')
12							
13							
14							
15							
16	36	Brown SAND, some fine Gravel, trace Silt.	ND	Dry	ND	ND	
17							
18							
19							
20			ND	Moist	ND	ND	

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-17

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	80°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 13:30 **Finish Time: 13:55**

Date: 8/1/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	28	Top 6": Brown coarse SAND, some Roots, Organics, fine Gravel (TOPSOIL).	ND	Dry	ND	Dry	
2		Middle 6": Black SAND, some Gravel, trace Silt (FILL).	ND	Dry	ND	Dry	SB-17 (1-3)
3		Middle 4": Gray GRAVEL, some Sand, Silt (Fill)	ND	Dry	ND	Dry	
4		Middle 2": Red fine SAND, some Clay (Fill)	ND	Dry	ND	Dry	
5		Middle 6": Black coarse SAND, some Gravel (Fill)	ND	Dry	ND	Dry	
6	36	Bottom 4": Yellow SAND, some Silt, Gravel (Fill)	ND	Dry	ND	Dry	
7		Brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	Dry	SB-17 (0-7') Waste Class
8							
9							
10							
11	36	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	Dry	SB-17 (10-12)
12							
13							
14							
15							
16	36	Brown SAND, some fine Gravel, trace Silt (Suspected FILL).	ND	Dry	ND	Dry	
17							
18							
19							
20			ND	Moist	ND	ND	

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Waste Class sample analyzed for Cyanide (EPA 9012), Hexavalent Chromium (EPA 7196), DRO/GRO TPH (EPA 8015)
Groundwater not encountered during soil boring.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-18

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Slide Hammer
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 09:55 **Finish Time: 10:20**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	30	Brown SAND, some fine Gravel, trace Silt, Roots (FILL).	ND	Dry	ND	ND	SB-18 (0-2') w/ Waste Class
2							
3							SB-18 (3-5')
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Waste Class sample analyzed for Cyanide (EPA 9012), Hexavalent Chromium (EPA 7196), DRO/GRO TPH (EPA 8015)
Groundwater not encountered during soil boring.
End of soil boring at 5 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-19

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Slide Hammer
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	75°F, Sunny
Logged By:	Jacob Menken, AKRF

Drilling

Start Time: 10:25 **Finish Time: 10:55**

Date: 8/2/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Grass	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	30	Brown SAND, some fine Gravel, trace Silt, Roots (FILL).	ND	Dry	ND	ND	SB-18 (0-2')
2							
3							SB-18 (3-5')
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil samples analyzed for VOCs (EPA 8260), SVOCs + TICs (EPA 8270), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082), Target Analyte List (TAL) Metals (EPA 6000/7000)
Groundwater not encountered during soil boring.
End of soil boring at 5 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-ES1

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Hand Auger
Sampling Method:	Hand Auger
Driller:	Cascade
Weather:	30°F, Sunny
Logged By:	MJ & TM, AKRF

Drilling

Start Time: 09:30 **Finish Time: 10:10**

Date: 11/11/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	60	Top 6": CONCRETE.	ND	Dry	ND	ND	
2		Next 14": Dark Brown SAND, little Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	SB-ES1 (0-2)
3							
4		Bottom 40": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
5							
6	60	Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	SB-ES1 (8-10)
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Notes: Soil sample analyzed for: Target Compound List (TCL) & Commissioners Policy-51 (CP-51) VOCs (EPA 8260)
Groundwater not encountered during soil boring installation.
End of soil boring at 10 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: SB-ES2

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	30°F, Sunny
Logged By:	MJ & TM, AKRF

Drilling

Start Time: 10:40 **Finish Time: 10:55**

Date: 11/11/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	28	Top 6": ASPHALT.	ND	Dry	ND	ND	
2		Next 4": CONCRETE.	ND	Dry	ND	ND	SB-ES2 (0-2)
3							
4		Bottom 18": Brown SAND, little Silt, fine Gravel (FILL).	ND	Dry	ND	ND	
5							
6	30	Top 8": SLOUGH.	ND	Dry	ND	ND	
7							SB-ES2 (8-10)
8		Bottom 22": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
9							
10							
11	27	Top 6": SLOUGH.	ND	Dry	ND	ND	
12							
13		Bottom 21": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
14							
15							
16	36	Top 10": SLOUGH.	ND	Dry	ND	ND	
17		Next 8": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
18							
19		Bottom 18": Brown fine SAND, some Silt.	ND	Dry	ND	ND	
20							

Notes: Soil sample analyzed for: Target Compound List (TCL) & Commissioners Policy-51 (CP-51) VOCs (EPA 8260)
Groundwater not encountered during soil boring installation.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy

AKRF Project Number: 89215

Soil Boring ID: **SB-ES3**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	30°F, Sunny
Logged By:	MJ & TM, AKRF

Drilling

Start Time: 11:20 **Finish Time: 11:40**

Date: 11/11/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	25	Top 6": ASPHALT.	ND	Dry	ND	ND	
2		Next 4": CONCRETE.	ND	Dry	ND	ND	SB-ES3 (0-2)
3							
4		Bottom 15": Brown SAND, some Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
5							
6	40	Top 6": SLOUGH.	ND	Dry	ND	ND	
7		Next 12": Brown SAND, some Silt, trace fine Gravel.	ND	Dry	ND	ND	SB-ES3 (8-10)
8							
9		Bottom 22": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
10							
11	36	Top 6": SLOUGH.	ND	Dry	ND	ND	
12							
13		Bottom 30": Brown SAND, little Silt, fine Gravel.	ND	Dry	ND	ND	
14							
15							
16	28	Top 4": SLOUGH.	ND	Dry	ND	ND	
17		Next 12": Brown SAND, little Silt, fine Gravel.	ND	Dry	ND	ND	
18							
19		Bottom 12": Brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	
20							

Notes: Soil sample analyzed for: Target Compound List (TCL) & Commissioners Policy-51 (CP-51) VOCs (EPA 8260)
Groundwater not encountered during soil boring installation.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy
AKRF Project Number: 89215

Soil Boring ID: **SB-GA1**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	35°F, Sunny
Logged By:	MJ & TM, AKRF

Drilling
Start Time: 12:20 **Finish Time: 12:40**
Date: 11/11/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Asphalt	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	39	Top 6": ASPHALT.	ND	Dry	ND	ND	
2		Next 12": Dark brown SAND, some fine Gravel, trace Silt (FILL).	ND	Dry	ND	ND	SB-GA1 (0-2)
3							
4		Bottom 21": Gray CLAY, trace Silt.	ND	Dry	ND	ND	
5							
6	58	Gray CLAY and SILT.	ND	Dry	ND	ND	SB-GA1 (8-10)
7							
8							
9							
10							
11	60	Gray CLAY and SILT.	ND	Wet	ND	ND	
12							
13							
14							
15							
16	60	Gray CLAY and SILT.	ND	Wet	ND	ND	
17							
18							
19							
20							

Notes: Soil sample analyzed for: Target Compound List (TCL) & Commissioners Policy-51 (CP-51) VOCs (EPA 8260), TCL & CP-51 SVOCs (EPA 8260), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082)
Groundwater encountered at 10 feet below grade during soil boring installation.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

St John Villa Academy
AKRF Project Number: 89215

Soil Boring ID: **SB-GA2**
Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe
Sampling Method:	5' Macrocore
Driller:	Cascade
Weather:	35°F, Sunny
Logged By:	MJ & TM, AKRF

Drilling
Start Time: 13:00 **Finish Time: 13:25**
Date: 11/11/2017

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	42	Top 6": CONCRETE.	ND	Dry	ND	ND	
2		Next 12": Brown SAND, little Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	SB-GA2 (0-2)
3							
4		Bottom 24": Light brown CLAY, trace Silt.	ND	Dry	ND	ND	
5							
6	42	Top 12": SLOUGH.	ND	Dry	ND	ND	
7							
8		Bottom 30": Brown SAND, little Silt, fine Gravel.	ND	Dry	ND	ND	
9							
10							
11	58	Top 24": SLOUGH.	ND	Dry	ND	ND	
12							SB-GA2 (13-15)
13		Bottom 34": Light brown/gray CLAY and SILT.	ND	Dry	ND	ND	
14							
15							
16	60	Top 24" SLOUGH.	ND	Dry	ND	ND	
17							
18		Bottom 36": Light brown/gray CLAY and SILT.	ND	Dry	ND	ND	
19							
20							

Notes: Soil sample analyzed for: Target Compound List (TCL) & Commissioners Policy-51 (CP-51) VOCs (EPA 8260), TCL & CP-51 SVOCs (EPA 8260), Pesticides (EPA 8081), Herbicides (EPA 8152), PCBs (EPA 8082)
Groundwater not encountered during soil boring installation.
End of soil boring at 20 feet below grade.

PID = photoionization detector NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

Appendix D
Laboratory Analytical Data Reports

ANALYTICAL REPORT

Job Number: 200-40953-1

SDG Number: 200-40953-1

Job Description: St. John Villa

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Attention: Ms. Elizabeth Matamoros

Approved for release.
Kristine A Dusablon
Project Manager II
11/22/2017 3:49 PM

Kristine A Dusablon, Project Manager II
30 Community Drive, South Burlington, VT, 05403
(802)660-1990
kris.dusablon@testamericainc.com
11/22/2017

cc: Mr. Timothy McClintock

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: AKRF Inc

Project: St. John Villa

Report Number: 200-40953-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 11/14/2017; the samples arrived in good condition.

During the canister pressure check performed upon receipt, sample SV-ES2 was found to be received at ambient pressure. The associated flow controller was evaluated and was found to be outside the acceptable flow range as compared to the original set flow rate. The laboratory was instructed to proceed with analysis.

VOLATILE ORGANIC COMPOUNDS

Samples SV-ES1, SV-ES2 and AA-1 were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 11/14/2017 and 11/15/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Client Sample ID: SV-ES1 — Lab Sample ID: 200-40953-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.93		0.035	0.029	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	2.6		0.035	0.0098	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.62		0.035	0.0091	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.7		0.14	0.11	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	18		0.24	0.066	ug/m3	1		TO-15	Total/NA
Trichloroethene	3.3		0.19	0.049	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-ES2 — Lab Sample ID: 200-40953-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.081		0.035	0.0098	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.55		0.24	0.066	ug/m3	1		TO-15	Total/NA

Client Sample ID: AA-1 — Lab Sample ID: 200-40953-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.034	J	0.035	0.0098	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.23	J	0.24	0.066	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-ES1

Lab Sample ID: 200-40953-1
Matrix: Air
Date Collected: 11/11/17 18:30
Date Received: 11/14/17 10:20
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.93**		0.035	0.029	ppb v/v			11/15/17 16:58	1
1,1-Dichloroethene	0.035	U	0.035	0.035	ppb v/v			11/15/17 16:58	1
Tetrachloroethene	**2.6**		0.035	0.0098	ppb v/v			11/15/17 16:58	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			11/15/17 16:58	1
Trichloroethene	**0.62**		0.035	0.0091	ppb v/v			11/15/17 16:58	1
Vinyl chloride	0.018	U	0.035	0.018	ppb v/v			11/15/17 16:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**3.7**		0.14	0.11	ug/m3			11/15/17 16:58	1
1,1-Dichloroethene	0.14	U	0.14	0.14	ug/m3			11/15/17 16:58	1
Tetrachloroethene	**18**		0.24	0.066	ug/m3			11/15/17 16:58	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			11/15/17 16:58	1
Trichloroethene	**3.3**		0.19	0.049	ug/m3			11/15/17 16:58	1
Vinyl chloride	0.046	U	0.089	0.046	ug/m3			11/15/17 16:58	1

Client Sample ID: SV-ES2

Lab Sample ID: 200-40953-3
Matrix: Air
Date Collected: 11/11/17 18:04
Date Received: 11/14/17 10:20
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.029	U	0.035	0.029	ppb v/v			11/15/17 17:48	1
1,1-Dichloroethene	0.035	U	0.035	0.035	ppb v/v			11/15/17 17:48	1
Tetrachloroethene	**0.081**		0.035	0.0098	ppb v/v			11/15/17 17:48	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			11/15/17 17:48	1
Trichloroethene	0.0091	U	0.035	0.0091	ppb v/v			11/15/17 17:48	1
Vinyl chloride	0.018	U	0.035	0.018	ppb v/v			11/15/17 17:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.11	U	0.14	0.11	ug/m3			11/15/17 17:48	1
1,1-Dichloroethene	0.14	U	0.14	0.14	ug/m3			11/15/17 17:48	1
Tetrachloroethene	**0.55**		0.24	0.066	ug/m3			11/15/17 17:48	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			11/15/17 17:48	1
Trichloroethene	0.049	U	0.19	0.049	ug/m3			11/15/17 17:48	1
Vinyl chloride	0.046	U	0.089	0.046	ug/m3			11/15/17 17:48	1

Client Sample ID: AA-1

Lab Sample ID: 200-40953-5
Matrix: Air
Date Collected: 11/11/17 14:35
Date Received: 11/14/17 10:20
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.029	U	0.035	0.029	ppb v/v			11/14/17 16:21	1
1,1-Dichloroethene	0.035	U	0.035	0.035	ppb v/v			11/14/17 16:21	1
Tetrachloroethene	**0.034**	**J**	0.035	0.0098	ppb v/v			11/14/17 16:21	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			11/14/17 16:21	1
Trichloroethene	0.0091	U	0.035	0.0091	ppb v/v			11/14/17 16:21	1
Vinyl chloride	0.018	U	0.035	0.018	ppb v/v			11/14/17 16:21	1

Client Sample ID: AA-1

Date Collected: 11/11/17 14:35
Date Received: 11/14/17 10:20
Sample Container: Summa Canister 6L

Lab Sample ID: 200-40953-5

Matrix: Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.11	U	0.14	0.11	ug/m3			11/14/17 16:21	1
1,1-Dichloroethene	0.14	U	0.14	0.14	ug/m3			11/14/17 16:21	1
Tetrachloroethene	**0.23**	**J**	0.24	0.066	ug/m3			11/14/17 16:21	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			11/14/17 16:21	1
Trichloroethene	0.049	U	0.19	0.049	ug/m3			11/14/17 16:21	1
Vinyl chloride	0.046	U	0.089	0.046	ug/m3			11/14/17 16:21	1

Default Detection Limits

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units	Method
1,1-Dichloroethene	0.035	0.035	ppb v/v	TO-15
1,1-Dichloroethene	0.14	0.14	ug/m3	TO-15
cis-1,2-Dichloroethene	0.035	0.029	ppb v/v	TO-15
cis-1,2-Dichloroethene	0.14	0.11	ug/m3	TO-15
Tetrachloroethene	0.035	0.0098	ppb v/v	TO-15
Tetrachloroethene	0.24	0.066	ug/m3	TO-15
trans-1,2-Dichloroethene	0.20	0.050	ppb v/v	TO-15
trans-1,2-Dichloroethene	0.79	0.20	ug/m3	TO-15
Trichloroethene	0.035	0.0091	ppb v/v	TO-15
Trichloroethene	0.19	0.049	ug/m3	TO-15
Vinyl chloride	0.035	0.018	ppb v/v	TO-15
Vinyl chloride	0.089	0.046	ug/m3	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-123310/5
Matrix: Air
Analysis Batch: 123310

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.029	U	0.035	0.029	ppb v/v			11/14/17 13:00	1
1,1-Dichloroethene	0.035	U	0.035	0.035	ppb v/v			11/14/17 13:00	1
Tetrachloroethene	0.0098	U	0.035	0.0098	ppb v/v			11/14/17 13:00	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			11/14/17 13:00	1
Trichloroethene	0.0091	U	0.035	0.0091	ppb v/v			11/14/17 13:00	1
Vinyl chloride	0.018	U	0.035	0.018	ppb v/v			11/14/17 13:00	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.11	U	0.14	0.11	ug/m3			11/14/17 13:00	1
1,1-Dichloroethene	0.14	U	0.14	0.14	ug/m3			11/14/17 13:00	1
Tetrachloroethene	0.066	U	0.24	0.066	ug/m3			11/14/17 13:00	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			11/14/17 13:00	1
Trichloroethene	0.049	U	0.19	0.049	ug/m3			11/14/17 13:00	1
Vinyl chloride	0.046	U	0.089	0.046	ug/m3			11/14/17 13:00	1

Lab Sample ID: LCS 200-123310/4
Matrix: Air
Analysis Batch: 123310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.22		ppb v/v		92	67 - 127
Carbon tetrachloride	10.0	9.13		ppb v/v		91	62 - 143
Chlorobenzene	10.0	9.13		ppb v/v		91	68 - 128
Chloroethane	10.0	9.64		ppb v/v		96	65 - 125
Chloromethane	10.0	9.34		ppb v/v		93	57 - 126
cis-1,2-Dichloroethene	10.0	8.92		ppb v/v		89	67 - 127
1,3-Dichlorobenzene	10.0	9.86		ppb v/v		99	67 - 127
1,2-Dichlorobenzene	10.0	9.68		ppb v/v		97	67 - 127
1,1-Dichloroethane	10.0	9.24		ppb v/v		92	66 - 126
1,2-Dichloroethane	10.0	9.62		ppb v/v		96	67 - 132
1,1-Dichloroethene	10.0	8.84		ppb v/v		88	67 - 127
1,2-Dichloropropane	10.0	9.18		ppb v/v		92	67 - 127
Ethylbenzene	10.0	9.25		ppb v/v		93	68 - 128
Methylene Chloride	10.0	9.83		ppb v/v		98	62 - 122
Methyl tert-butyl ether	10.0	9.45		ppb v/v		95	67 - 127
m,p-Xylene	20.0	18.2		ppb v/v		91	68 - 128
Naphthalene	10.0	8.84		ppb v/v		88	50 - 121
Tetrachloroethene	10.0	8.73		ppb v/v		87	70 - 130
Toluene	10.0	9.15		ppb v/v		92	67 - 127
trans-1,2-Dichloroethene	10.0	10.4		ppb v/v		104	72 - 132
1,1,1-Trichloroethane	10.0	9.32		ppb v/v		93	70 - 130
Trichloroethene	10.0	8.83		ppb v/v		88	68 - 128
1,3,5-Trimethylbenzene	10.0	9.18		ppb v/v		92	65 - 125
1,2,4-Trimethylbenzene	10.0	9.39		ppb v/v		94	65 - 125
Vinyl chloride	10.0	9.18		ppb v/v		92	62 - 125
Xylene, o-	10.0	8.86		ppb v/v		89	67 - 127
1,1,2,2-Tetrachloroethane	10.0	9.50		ppb v/v		95	69 - 129
1,1,2-Trichloroethane	10.0	9.26		ppb v/v		93	69 - 129

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123310/4
Matrix: Air
Analysis Batch: 123310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	10.0	9.36		ppb v/v		94	59 - 126
1,2-Dibromoethane	10.0	9.59		ppb v/v		96	70 - 130
1,2-Dichlorotetrafluoroethane	10.0	10.4		ppb v/v		104	78 - 138
Acetone	10.0	10.5		ppb v/v		105	64 - 136
1,3-Butadiene	10.0	8.82		ppb v/v		88	59 - 125
2-Chlorotoluene	10.0	9.21		ppb v/v		92	67 - 127
4-Ethyltoluene	10.0	9.66		ppb v/v		97	69 - 129
1,4-Dioxane	10.0	10.2		ppb v/v		102	66 - 132
3-Chloropropene	10.0	10.4		ppb v/v		104	53 - 133
4-Isopropyltoluene	10.0	9.55		ppb v/v		96	67 - 129
1,4-Dichlorobenzene	10.0	9.86		ppb v/v		99	66 - 126
2,2,4-Trimethylpentane	10.0	9.41		ppb v/v		94	67 - 127
cis-1,3-Dichloropropene	10.0	9.75		ppb v/v		97	70 - 130
Carbon disulfide	10.0	11.4		ppb v/v		114	81 - 141
Bromoform	10.0	10.3		ppb v/v		103	34 - 170
Benzyl chloride	10.0	10.7		ppb v/v		107	54 - 135
Bromomethane	10.0	9.39		ppb v/v		94	68 - 128
Chloroform	10.0	9.44		ppb v/v		94	69 - 129
Bromoethene(Vinyl Bromide)	10.0	9.24		ppb v/v		92	67 - 127
Bromodichloromethane	10.0	9.47		ppb v/v		95	69 - 129
Dichlorodifluoromethane	10.0	9.45		ppb v/v		94	68 - 128
Dibromochloromethane	10.0	9.42		ppb v/v		94	66 - 130
Cumene	10.0	9.06		ppb v/v		91	67 - 127
Cyclohexane	10.0	9.42		ppb v/v		94	69 - 129
Tetrahydrofuran	10.0	10.7		ppb v/v		107	61 - 136
methyl isobutyl ketone	10.0	10.5		ppb v/v		105	62 - 130
Methyl methacrylate	10.0	10.2		ppb v/v		102	70 - 130
Freon TF	10.0	9.30		ppb v/v		93	68 - 128
tert-Butyl alcohol	10.0	10.6		ppb v/v		106	64 - 124
Hexachlorobutadiene	10.0	9.18		ppb v/v		92	62 - 130
n-Butylbenzene	10.0	10.3		ppb v/v		103	67 - 127
Freon 22	10.0	9.53		ppb v/v		95	64 - 128
n-Hexane	10.0	10.1		ppb v/v		101	71 - 131
Styrene	10.0	9.30		ppb v/v		93	68 - 128
sec-Butylbenzene	10.0	9.33		ppb v/v		93	66 - 126
Methyl Butyl Ketone (2-Hexanone)	10.0	11.0		ppb v/v		110	61 - 127
Methyl Ethyl Ketone	10.0	10.2		ppb v/v		102	62 - 122
n-Propylbenzene	10.0	9.38		ppb v/v		94	67 - 127
Trichlorofluoromethane	10.0	9.19		ppb v/v		92	67 - 127
Isopropyl alcohol	10.0	10.2		ppb v/v		102	55 - 124
n-Heptane	10.0	9.53		ppb v/v		95	62 - 130
n-Butane	10.0	9.69		ppb v/v		97	56 - 130
trans-1,3-Dichloropropene	10.0	10.0		ppb v/v		100	69 - 129
tert-Butylbenzene	10.0	9.01		ppb v/v		90	63 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	32	29.4		ug/m3		92	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123310/4
Matrix: Air
Analysis Batch: 123310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	63	57.4		ug/m3		91	62 - 143
Chlorobenzene	46	42.0		ug/m3		91	68 - 128
Chloroethane	26	25.4		ug/m3		96	65 - 125
Chloromethane	21	19.3		ug/m3		93	57 - 126
cis-1,2-Dichloroethene	40	35.4		ug/m3		89	67 - 127
1,3-Dichlorobenzene	60	59.3		ug/m3		99	67 - 127
1,2-Dichlorobenzene	60	58.2		ug/m3		97	67 - 127
1,1-Dichloroethane	40	37.4		ug/m3		92	66 - 126
1,2-Dichloroethane	40	38.9		ug/m3		96	67 - 132
1,1-Dichloroethene	40	35.0		ug/m3		88	67 - 127
1,2-Dichloropropane	46	42.4		ug/m3		92	67 - 127
Ethylbenzene	43	40.2		ug/m3		93	68 - 128
Methylene Chloride	35	34.1		ug/m3		98	62 - 122
Methyl tert-butyl ether	36	34.1		ug/m3		95	67 - 127
m,p-Xylene	87	79.2		ug/m3		91	68 - 128
Naphthalene	52	46.4		ug/m3		88	50 - 121
Tetrachloroethene	68	59.2		ug/m3		87	70 - 130
Toluene	38	34.5		ug/m3		92	67 - 127
trans-1,2-Dichloroethene	40	41.2		ug/m3		104	72 - 132
1,1,1-Trichloroethane	55	50.9		ug/m3		93	70 - 130
Trichloroethene	54	47.5		ug/m3		88	68 - 128
1,3,5-Trimethylbenzene	49	45.1		ug/m3		92	65 - 125
1,2,4-Trimethylbenzene	49	46.2		ug/m3		94	65 - 125
Vinyl chloride	26	23.5		ug/m3		92	62 - 125
Xylene, o-	43	38.5		ug/m3		89	67 - 127
1,1,2,2-Tetrachloroethane	69	65.2		ug/m3		95	69 - 129
1,1,2-Trichloroethane	55	50.6		ug/m3		93	69 - 129
1,2,4-Trichlorobenzene	74	69.4		ug/m3		94	59 - 126
1,2-Dibromoethane	77	73.7		ug/m3		96	70 - 130
1,2-Dichlorotetrafluoroethane	70	72.5		ug/m3		104	78 - 138
Acetone	24	25.0		ug/m3		105	64 - 136
1,3-Butadiene	22	19.5		ug/m3		88	59 - 125
2-Chlorotoluene	52	47.7		ug/m3		92	67 - 127
4-Ethyltoluene	49	47.5		ug/m3		97	69 - 129
1,4-Dioxane	36	36.7		ug/m3		102	66 - 132
3-Chloropropene	31	32.5		ug/m3		104	53 - 133
4-Isopropyltoluene	55	52.5		ug/m3		96	67 - 129
1,4-Dichlorobenzene	60	59.3		ug/m3		99	66 - 126
2,2,4-Trimethylpentane	47	44.0		ug/m3		94	67 - 127
cis-1,3-Dichloropropene	45	44.2		ug/m3		97	70 - 130
Carbon disulfide	31	35.4		ug/m3		114	81 - 141
Bromoform	100	107		ug/m3		103	34 - 170
Benzyl chloride	52	55.5		ug/m3		107	54 - 135
Bromomethane	39	36.5		ug/m3		94	68 - 128
Chloroform	49	46.1		ug/m3		94	69 - 129
Bromoethene(Vinyl Bromide)	44	40.4		ug/m3		92	67 - 127
Bromodichloromethane	67	63.4		ug/m3		95	69 - 129
Dichlorodifluoromethane	49	46.7		ug/m3		94	68 - 128

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123310/4
Matrix: Air
Analysis Batch: 123310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	85	80.3		ug/m3		94	66 - 130
Cumene	49	44.5		ug/m3		91	67 - 127
Cyclohexane	34	32.4		ug/m3		94	69 - 129
Tetrahydrofuran	29	31.6		ug/m3		107	61 - 136
methyl isobutyl ketone	41	43.1		ug/m3		105	62 - 130
Methyl methacrylate	41	41.6		ug/m3		102	70 - 130
Freon TF	77	71.3		ug/m3		93	68 - 128
tert-Butyl alcohol	30	32.2		ug/m3		106	64 - 124
Hexachlorobutadiene	110	97.9		ug/m3		92	62 - 130
n-Butylbenzene	55	56.5		ug/m3		103	67 - 127
Freon 22	35	33.7		ug/m3		95	64 - 128
n-Hexane	35	35.5		ug/m3		101	71 - 131
Styrene	43	39.6		ug/m3		93	68 - 128
sec-Butylbenzene	55	51.2		ug/m3		93	66 - 126
Methyl Butyl Ketone (2-Hexanone)	41	45.0		ug/m3		110	61 - 127
Methyl Ethyl Ketone	29	30.1		ug/m3		102	62 - 122
n-Propylbenzene	49	46.1		ug/m3		94	67 - 127
Trichlorofluoromethane	56	51.6		ug/m3		92	67 - 127
Isopropyl alcohol	25	25.1		ug/m3		102	55 - 124
n-Heptane	41	39.1		ug/m3		95	62 - 130
n-Butane	24	23.0		ug/m3		97	56 - 130
trans-1,3-Dichloropropene	45	45.4		ug/m3		100	69 - 129
tert-Butylbenzene	55	49.5		ug/m3		90	63 - 125

Lab Sample ID: MB 200-123382/4
Matrix: Air
Analysis Batch: 123382

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.029	U	0.035	0.029	ppb v/v			11/15/17 13:36	1
1,1-Dichloroethene	0.035	U	0.035	0.035	ppb v/v			11/15/17 13:36	1
Tetrachloroethene	0.0098	U	0.035	0.0098	ppb v/v			11/15/17 13:36	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			11/15/17 13:36	1
Trichloroethene	0.0091	U	0.035	0.0091	ppb v/v			11/15/17 13:36	1
Vinyl chloride	0.018	U	0.035	0.018	ppb v/v			11/15/17 13:36	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.11	U	0.14	0.11	ug/m3			11/15/17 13:36	1
1,1-Dichloroethene	0.14	U	0.14	0.14	ug/m3			11/15/17 13:36	1
Tetrachloroethene	0.066	U	0.24	0.066	ug/m3			11/15/17 13:36	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			11/15/17 13:36	1
Trichloroethene	0.049	U	0.19	0.049	ug/m3			11/15/17 13:36	1
Vinyl chloride	0.046	U	0.089	0.046	ug/m3			11/15/17 13:36	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123382/3
Matrix: Air
Analysis Batch: 123382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.91		ppb v/v		99	67 - 127
Carbon tetrachloride	10.0	11.1		ppb v/v		111	62 - 143
Chlorobenzene	10.0	10.0		ppb v/v		100	68 - 128
Chloroethane	10.0	10.0		ppb v/v		100	65 - 125
Chloromethane	10.0	9.87		ppb v/v		99	57 - 126
cis-1,2-Dichloroethene	10.0	9.89		ppb v/v		99	67 - 127
1,3-Dichlorobenzene	10.0	11.0		ppb v/v		110	67 - 127
1,2-Dichlorobenzene	10.0	10.7		ppb v/v		107	67 - 127
1,1-Dichloroethane	10.0	10.6		ppb v/v		106	66 - 126
1,2-Dichloroethane	10.0	10.7		ppb v/v		107	67 - 132
1,1-Dichloroethene	10.0	9.99		ppb v/v		100	67 - 127
1,2-Dichloropropane	10.0	10.1		ppb v/v		101	67 - 127
Ethylbenzene	10.0	10.5		ppb v/v		105	68 - 128
Methylene Chloride	10.0	10.6		ppb v/v		106	62 - 122
Methyl tert-butyl ether	10.0	11.1		ppb v/v		111	67 - 127
m,p-Xylene	20.0	20.8		ppb v/v		104	68 - 128
Naphthalene	10.0	9.64		ppb v/v		96	50 - 121
Tetrachloroethene	10.0	9.63		ppb v/v		96	70 - 130
Toluene	10.0	10.1		ppb v/v		101	67 - 127
trans-1,2-Dichloroethene	10.0	11.3		ppb v/v		113	72 - 132
1,1,1-Trichloroethane	10.0	10.6		ppb v/v		106	70 - 130
Trichloroethene	10.0	10.4		ppb v/v		104	68 - 128
1,3,5-Trimethylbenzene	10.0	10.6		ppb v/v		106	65 - 125
1,2,4-Trimethylbenzene	10.0	10.9		ppb v/v		109	65 - 125
Vinyl chloride	10.0	10.0		ppb v/v		100	62 - 125
Xylene, o-	10.0	10.2		ppb v/v		102	67 - 127
1,1,2,2-Tetrachloroethane	10.0	10.8		ppb v/v		108	69 - 129
1,1,2-Trichloroethane	10.0	10.3		ppb v/v		103	69 - 129
1,2,4-Trichlorobenzene	10.0	9.71		ppb v/v		97	59 - 126
1,2-Dibromoethane	10.0	10.5		ppb v/v		105	70 - 130
1,2-Dichlorotetrafluoroethane	10.0	11.3		ppb v/v		113	78 - 138
Acetone	10.0	11.6		ppb v/v		116	64 - 136
1,3-Butadiene	10.0	10.0		ppb v/v		100	59 - 125
2-Chlorotoluene	10.0	10.8		ppb v/v		108	67 - 127
4-Ethyltoluene	10.0	11.7		ppb v/v		117	69 - 129
1,4-Dioxane	10.0	10.6		ppb v/v		106	66 - 132
3-Chloropropene	10.0	10.5		ppb v/v		105	53 - 133
4-Isopropyltoluene	10.0	11.2		ppb v/v		112	67 - 129
1,4-Dichlorobenzene	10.0	10.8		ppb v/v		108	66 - 126
2,2,4-Trimethylpentane	10.0	10.4		ppb v/v		104	67 - 127
cis-1,3-Dichloropropene	10.0	10.7		ppb v/v		107	70 - 130
Carbon disulfide	10.0	11.9		ppb v/v		119	81 - 141
Bromoform	10.0	11.1		ppb v/v		111	34 - 170
Benzyl chloride	10.0	11.9		ppb v/v		119	54 - 135
Bromomethane	10.0	9.95		ppb v/v		100	68 - 128
Chloroform	10.0	10.5		ppb v/v		105	69 - 129
Bromoethene(Vinyl Bromide)	10.0	9.75		ppb v/v		98	67 - 127
Bromodichloromethane	10.0	10.6		ppb v/v		106	69 - 129

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123382/3
Matrix: Air
Analysis Batch: 123382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	10.0	10.4		ppb v/v		104	68 - 128
Dibromochloromethane	10.0	10.3		ppb v/v		103	66 - 130
Cumene	10.0	10.3		ppb v/v		103	67 - 127
Cyclohexane	10.0	10.7		ppb v/v		107	69 - 129
Tetrahydrofuran	10.0	11.8		ppb v/v		118	61 - 136
methyl isobutyl ketone	10.0	11.7		ppb v/v		117	62 - 130
Methyl methacrylate	10.0	11.8		ppb v/v		118	70 - 130
Freon TF	10.0	10.1		ppb v/v		101	68 - 128
tert-Butyl alcohol	10.0	10.6		ppb v/v		106	64 - 124
Hexachlorobutadiene	10.0	10.2		ppb v/v		102	62 - 130
n-Butylbenzene	10.0	11.4		ppb v/v		114	67 - 127
Freon 22	10.0	10.6		ppb v/v		106	64 - 128
n-Hexane	10.0	11.3		ppb v/v		113	71 - 131
Styrene	10.0	11.1		ppb v/v		111	68 - 128
sec-Butylbenzene	10.0	10.7		ppb v/v		107	66 - 126
Methyl Butyl Ketone (2-Hexanone)	10.0	11.5		ppb v/v		115	61 - 127
Methyl Ethyl Ketone	10.0	11.3		ppb v/v		113	62 - 122
n-Propylbenzene	10.0	10.7		ppb v/v		107	67 - 127
Trichlorofluoromethane	10.0	9.70		ppb v/v		97	67 - 127
Isopropyl alcohol	10.0	10.5		ppb v/v		105	55 - 124
n-Heptane	10.0	10.4		ppb v/v		104	62 - 130
n-Butane	10.0	10.5		ppb v/v		105	56 - 130
trans-1,3-Dichloropropene	10.0	10.8		ppb v/v		108	69 - 129
tert-Butylbenzene	10.0	10.4		ppb v/v		104	63 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	32	31.7		ug/m3		99	67 - 127
Carbon tetrachloride	63	69.7		ug/m3		111	62 - 143
Chlorobenzene	46	46.2		ug/m3		100	68 - 128
Chloroethane	26	26.5		ug/m3		100	65 - 125
Chloromethane	21	20.4		ug/m3		99	57 - 126
cis-1,2-Dichloroethene	40	39.2		ug/m3		99	67 - 127
1,3-Dichlorobenzene	60	66.3		ug/m3		110	67 - 127
1,2-Dichlorobenzene	60	64.0		ug/m3		107	67 - 127
1,1-Dichloroethane	40	43.1		ug/m3		106	66 - 126
1,2-Dichloroethane	40	43.2		ug/m3		107	67 - 132
1,1-Dichloroethene	40	39.6		ug/m3		100	67 - 127
1,2-Dichloropropane	46	46.6		ug/m3		101	67 - 127
Ethylbenzene	43	45.6		ug/m3		105	68 - 128
Methylene Chloride	35	36.7		ug/m3		106	62 - 122
Methyl tert-butyl ether	36	40.0		ug/m3		111	67 - 127
m,p-Xylene	87	90.1		ug/m3		104	68 - 128
Naphthalene	52	50.6		ug/m3		96	50 - 121
Tetrachloroethene	68	65.3		ug/m3		96	70 - 130
Toluene	38	38.0		ug/m3		101	67 - 127
trans-1,2-Dichloroethene	40	44.8		ug/m3		113	72 - 132
1,1,1-Trichloroethane	55	57.6		ug/m3		106	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123382/3
Matrix: Air
Analysis Batch: 123382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	54	55.7		ug/m3		104	68 - 128
1,3,5-Trimethylbenzene	49	52.2		ug/m3		106	65 - 125
1,2,4-Trimethylbenzene	49	53.6		ug/m3		109	65 - 125
Vinyl chloride	26	25.6		ug/m3		100	62 - 125
Xylene, o-	43	44.5		ug/m3		102	67 - 127
1,1,2,2-Tetrachloroethane	69	73.9		ug/m3		108	69 - 129
1,1,2-Trichloroethane	55	56.2		ug/m3		103	69 - 129
1,2,4-Trichlorobenzene	74	72.1		ug/m3		97	59 - 126
1,2-Dibromoethane	77	80.5		ug/m3		105	70 - 130
1,2-Dichlorotetrafluoroethane	70	78.9		ug/m3		113	78 - 138
Acetone	24	27.7		ug/m3		116	64 - 136
1,3-Butadiene	22	22.2		ug/m3		100	59 - 125
2-Chlorotoluene	52	56.1		ug/m3		108	67 - 127
4-Ethyltoluene	49	57.4		ug/m3		117	69 - 129
1,4-Dioxane	36	38.1		ug/m3		106	66 - 132
3-Chloropropene	31	32.9		ug/m3		105	53 - 133
4-Isopropyltoluene	55	61.7		ug/m3		112	67 - 129
1,4-Dichlorobenzene	60	65.1		ug/m3		108	66 - 126
2,2,4-Trimethylpentane	47	48.5		ug/m3		104	67 - 127
cis-1,3-Dichloropropene	45	48.6		ug/m3		107	70 - 130
Carbon disulfide	31	37.1		ug/m3		119	81 - 141
Bromoform	100	114		ug/m3		111	34 - 170
Benzyl chloride	52	61.6		ug/m3		119	54 - 135
Bromomethane	39	38.6		ug/m3		100	68 - 128
Chloroform	49	51.1		ug/m3		105	69 - 129
Bromoethene(Vinyl Bromide)	44	42.7		ug/m3		98	67 - 127
Bromodichloromethane	67	71.3		ug/m3		106	69 - 129
Dichlorodifluoromethane	49	51.3		ug/m3		104	68 - 128
Dibromochloromethane	85	87.6		ug/m3		103	66 - 130
Cumene	49	50.7		ug/m3		103	67 - 127
Cyclohexane	34	36.9		ug/m3		107	69 - 129
Tetrahydrofuran	29	34.9		ug/m3		118	61 - 136
methyl isobutyl ketone	41	47.7		ug/m3		117	62 - 130
Methyl methacrylate	41	48.4		ug/m3		118	70 - 130
Freon TF	77	77.7		ug/m3		101	68 - 128
tert-Butyl alcohol	30	32.2		ug/m3		106	64 - 124
Hexachlorobutadiene	110	108		ug/m3		102	62 - 130
n-Butylbenzene	55	62.5		ug/m3		114	67 - 127
Freon 22	35	37.4		ug/m3		106	64 - 128
n-Hexane	35	39.8		ug/m3		113	71 - 131
Styrene	43	47.2		ug/m3		111	68 - 128
sec-Butylbenzene	55	58.8		ug/m3		107	66 - 126
Methyl Butyl Ketone (2-Hexanone)	41	47.1		ug/m3		115	61 - 127
Methyl Ethyl Ketone	29	33.4		ug/m3		113	62 - 122
n-Propylbenzene	49	52.6		ug/m3		107	67 - 127
Trichlorofluoromethane	56	54.5		ug/m3		97	67 - 127
Isopropyl alcohol	25	25.8		ug/m3		105	55 - 124

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-123382/3
Matrix: Air
Analysis Batch: 123382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Heptane	41	42.8		ug/m3		104	62 - 130
n-Butane	24	25.0		ug/m3		105	56 - 130
trans-1,3-Dichloropropene	45	49.2		ug/m3		108	69 - 129
tert-Butylbenzene	55	57.0		ug/m3		104	63 - 125

QC Association Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Air - GC/MS VOA

Analysis Batch: 123310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-40953-5	AA-1	Total/NA	Air	TO-15	
MB 200-123310/5	Method Blank	Total/NA	Air	TO-15	
LCS 200-123310/4	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 123382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-40953-1	SV-ES1	Total/NA	Air	TO-15	
200-40953-3	SV-ES2	Total/NA	Air	TO-15	
MB 200-123382/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-123382/3	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Client Sample ID: SV-ES1
Date Collected: 11/11/17 18:30
Date Received: 11/14/17 10:20

Lab Sample ID: 200-40953-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	123382	11/15/17 16:58	A1B	TAL BUR

Client Sample ID: SV-ES2
Date Collected: 11/11/17 18:04
Date Received: 11/14/17 10:20

Lab Sample ID: 200-40953-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	123382	11/15/17 17:48	A1B	TAL BUR

Client Sample ID: AA-1
Date Collected: 11/11/17 14:35
Date Received: 11/14/17 10:20

Lab Sample ID: 200-40953-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	123310	11/14/17 16:21	K1P	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-18
Florida	NELAP	4	E87467	06-30-18
L-A-B	DoD ELAP		L2336	02-25-20
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-17
New Hampshire	NELAP	1	2006	12-18-17
New Jersey	NELAP	2	VT972	06-30-18
Pennsylvania	NELAP	3	68-00489	04-30-18
Rhode Island	State Program	1	LAO00298	12-30-17
US Fish & Wildlife	Federal		LE-058448-0	07-31-18
USDA	Federal		P330-11-00093	12-05-19
Vermont	State Program	1	VT-4000	12-31-17
Virginia	NELAP	3	460209	12-14-17

Method Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-40953-1	SV-ES1	Air	11/11/17 18:30	11/14/17 10:20
200-40953-3	SV-ES2	Air	11/11/17 18:04	11/14/17 10:20
200-40953-5	AA-1	Air	11/11/17 14:35	11/14/17 10:20

Quantitation Limit Exceptions Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-40953-1
SDG: 200-40953-1

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
TO-15	Air	1,1-Dichloroethene	ppb v/v	0.035	0.20
TO-15	Air	cis-1,2-Dichloroethene	ppb v/v	0.035	0.20
TO-15	Air	Tetrachloroethene	ppb v/v	0.035	0.20
TO-15	Air	Trichloroethene	ppb v/v	0.035	0.20
TO-15	Air	Vinyl chloride	ppb v/v	0.035	0.20

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHG.i Analysis Batch Number: 122801

Lab Sample ID: IC 200-122801/3 Client Sample ID:

Date Analyzed: 10/31/17 18:11 Lab File ID: 200-27684-003.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	5.82	Incomplete Integration	daiglep	11/01/17 09:52
cis-1,2-Dichloroethene	8.98	Incomplete Integration	daiglep	11/01/17 09:52
Tetrachloroethene	15.43	Incomplete Integration	daiglep	11/01/17 09:53

Lab Sample ID: IC 200-122801/4 Client Sample ID:

Date Analyzed: 10/31/17 19:01 Lab File ID: 200-27684-004.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Cyclohexane	9.76	Incomplete Integration	daiglep	11/01/17 09:55

Lab Sample ID: IC 200-122801/11 Client Sample ID:

Date Analyzed: 11/01/17 00:55 Lab File ID: 200-27684-011.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	12.59	Wrong peak	daiglep	11/01/17 10:03

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHG.i Analysis Batch Number: 123382

Lab Sample ID: MB 200-123382/4 Client Sample ID:

Date Analyzed: 11/15/17 13:36 Lab File ID: 200-27906-004.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butane	3.68	Assign Peak	bunmaa	11/16/17 12:49
Carbon disulfide	6.17	Assign Peak	bunmaa	11/16/17 12:50
Methylene Chloride	6.76	Assign Peak	bunmaa	11/16/17 12:51
2,2,4-Trimethylpentane	10.43	Assign Peak	bunmaa	11/16/17 12:52

Lab Sample ID: 200-40953-3 Client Sample ID: SV-ES2

Date Analyzed: 11/15/17 17:48 Lab File ID: 200-27906-009.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloroethene	15.41	Incomplete Integration	phamvu	11/20/17 15:45

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHW.i Analysis Batch Number: 123127

Lab Sample ID: IC 200-123127/4 Client Sample ID:

Date Analyzed: 11/08/17 17:28 Lab File ID: 27803-04.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	11.96	Incomplete Integration	daiglep	11/09/17 09:12

Lab Sample ID: IC 200-123127/5 Client Sample ID:

Date Analyzed: 11/08/17 18:20 Lab File ID: 27803-05.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Chloropropene	9.50	Incomplete Integration	daiglep	11/09/17 09:14
Toluene	16.85	Incomplete Integration	daiglep	11/09/17 09:14

Lab Sample ID: IC 200-123127/8 Client Sample ID:

Date Analyzed: 11/08/17 20:59 Lab File ID: 27803-08.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Freon 22	5.26	Incomplete Integration	daiglep	11/09/17 09:38
1,2,4-Trichlorobenzene	26.73	Incomplete Integration	daiglep	11/09/17 09:39
Naphthalene	27.26	Incomplete Integration	daiglep	11/09/17 09:39
1,2,3-Trichlorobenzene	27.77	Incomplete Integration	daiglep	11/09/17 09:40

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHW.i Analysis Batch Number: 123310

Lab Sample ID: MB 200-123310/5 Client Sample ID:

Date Analyzed: 11/14/17 13:00 Lab File ID: 27883-05.d GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	9.78	Assign Peak	puangmalee k	11/15/17 08:22
Toluene	16.85	Assign Peak	puangmalee k	11/15/17 08:23
Ethylbenzene	19.75	Assign Peak	puangmalee k	11/15/17 08:24
1,2,4-Trimethylbenzene	22.88	Assign Peak	puangmalee k	11/15/17 08:26

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL1w_00178	12/17/17	09/19/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00144	155 mL	1,1,1-Trichloroethane	0.20044 ppb v/v
							1,1,2,2-Tetrachloroethane	0.20044 ppb v/v
							1,1,2-Trichloroethane	0.20044 ppb v/v
							1,1-Dichloroethane	0.20044 ppb v/v
							1,1-Dichloroethene	0.20044 ppb v/v
							1,2,3-Trichlorobenzene	0.20044 ppb v/v
							1,2,3-Trichloropropane	0.20044 ppb v/v
							1,2,4-Trichlorobenzene	0.20044 ppb v/v
							1,2,4-Trimethylbenzene	0.20044 ppb v/v
							1,2-Dibromoethane	0.20044 ppb v/v
							1,2-Dichlorobenzene	0.20044 ppb v/v
							1,2-Dichloroethane	0.20044 ppb v/v
							1,2-Dichloropropane	0.20044 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.20044 ppb v/v
							1,3,5-Trimethylbenzene	0.20044 ppb v/v
							1,3-Butadiene	0.20044 ppb v/v
							1,3-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dioxane	0.20044 ppb v/v
							2,2,4-Trimethylpentane	0.20044 ppb v/v
							2-Chlorotoluene	0.20044 ppb v/v
							2-Methylbutane	0.20044 ppb v/v
							3-Chloropropene	0.20044 ppb v/v
							4-Ethyltoluene	0.20044 ppb v/v
							4-Isopropyltoluene	0.20044 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	0.20044 ppb v/v
							Acetonitrile	0.20044 ppb v/v
							Acrolein	0.20044 ppb v/v
							Acrylonitrile	0.20044 ppb v/v
							Alpha Methyl Styrene	0.20044 ppb v/v
							Benzene	0.20044 ppb v/v
							Benzyl chloride	0.20044 ppb v/v
							Bromodichloromethane	0.20044 ppb v/v
							Bromoethene(Vinyl Bromide)	0.20044 ppb v/v
							Bromoform	0.20044 ppb v/v
							Bromomethane	0.20044 ppb v/v
							Carbon disulfide	0.20044 ppb v/v
							Carbon tetrachloride	0.20044 ppb v/v
							Chlorobenzene	0.20044 ppb v/v
							Chloroethane	0.20044 ppb v/v
							Chloroform	0.20044 ppb v/v
							Chloromethane	0.20044 ppb v/v
							cis-1,2-Dichloroethene	0.20044 ppb v/v
							cis-1,3-Dichloropropene	0.20044 ppb v/v
							Cumene	0.20044 ppb v/v
							Cyclohexane	0.20044 ppb v/v
							Dibromochloromethane	0.20044 ppb v/v
							Dibromomethane	0.20044 ppb v/v
							Dichlorodifluoromethane	0.20044 ppb v/v
							Dodecane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl acetate	0.20044 ppb v/v
							Ethyl ether	0.20044 ppb v/v
							Ethylbenzene	0.20044 ppb v/v
							Freon 22	0.20044 ppb v/v
							Freon TF	0.20044 ppb v/v
							Hexachlorobutadiene	0.20044 ppb v/v
							Isopropyl alcohol	0.20044 ppb v/v
							m,p-Xylene	0.400879 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.20044 ppb v/v
							Methyl Ethyl Ketone	0.20044 ppb v/v
							methyl isobutyl ketone	0.20044 ppb v/v
							Methyl methacrylate	0.20044 ppb v/v
							Methyl tert-butyl ether	0.20044 ppb v/v
							Methylene Chloride	0.20044 ppb v/v
							n-Butane	0.20044 ppb v/v
							n-Butanol	0.20044 ppb v/v
							n-Butylbenzene	0.20044 ppb v/v
							n-Decane	0.20044 ppb v/v
							n-Heptane	0.20044 ppb v/v
							n-Hexane	0.20044 ppb v/v
							n-Nonane	0.20044 ppb v/v
							n-Octane	0.20044 ppb v/v
							n-Propylbenzene	0.20044 ppb v/v
							Naphthalene	0.20044 ppb v/v
							Pentane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	0.20044 ppb v/v
							sec-Butylbenzene	0.20044 ppb v/v
							Styrene	0.20044 ppb v/v
							tert-Butyl alcohol	0.20044 ppb v/v
							tert-Butylbenzene	0.20044 ppb v/v
							Tetrachloroethene	0.20044 ppb v/v
							Tetrahydrofuran	0.20044 ppb v/v
							Toluene	0.20044 ppb v/v
							trans-1,2-Dichloroethene	0.20044 ppb v/v
							trans-1,3-Dichloropropene	0.20044 ppb v/v
							Trichloroethene	0.20044 ppb v/v
							Trichlorofluoromethane	0.20044 ppb v/v
							Undecane	0.20044 ppb v/v
							Vinyl acetate	0.20044 ppb v/v
							Vinyl chloride	0.20044 ppb v/v
							Xylene, o-	0.20044 ppb v/v
							Ethanol	0.400944 ppb v/v
.ATTO15CAL6w_00144	12/17/17	09/19/17	Zero Air, Lot 1	15.463 L	ATTO15CALSTKi_00094	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00088	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL1w_00180	12/19/17	11/06/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00145	155 mL	1,1,1-Trichloroethane	0.20044 ppb v/v
							1,1,2,2-Tetrachloroethane	0.20044 ppb v/v
							1,1,2-Trichloroethane	0.20044 ppb v/v
							1,1-Dichloroethane	0.20044 ppb v/v
							1,1-Dichloroethene	0.20044 ppb v/v
							1,2,3-Trichlorobenzene	0.20044 ppb v/v
							1,2,3-Trichloropropane	0.20044 ppb v/v
							1,2,4-Trichlorobenzene	0.20044 ppb v/v
							1,2,4-Trimethylbenzene	0.20044 ppb v/v
							1,2-Dibromoethane	0.20044 ppb v/v
							1,2-Dichlorobenzene	0.20044 ppb v/v
							1,2-Dichloroethane	0.20044 ppb v/v
							1,2-Dichloropropane	0.20044 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.20044 ppb v/v
							1,3,5-Trimethylbenzene	0.20044 ppb v/v
							1,3-Butadiene	0.20044 ppb v/v
							1,3-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dioxane	0.20044 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2,4-Trimethylpentane	0.20044 ppb v/v
							2-Chlorotoluene	0.20044 ppb v/v
							2-Methylbutane	0.20044 ppb v/v
							3-Chloropropene	0.20044 ppb v/v
							4-Ethyltoluene	0.20044 ppb v/v
							4-Isopropyltoluene	0.20044 ppb v/v
							Acetone	0.20044 ppb v/v
							Acetonitrile	0.20044 ppb v/v
							Acrolein	0.20044 ppb v/v
							Acrylonitrile	0.20044 ppb v/v
							Alpha Methyl Styrene	0.20044 ppb v/v
							Benzene	0.20044 ppb v/v
							Benzyl chloride	0.20044 ppb v/v
							Bromodichloromethane	0.20044 ppb v/v
							Bromoethene(Vinyl Bromide)	0.20044 ppb v/v
							Bromoform	0.20044 ppb v/v
							Bromomethane	0.20044 ppb v/v
							Carbon disulfide	0.20044 ppb v/v
							Carbon tetrachloride	0.20044 ppb v/v
							Chlorobenzene	0.20044 ppb v/v
							Chloroethane	0.20044 ppb v/v
							Chloroform	0.20044 ppb v/v
							Chloromethane	0.20044 ppb v/v
							cis-1,2-Dichloroethene	0.20044 ppb v/v
							cis-1,3-Dichloropropene	0.20044 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cumene	0.20044 ppb v/v
							Cyclohexane	0.20044 ppb v/v
							Dibromochloromethane	0.20044 ppb v/v
							Dibromomethane	0.20044 ppb v/v
							Dichlorodifluoromethane	0.20044 ppb v/v
							Dodecane	0.20044 ppb v/v
							Ethyl acetate	0.20044 ppb v/v
							Ethyl ether	0.20044 ppb v/v
							Ethylbenzene	0.20044 ppb v/v
							Freon 22	0.20044 ppb v/v
							Freon TF	0.20044 ppb v/v
							Hexachlorobutadiene	0.20044 ppb v/v
							Isopropyl alcohol	0.20044 ppb v/v
							m,p-Xylene	0.400879 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.20044 ppb v/v
							Methyl Ethyl Ketone	0.20044 ppb v/v
							methyl isobutyl ketone	0.20044 ppb v/v
							Methyl methacrylate	0.20044 ppb v/v
							Methyl tert-butyl ether	0.20044 ppb v/v
							Methylene Chloride	0.20044 ppb v/v
							n-Butane	0.20044 ppb v/v
							n-Butanol	0.20044 ppb v/v
							n-Butylbenzene	0.20044 ppb v/v
							n-Decane	0.20044 ppb v/v
							n-Heptane	0.20044 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Hexane	0.20044 ppb v/v
							n-Nonane	0.20044 ppb v/v
							n-Octane	0.20044 ppb v/v
							n-Propylbenzene	0.20044 ppb v/v
							Naphthalene	0.20044 ppb v/v
							Pentane	0.20044 ppb v/v
							Propene	0.20044 ppb v/v
							sec-Butylbenzene	0.20044 ppb v/v
							Styrene	0.20044 ppb v/v
							tert-Butyl alcohol	0.20044 ppb v/v
							tert-Butylbenzene	0.20044 ppb v/v
							Tetrachloroethene	0.20044 ppb v/v
							Tetrahydrofuran	0.20044 ppb v/v
							Toluene	0.20044 ppb v/v
							trans-1,2-Dichloroethene	0.20044 ppb v/v
							trans-1,3-Dichloropropene	0.20044 ppb v/v
							Trichloroethene	0.20044 ppb v/v
							Trichlorofluoromethane	0.20044 ppb v/v
							Undecane	0.20044 ppb v/v
							Vinyl acetate	0.20044 ppb v/v
							Vinyl chloride	0.20044 ppb v/v
							Xylene, o-	0.20044 ppb v/v
							Ethanol	0.400944 ppb v/v
.ATTO15CAL6w_00145	12/19/17	11/03/17	Zero Air, Lot 1	15.463 L	ATTO15CALSTKi_00095	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00089	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL2w_00245	12/17/17	09/19/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00144	387 mL	1,1,1-Trichloroethane	0.500453 ppb v/v
							1,1,2,2-Tetrachloroethane	0.500453 ppb v/v
							1,1,2-Trichloroethane	0.500453 ppb v/v
							1,1-Dichloroethane	0.500453 ppb v/v
							1,1-Dichloroethene	0.500453 ppb v/v
							1,2,3-Trichlorobenzene	0.500453 ppb v/v
							1,2,3-Trichloropropane	0.500453 ppb v/v
							1,2,4-Trichlorobenzene	0.500453 ppb v/v
							1,2,4-Trimethylbenzene	0.500453 ppb v/v
							1,2-Dibromoethane	0.500453 ppb v/v
							1,2-Dichlorobenzene	0.500453 ppb v/v
							1,2-Dichloroethane	0.500453 ppb v/v
							1,2-Dichloropropane	0.500453 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorotetrafluoroethane	0.500453 ppb v/v
							1,3,5-Trimethylbenzene	0.500453 ppb v/v
							1,3-Butadiene	0.500453 ppb v/v
							1,3-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dioxane	0.500453 ppb v/v
							2,2,4-Trimethylpentane	0.500453 ppb v/v
							2-Chlorotoluene	0.500453 ppb v/v
							2-Methylbutane	0.500453 ppb v/v
							3-Chloropropene	0.500453 ppb v/v
							4-Ethyltoluene	0.500453 ppb v/v
							4-Isopropyltoluene	0.500453 ppb v/v
							Acetone	0.500453 ppb v/v
							Acetonitrile	0.500453 ppb v/v
							Acrolein	0.500453 ppb v/v
							Acrylonitrile	0.500453 ppb v/v
							Alpha Methyl Styrene	0.500453 ppb v/v
							Benzene	0.500453 ppb v/v
							Benzyl chloride	0.500453 ppb v/v
							Bromodichloromethane	0.500453 ppb v/v
							Bromoethene(Vinyl Bromide)	0.500453 ppb v/v
							Bromoform	0.500453 ppb v/v
							Bromomethane	0.500453 ppb v/v
							Carbon disulfide	0.500453 ppb v/v
							Carbon tetrachloride	0.500453 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	0.500453 ppb v/v
							Chloroethane	0.500453 ppb v/v
							Chloroform	0.500453 ppb v/v
							Chloromethane	0.500453 ppb v/v
							cis-1,2-Dichloroethene	0.500453 ppb v/v
							cis-1,3-Dichloropropene	0.500453 ppb v/v
							Cumene	0.500453 ppb v/v
							Cyclohexane	0.500453 ppb v/v
							Dibromochloromethane	0.500453 ppb v/v
							Dibromomethane	0.500453 ppb v/v
							Dichlorodifluoromethane	0.500453 ppb v/v
							Dodecane	0.500453 ppb v/v
							Ethyl acetate	0.500453 ppb v/v
							Ethyl ether	0.500453 ppb v/v
							Ethylbenzene	0.500453 ppb v/v
							Freon 22	0.500453 ppb v/v
							Freon TF	0.500453 ppb v/v
							Hexachlorobutadiene	0.500453 ppb v/v
							Isopropyl alcohol	0.500453 ppb v/v
							m,p-Xylene	1.00091 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.500453 ppb v/v
							Methyl Ethyl Ketone	0.500453 ppb v/v
							methyl isobutyl ketone	0.500453 ppb v/v
							Methyl methacrylate	0.500453 ppb v/v
							Methyl tert-butyl ether	0.500453 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	0.500453 ppb v/v
							n-Butane	0.500453 ppb v/v
							n-Butanol	0.500453 ppb v/v
							n-Butylbenzene	0.500453 ppb v/v
							n-Decane	0.500453 ppb v/v
							n-Heptane	0.500453 ppb v/v
							n-Hexane	0.500453 ppb v/v
							n-Nonane	0.500453 ppb v/v
							n-Octane	0.500453 ppb v/v
							n-Propylbenzene	0.500453 ppb v/v
							Naphthalene	0.500453 ppb v/v
							Pentane	0.500453 ppb v/v
							Propene	0.500453 ppb v/v
							sec-Butylbenzene	0.500453 ppb v/v
							Styrene	0.500453 ppb v/v
							tert-Butyl alcohol	0.500453 ppb v/v
							tert-Butylbenzene	0.500453 ppb v/v
							Tetrachloroethene	0.500453 ppb v/v
							Tetrahydrofuran	0.500453 ppb v/v
							Toluene	0.500453 ppb v/v
							trans-1,2-Dichloroethene	0.500453 ppb v/v
							trans-1,3-Dichloropropene	0.500453 ppb v/v
							Trichloroethene	0.500453 ppb v/v
							Trichlorofluoromethane	0.500453 ppb v/v
							Undecane	0.500453 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl acetate	0.500453 ppb v/v
							Vinyl chloride	0.500453 ppb v/v
							Xylene, o-	0.500453 ppb v/v
							Ethanol	5.01064 ppb v/v
					ATTO15EthCALw_00088	124 mL	Ethanol	5.01064 ppb v/v
.ATTO15CAL6w_00144	12/17/17	09/19/17	Zero Air, Lot 1	15.463 L	ATTO15CALSTKi_00094	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00088	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
.ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL2w_00247	12/19/17	11/08/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00145	387 mL	1,1,1-Trichloroethane	0.500453 ppb v/v
							1,1,2,2-Tetrachloroethane	0.500453 ppb v/v
							1,1,2-Trichloroethane	0.500453 ppb v/v
							1,1-Dichloroethane	0.500453 ppb v/v
							1,1-Dichloroethene	0.500453 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	0.500453 ppb v/v
							1,2,3-Trichloropropane	0.500453 ppb v/v
							1,2,4-Trichlorobenzene	0.500453 ppb v/v
							1,2,4-Trimethylbenzene	0.500453 ppb v/v
							1,2-Dibromoethane	0.500453 ppb v/v
							1,2-Dichlorobenzene	0.500453 ppb v/v
							1,2-Dichloroethane	0.500453 ppb v/v
							1,2-Dichloropropane	0.500453 ppb v/v
							1,2-Dichlorotetrafluoroethane	0.500453 ppb v/v
							1,3,5-Trimethylbenzene	0.500453 ppb v/v
							1,3-Butadiene	0.500453 ppb v/v
							1,3-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dioxane	0.500453 ppb v/v
							2,2,4-Trimethylpentane	0.500453 ppb v/v
							2-Chlorotoluene	0.500453 ppb v/v
							2-Methylbutane	0.500453 ppb v/v
							3-Chloropropene	0.500453 ppb v/v
							4-Ethyltoluene	0.500453 ppb v/v
							4-Isopropyltoluene	0.500453 ppb v/v
							Acetone	0.500453 ppb v/v
							Acetonitrile	0.500453 ppb v/v
							Acrolein	0.500453 ppb v/v
							Acrylonitrile	0.500453 ppb v/v
							Alpha Methyl Styrene	0.500453 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	0.500453 ppb v/v
							Benzyl chloride	0.500453 ppb v/v
							Bromodichloromethane	0.500453 ppb v/v
							Bromoethene(Vinyl Bromide)	0.500453 ppb v/v
							Bromoform	0.500453 ppb v/v
							Bromomethane	0.500453 ppb v/v
							Carbon disulfide	0.500453 ppb v/v
							Carbon tetrachloride	0.500453 ppb v/v
							Chlorobenzene	0.500453 ppb v/v
							Chloroethane	0.500453 ppb v/v
							Chloroform	0.500453 ppb v/v
							Chloromethane	0.500453 ppb v/v
							cis-1,2-Dichloroethene	0.500453 ppb v/v
							cis-1,3-Dichloropropene	0.500453 ppb v/v
							Cumene	0.500453 ppb v/v
							Cyclohexane	0.500453 ppb v/v
							Dibromochloromethane	0.500453 ppb v/v
							Dibromomethane	0.500453 ppb v/v
							Dichlorodifluoromethane	0.500453 ppb v/v
							Dodecane	0.500453 ppb v/v
							Ethyl acetate	0.500453 ppb v/v
							Ethyl ether	0.500453 ppb v/v
							Ethylbenzene	0.500453 ppb v/v
							Freon 22	0.500453 ppb v/v
							Freon TF	0.500453 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	0.500453 ppb v/v
							Isopropyl alcohol	0.500453 ppb v/v
							m,p-Xylene	1.00091 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	0.500453 ppb v/v
							Methyl Ethyl Ketone	0.500453 ppb v/v
							methyl isobutyl ketone	0.500453 ppb v/v
							Methyl methacrylate	0.500453 ppb v/v
							Methyl tert-butyl ether	0.500453 ppb v/v
							Methylene Chloride	0.500453 ppb v/v
							n-Butane	0.500453 ppb v/v
							n-Butanol	0.500453 ppb v/v
							n-Butylbenzene	0.500453 ppb v/v
							n-Decane	0.500453 ppb v/v
							n-Heptane	0.500453 ppb v/v
							n-Hexane	0.500453 ppb v/v
							n-Nonane	0.500453 ppb v/v
							n-Octane	0.500453 ppb v/v
							n-Propylbenzene	0.500453 ppb v/v
							Naphthalene	0.500453 ppb v/v
							Pentane	0.500453 ppb v/v
							Propene	0.500453 ppb v/v
							sec-Butylbenzene	0.500453 ppb v/v
							Styrene	0.500453 ppb v/v
							tert-Butyl alcohol	0.500453 ppb v/v
							tert-Butylbenzene	0.500453 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	0.500453 ppb v/v
							Tetrahydrofuran	0.500453 ppb v/v
							Toluene	0.500453 ppb v/v
							trans-1,2-Dichloroethene	0.500453 ppb v/v
							trans-1,3-Dichloropropene	0.500453 ppb v/v
							Trichloroethene	0.500453 ppb v/v
							Trichlorofluoromethane	0.500453 ppb v/v
							Undecane	0.500453 ppb v/v
							Vinyl acetate	0.500453 ppb v/v
							Vinyl chloride	0.500453 ppb v/v
							Xylene, o-	0.500453 ppb v/v
							Ethanol	5.01064 ppb v/v
					ATTO15EthCALw_00089	124 mL	Ethanol	5.01064 ppb v/v
.ATTO15CAL6w_00145	12/19/17	11/03/17	Zero Air, Lot 1	15.463 L	ATTO15CALSTKi_00095	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00089	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
.ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL3w_00189	12/17/17	09/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00094	386 mL	1,1,1-Trichloroethane	4.99256 ppb v/v
							1,1,2,2-Tetrachloroethane	4.99256 ppb v/v
							1,1,2-Trichloroethane	4.99256 ppb v/v
							1,1-Dichloroethane	4.99256 ppb v/v
							1,1-Dichloroethene	4.99256 ppb v/v
							1,2,3-Trichlorobenzene	4.99256 ppb v/v
							1,2,3-Trichloropropane	4.99256 ppb v/v
							1,2,4-Trichlorobenzene	4.99256 ppb v/v
							1,2,4-Trimethylbenzene	4.99256 ppb v/v
							1,2-Dibromoethane	4.99256 ppb v/v
							1,2-Dichlorobenzene	4.99256 ppb v/v
							1,2-Dichloroethane	4.99256 ppb v/v
							1,2-Dichloropropane	4.99256 ppb v/v
							1,2-Dichlorotetrafluoroethane	4.99256 ppb v/v
							1,3,5-Trimethylbenzene	4.99256 ppb v/v
							1,3-Butadiene	4.99256 ppb v/v
							1,3-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dioxane	4.99256 ppb v/v
							2,2,4-Trimethylpentane	4.99256 ppb v/v
							2-Chlorotoluene	4.99256 ppb v/v
							2-Methylbutane	4.99256 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloropropene	4.99256 ppb v/v
							4-Ethyltoluene	4.99256 ppb v/v
							4-Isopropyltoluene	4.99256 ppb v/v
							Acetone	4.99256 ppb v/v
							Acetonitrile	4.99256 ppb v/v
							Acrolein	4.99256 ppb v/v
							Acrylonitrile	4.99256 ppb v/v
							Alpha Methyl Styrene	4.99256 ppb v/v
							Benzene	4.99256 ppb v/v
							Benzyl chloride	4.99256 ppb v/v
							Bromodichloromethane	4.99256 ppb v/v
							Bromoethene(Vinyl Bromide)	4.99256 ppb v/v
							Bromoform	4.99256 ppb v/v
							Bromomethane	4.99256 ppb v/v
							Carbon disulfide	4.99256 ppb v/v
							Carbon tetrachloride	4.99256 ppb v/v
							Chlorobenzene	4.99256 ppb v/v
							Chloroethane	4.99256 ppb v/v
							Chloroform	4.99256 ppb v/v
							Chloromethane	4.99256 ppb v/v
							cis-1,2-Dichloroethene	4.99256 ppb v/v
							cis-1,3-Dichloropropene	4.99256 ppb v/v
							Cumene	4.99256 ppb v/v
							Cyclohexane	4.99256 ppb v/v
							Dibromochloromethane	4.99256 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	4.99256 ppb v/v
							Dichlorodifluoromethane	4.99256 ppb v/v
							Dodecane	4.99256 ppb v/v
							Ethyl acetate	4.99256 ppb v/v
							Ethyl ether	4.99256 ppb v/v
							Ethylbenzene	4.99256 ppb v/v
							Freon 22	4.99256 ppb v/v
							Freon TF	4.99256 ppb v/v
							Hexachlorobutadiene	4.99256 ppb v/v
							Isopropyl alcohol	4.99256 ppb v/v
							m,p-Xylene	9.98513 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	4.99256 ppb v/v
							Methyl Ethyl Ketone	4.99256 ppb v/v
							methyl isobutyl ketone	4.99256 ppb v/v
							Methyl methacrylate	4.99256 ppb v/v
							Methyl tert-butyl ether	4.99256 ppb v/v
							Methylene Chloride	4.99256 ppb v/v
							n-Butane	4.99256 ppb v/v
							n-Butanol	4.99256 ppb v/v
							n-Butylbenzene	4.99256 ppb v/v
							n-Decane	4.99256 ppb v/v
							n-Heptane	4.99256 ppb v/v
							n-Hexane	4.99256 ppb v/v
							n-Nonane	4.99256 ppb v/v
							n-Octane	4.99256 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Propylbenzene	4.99256 ppb v/v
							Naphthalene	4.99256 ppb v/v
							Pentane	4.99256 ppb v/v
							Propene	4.99256 ppb v/v
							sec-Butylbenzene	4.99256 ppb v/v
							Styrene	4.99256 ppb v/v
							tert-Butyl alcohol	4.99256 ppb v/v
							tert-Butylbenzene	4.99256 ppb v/v
							Tetrachloroethene	4.99256 ppb v/v
							Tetrahydrofuran	4.99256 ppb v/v
							Toluene	4.99256 ppb v/v
							trans-1,2-Dichloroethene	4.99256 ppb v/v
							trans-1,3-Dichloropropene	4.99256 ppb v/v
							Trichloroethene	4.99256 ppb v/v
							Trichlorofluoromethane	4.99256 ppb v/v
							Undecane	4.99256 ppb v/v
							Vinyl acetate	4.99256 ppb v/v
							Vinyl chloride	4.99256 ppb v/v
							Xylene, o-	4.99256 ppb v/v
					ATTO15EthCALw_00088	309 mL	Ethanol	9.99159 ppb v/v
.ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL3w_00190	12/19/17	11/03/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00095	386 mL	1,1,1-Trichloroethane	4.99256 ppb v/v
							1,1,2,2-Tetrachloroethane	4.99256 ppb v/v
							1,1,2-Trichloroethane	4.99256 ppb v/v
							1,1-Dichloroethane	4.99256 ppb v/v
							1,1-Dichloroethene	4.99256 ppb v/v
							1,2,3-Trichlorobenzene	4.99256 ppb v/v
							1,2,3-Trichloropropane	4.99256 ppb v/v
							1,2,4-Trichlorobenzene	4.99256 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	4.99256 ppb v/v
							1,2-Dibromoethane	4.99256 ppb v/v
							1,2-Dichlorobenzene	4.99256 ppb v/v
							1,2-Dichloroethane	4.99256 ppb v/v
							1,2-Dichloropropane	4.99256 ppb v/v
							1,2-Dichlorotetrafluoroethane	4.99256 ppb v/v
							1,3,5-Trimethylbenzene	4.99256 ppb v/v
							1,3-Butadiene	4.99256 ppb v/v
							1,3-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dioxane	4.99256 ppb v/v
							2,2,4-Trimethylpentane	4.99256 ppb v/v
							2-Chlorotoluene	4.99256 ppb v/v
							2-Methylbutane	4.99256 ppb v/v
							3-Chloropropene	4.99256 ppb v/v
							4-Ethyltoluene	4.99256 ppb v/v
							4-Isopropyltoluene	4.99256 ppb v/v
							Acetone	4.99256 ppb v/v
							Acetonitrile	4.99256 ppb v/v
							Acrolein	4.99256 ppb v/v
							Acrylonitrile	4.99256 ppb v/v
							Alpha Methyl Styrene	4.99256 ppb v/v
							Benzene	4.99256 ppb v/v
							Benzyl chloride	4.99256 ppb v/v
							Bromodichloromethane	4.99256 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoethene(Vinyl Bromide)	4.99256 ppb v/v
							Bromoform	4.99256 ppb v/v
							Bromomethane	4.99256 ppb v/v
							Carbon disulfide	4.99256 ppb v/v
							Carbon tetrachloride	4.99256 ppb v/v
							Chlorobenzene	4.99256 ppb v/v
							Chloroethane	4.99256 ppb v/v
							Chloroform	4.99256 ppb v/v
							Chloromethane	4.99256 ppb v/v
							cis-1,2-Dichloroethene	4.99256 ppb v/v
							cis-1,3-Dichloropropene	4.99256 ppb v/v
							Cumene	4.99256 ppb v/v
							Cyclohexane	4.99256 ppb v/v
							Dibromochloromethane	4.99256 ppb v/v
							Dibromomethane	4.99256 ppb v/v
							Dichlorodifluoromethane	4.99256 ppb v/v
							Dodecane	4.99256 ppb v/v
							Ethyl acetate	4.99256 ppb v/v
							Ethyl ether	4.99256 ppb v/v
							Ethylbenzene	4.99256 ppb v/v
							Freon 22	4.99256 ppb v/v
							Freon TF	4.99256 ppb v/v
							Hexachlorobutadiene	4.99256 ppb v/v
							Isopropyl alcohol	4.99256 ppb v/v
							m,p-Xylene	9.98513 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Butyl Ketone (2-Hexanone)	4.99256 ppb v/v
							Methyl Ethyl Ketone	4.99256 ppb v/v
							methyl isobutyl ketone	4.99256 ppb v/v
							Methyl methacrylate	4.99256 ppb v/v
							Methyl tert-butyl ether	4.99256 ppb v/v
							Methylene Chloride	4.99256 ppb v/v
							n-Butane	4.99256 ppb v/v
							n-Butanol	4.99256 ppb v/v
							n-Butylbenzene	4.99256 ppb v/v
							n-Decane	4.99256 ppb v/v
							n-Heptane	4.99256 ppb v/v
							n-Hexane	4.99256 ppb v/v
							n-Nonane	4.99256 ppb v/v
							n-Octane	4.99256 ppb v/v
							n-Propylbenzene	4.99256 ppb v/v
							Naphthalene	4.99256 ppb v/v
							Pentane	4.99256 ppb v/v
							Propene	4.99256 ppb v/v
							sec-Butylbenzene	4.99256 ppb v/v
							Styrene	4.99256 ppb v/v
							tert-Butyl alcohol	4.99256 ppb v/v
							tert-Butylbenzene	4.99256 ppb v/v
							Tetrachloroethene	4.99256 ppb v/v
							Tetrahydrofuran	4.99256 ppb v/v
							Toluene	4.99256 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	4.99256 ppb v/v
							trans-1,3-Dichloropropene	4.99256 ppb v/v
							Trichloroethene	4.99256 ppb v/v
							Trichlorofluoromethane	4.99256 ppb v/v
							Undecane	4.99256 ppb v/v
							Vinyl acetate	4.99256 ppb v/v
							Vinyl chloride	4.99256 ppb v/v
							Xylene, o-	4.99256 ppb v/v
					ATTO15EthCALw_00089	309 mL	Ethanol	9.99159 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00645	12/17/17	09/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00094	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,3-Trichlorobenzene	9.99806 ppb v/v
							1,2,3-Trichloropropane	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							2-Methylbutane	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Acetonitrile	9.99806 ppb v/v
							Acrolein	9.99806 ppb v/v
							Acrylonitrile	9.99806 ppb v/v
							Alpha Methyl Styrene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dibromomethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Dodecane	9.99806 ppb v/v
							Ethyl acetate	9.99806 ppb v/v
							Ethyl ether	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butanol	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Decane	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Hexane	9.99806 ppb v/v
							n-Nonane	9.99806 ppb v/v
							n-Octane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Pentane	9.99806 ppb v/v
							Propene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Undecane	9.99806 ppb v/v
							Vinyl acetate	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
					ATTO15EthCALw_00088	464 mL	Ethanol	15.0036 ppb v/v
.ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00650	12/19/17	10/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00095	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	9.99806 ppb v/v
							1,2,3-Trichloropropane	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							2-Methylbutane	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Acetonitrile	9.99806 ppb v/v
							Acrolein	9.99806 ppb v/v
							Acrylonitrile	9.99806 ppb v/v
							Alpha Methyl Styrene	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dibromomethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Dodecane	9.99806 ppb v/v
							Ethyl acetate	9.99806 ppb v/v
							Ethyl ether	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butanol	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Decane	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Nonane	9.99806 ppb v/v
							n-Octane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Pentane	9.99806 ppb v/v
							Propene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Undecane	9.99806 ppb v/v
							Vinyl acetate	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
					ATTO15EthCALw_00089	464 mL	Ethanol	15.0036 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00650	12/19/17	10/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00095	773 mL	1,2-Dichloroethene, Total	19.9961 ppb v/v
							Xylenes, Total	29.9942 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,2-Dichloroethene, Total	400 ppb v/v
							Xylenes, Total	600 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,2-Dichloroethene, Total	2 ppm v/v
							Xylenes, Total	3 ppm v/v
ATTO15CAL4w_00653	12/19/17	10/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00095	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloroethene, Total	19.9961 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
							Xylenes, Total	29.9942 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloroethene, Total	400 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylene, o-	200 ppb v/v
							Xylenes, Total	600 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloroethene, Total	2 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
							Xylenes, Total	3 ppm v/v
ATTO15CAL5w_00069	12/17/17	09/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00094	1160 mL	1,1,1-Trichloroethane	15.0036 ppb v/v
							1,1,2,2-Tetrachloroethane	15.0036 ppb v/v
							1,1,2-Trichloroethane	15.0036 ppb v/v
							1,1-Dichloroethane	15.0036 ppb v/v
							1,1-Dichloroethene	15.0036 ppb v/v
							1,2,3-Trichlorobenzene	15.0036 ppb v/v
							1,2,3-Trichloropropane	15.0036 ppb v/v
							1,2,4-Trichlorobenzene	15.0036 ppb v/v
							1,2,4-Trimethylbenzene	15.0036 ppb v/v
							1,2-Dibromoethane	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	15.0036 ppb v/v
							1,2-Dichloroethane	15.0036 ppb v/v
							1,2-Dichloropropane	15.0036 ppb v/v
							1,2-Dichlorotetrafluoroethane	15.0036 ppb v/v
							1,3,5-Trimethylbenzene	15.0036 ppb v/v
							1,3-Butadiene	15.0036 ppb v/v
							1,3-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dioxane	15.0036 ppb v/v
							2,2,4-Trimethylpentane	15.0036 ppb v/v
							2-Chlorotoluene	15.0036 ppb v/v
							2-Methylbutane	15.0036 ppb v/v
							3-Chloropropene	15.0036 ppb v/v
							4-Ethyltoluene	15.0036 ppb v/v
							4-Isopropyltoluene	15.0036 ppb v/v
							Acetone	15.0036 ppb v/v
							Acetonitrile	15.0036 ppb v/v
							Acrolein	15.0036 ppb v/v
							Acrylonitrile	15.0036 ppb v/v
							Alpha Methyl Styrene	15.0036 ppb v/v
							Benzene	15.0036 ppb v/v
							Benzyl chloride	15.0036 ppb v/v
							Bromodichloromethane	15.0036 ppb v/v
							Bromoethene(Vinyl Bromide)	15.0036 ppb v/v
							Bromoform	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	15.0036 ppb v/v
							Carbon disulfide	15.0036 ppb v/v
							Carbon tetrachloride	15.0036 ppb v/v
							Chlorobenzene	15.0036 ppb v/v
							Chloroethane	15.0036 ppb v/v
							Chloroform	15.0036 ppb v/v
							Chloromethane	15.0036 ppb v/v
							cis-1,2-Dichloroethene	15.0036 ppb v/v
							cis-1,3-Dichloropropene	15.0036 ppb v/v
							Cumene	15.0036 ppb v/v
							Cyclohexane	15.0036 ppb v/v
							Dibromochloromethane	15.0036 ppb v/v
							Dibromomethane	15.0036 ppb v/v
							Dichlorodifluoromethane	15.0036 ppb v/v
							Dodecane	15.0036 ppb v/v
							Ethyl acetate	15.0036 ppb v/v
							Ethyl ether	15.0036 ppb v/v
							Ethylbenzene	15.0036 ppb v/v
							Freon 22	15.0036 ppb v/v
							Freon TF	15.0036 ppb v/v
							Hexachlorobutadiene	15.0036 ppb v/v
							Isopropyl alcohol	15.0036 ppb v/v
							m,p-Xylene	30.0071 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	15.0036 ppb v/v
							Methyl Ethyl Ketone	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							methyl isobutyl ketone	15.0036 ppb v/v
							Methyl methacrylate	15.0036 ppb v/v
							Methyl tert-butyl ether	15.0036 ppb v/v
							Methylene Chloride	15.0036 ppb v/v
							n-Butane	15.0036 ppb v/v
							n-Butanol	15.0036 ppb v/v
							n-Butylbenzene	15.0036 ppb v/v
							n-Decane	15.0036 ppb v/v
							n-Heptane	15.0036 ppb v/v
							n-Hexane	15.0036 ppb v/v
							n-Nonane	15.0036 ppb v/v
							n-Octane	15.0036 ppb v/v
							n-Propylbenzene	15.0036 ppb v/v
							Naphthalene	15.0036 ppb v/v
							Pentane	15.0036 ppb v/v
							Propene	15.0036 ppb v/v
							sec-Butylbenzene	15.0036 ppb v/v
							Styrene	15.0036 ppb v/v
							tert-Butyl alcohol	15.0036 ppb v/v
							tert-Butylbenzene	15.0036 ppb v/v
							Tetrachloroethene	15.0036 ppb v/v
							Tetrahydrofuran	15.0036 ppb v/v
							Toluene	15.0036 ppb v/v
							trans-1,2-Dichloroethene	15.0036 ppb v/v
							trans-1,3-Dichloropropene	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	15.0036 ppb v/v
							Trichlorofluoromethane	15.0036 ppb v/v
							Undecane	15.0036 ppb v/v
							Vinyl acetate	15.0036 ppb v/v
							Vinyl chloride	15.0036 ppb v/v
							Xylene, o-	15.0036 ppb v/v
					ATTO15EthCALw_00088	620 mL	Ethanol	20.0479 ppb v/v
.ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL5w_00070	12/19/17	11/03/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00095	1160 mL	1,1,1-Trichloroethane	15.0036 ppb v/v
							1,1,2,2-Tetrachloroethane	15.0036 ppb v/v
							1,1,2-Trichloroethane	15.0036 ppb v/v
							1,1-Dichloroethane	15.0036 ppb v/v
							1,1-Dichloroethene	15.0036 ppb v/v
							1,2,3-Trichlorobenzene	15.0036 ppb v/v
							1,2,3-Trichloropropane	15.0036 ppb v/v
							1,2,4-Trichlorobenzene	15.0036 ppb v/v
							1,2,4-Trimethylbenzene	15.0036 ppb v/v
							1,2-Dibromoethane	15.0036 ppb v/v
							1,2-Dichlorobenzene	15.0036 ppb v/v
							1,2-Dichloroethane	15.0036 ppb v/v
							1,2-Dichloropropane	15.0036 ppb v/v
							1,2-Dichlorotetrafluoroethane	15.0036 ppb v/v
							1,3,5-Trimethylbenzene	15.0036 ppb v/v
							1,3-Butadiene	15.0036 ppb v/v
							1,3-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dioxane	15.0036 ppb v/v
							2,2,4-Trimethylpentane	15.0036 ppb v/v
							2-Chlorotoluene	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylbutane	15.0036 ppb v/v
							3-Chloropropene	15.0036 ppb v/v
							4-Ethyltoluene	15.0036 ppb v/v
							4-Isopropyltoluene	15.0036 ppb v/v
							Acetone	15.0036 ppb v/v
							Acetonitrile	15.0036 ppb v/v
							Acrolein	15.0036 ppb v/v
							Acrylonitrile	15.0036 ppb v/v
							Alpha Methyl Styrene	15.0036 ppb v/v
							Benzene	15.0036 ppb v/v
							Benzyl chloride	15.0036 ppb v/v
							Bromodichloromethane	15.0036 ppb v/v
							Bromoethene(Vinyl Bromide)	15.0036 ppb v/v
							Bromoform	15.0036 ppb v/v
							Bromomethane	15.0036 ppb v/v
							Carbon disulfide	15.0036 ppb v/v
							Carbon tetrachloride	15.0036 ppb v/v
							Chlorobenzene	15.0036 ppb v/v
							Chloroethane	15.0036 ppb v/v
							Chloroform	15.0036 ppb v/v
							Chloromethane	15.0036 ppb v/v
							cis-1,2-Dichloroethene	15.0036 ppb v/v
							cis-1,3-Dichloropropene	15.0036 ppb v/v
							Cumene	15.0036 ppb v/v
							Cyclohexane	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromochloromethane	15.0036 ppb v/v
							Dibromomethane	15.0036 ppb v/v
							Dichlorodifluoromethane	15.0036 ppb v/v
							Dodecane	15.0036 ppb v/v
							Ethyl acetate	15.0036 ppb v/v
							Ethyl ether	15.0036 ppb v/v
							Ethylbenzene	15.0036 ppb v/v
							Freon 22	15.0036 ppb v/v
							Freon TF	15.0036 ppb v/v
							Hexachlorobutadiene	15.0036 ppb v/v
							Isopropyl alcohol	15.0036 ppb v/v
							m,p-Xylene	30.0071 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	15.0036 ppb v/v
							Methyl Ethyl Ketone	15.0036 ppb v/v
							methyl isobutyl ketone	15.0036 ppb v/v
							Methyl methacrylate	15.0036 ppb v/v
							Methyl tert-butyl ether	15.0036 ppb v/v
							Methylene Chloride	15.0036 ppb v/v
							n-Butane	15.0036 ppb v/v
							n-Butanol	15.0036 ppb v/v
							n-Butylbenzene	15.0036 ppb v/v
							n-Decane	15.0036 ppb v/v
							n-Heptane	15.0036 ppb v/v
							n-Hexane	15.0036 ppb v/v
							n-Nonane	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Octane	15.0036 ppb v/v
							n-Propylbenzene	15.0036 ppb v/v
							Naphthalene	15.0036 ppb v/v
							Pentane	15.0036 ppb v/v
							Propene	15.0036 ppb v/v
							sec-Butylbenzene	15.0036 ppb v/v
							Styrene	15.0036 ppb v/v
							tert-Butyl alcohol	15.0036 ppb v/v
							tert-Butylbenzene	15.0036 ppb v/v
							Tetrachloroethene	15.0036 ppb v/v
							Tetrahydrofuran	15.0036 ppb v/v
							Toluene	15.0036 ppb v/v
							trans-1,2-Dichloroethene	15.0036 ppb v/v
							trans-1,3-Dichloropropene	15.0036 ppb v/v
							Trichloroethene	15.0036 ppb v/v
							Trichlorofluoromethane	15.0036 ppb v/v
							Undecane	15.0036 ppb v/v
							Vinyl acetate	15.0036 ppb v/v
							Vinyl chloride	15.0036 ppb v/v
							Xylene, o-	15.0036 ppb v/v
					ATTO15EthCALw_00089	620 mL	Ethanol	20.0479 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL6w_00144	12/17/17	09/19/17	Zero Air, Lot 1	15.463 L	ATTO15CALSTKi_00094	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00088	1237 mL	Ethanol	39.9987 ppb v/v
.ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL6w_00145	12/19/17	11/03/17	Zero Air, Lot 1	15.463 L	ATTO15CALSTKi_00095	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dibromoethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,2-Dichlorotetrafluoroethane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Butadiene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	19.9961 ppb v/v
							2,2,4-Trimethylpentane	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloropropene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromodichloromethane	19.9961 ppb v/v
							Bromoethene(Vinyl Bromide)	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cumene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromochloromethane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Freon 22	19.9961 ppb v/v
							Freon TF	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	19.9961 ppb v/v
							Methyl Ethyl Ketone	19.9961 ppb v/v
							methyl isobutyl ketone	19.9961 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butane	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Heptane	19.9961 ppb v/v
							n-Hexane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							n-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butyl alcohol	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00089	1237 mL	Ethanol	39.9987 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL7w_00071	12/17/17	09/19/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00094	3092 mL	1,1,1-Trichloroethane	39.9922 ppb v/v
							1,1,2,2-Tetrachloroethane	39.9922 ppb v/v
							1,1,2-Trichloroethane	39.9922 ppb v/v
							1,1-Dichloroethane	39.9922 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	39.9922 ppb v/v
							1,2,3-Trichlorobenzene	39.9922 ppb v/v
							1,2,3-Trichloropropane	39.9922 ppb v/v
							1,2,4-Trichlorobenzene	39.9922 ppb v/v
							1,2,4-Trimethylbenzene	39.9922 ppb v/v
							1,2-Dibromoethane	39.9922 ppb v/v
							1,2-Dichlorobenzene	39.9922 ppb v/v
							1,2-Dichloroethane	39.9922 ppb v/v
							1,2-Dichloropropane	39.9922 ppb v/v
							1,2-Dichlorotetrafluoroethane	39.9922 ppb v/v
							1,3,5-Trimethylbenzene	39.9922 ppb v/v
							1,3-Butadiene	39.9922 ppb v/v
							1,3-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dioxane	39.9922 ppb v/v
							2,2,4-Trimethylpentane	39.9922 ppb v/v
							2-Chlorotoluene	39.9922 ppb v/v
							2-Methylbutane	39.9922 ppb v/v
							3-Chloropropene	39.9922 ppb v/v
							4-Ethyltoluene	39.9922 ppb v/v
							4-Isopropyltoluene	39.9922 ppb v/v
							Acetone	39.9922 ppb v/v
							Acetonitrile	39.9922 ppb v/v
							Acrolein	39.9922 ppb v/v
							Acrylonitrile	39.9922 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha Methyl Styrene	39.9922 ppb v/v
							Benzene	39.9922 ppb v/v
							Benzyl chloride	39.9922 ppb v/v
							Bromodichloromethane	39.9922 ppb v/v
							Bromoethene(Vinyl Bromide)	39.9922 ppb v/v
							Bromoform	39.9922 ppb v/v
							Bromomethane	39.9922 ppb v/v
							Carbon disulfide	39.9922 ppb v/v
							Carbon tetrachloride	39.9922 ppb v/v
							Chlorobenzene	39.9922 ppb v/v
							Chloroethane	39.9922 ppb v/v
							Chloroform	39.9922 ppb v/v
							Chloromethane	39.9922 ppb v/v
							cis-1,2-Dichloroethene	39.9922 ppb v/v
							cis-1,3-Dichloropropene	39.9922 ppb v/v
							Cumene	39.9922 ppb v/v
							Cyclohexane	39.9922 ppb v/v
							Dibromochloromethane	39.9922 ppb v/v
							Dibromomethane	39.9922 ppb v/v
							Dichlorodifluoromethane	39.9922 ppb v/v
							Dodecane	39.9922 ppb v/v
							Ethyl acetate	39.9922 ppb v/v
							Ethyl ether	39.9922 ppb v/v
							Ethylbenzene	39.9922 ppb v/v
							Freon 22	39.9922 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Freon TF	39.9922 ppb v/v
							Hexachlorobutadiene	39.9922 ppb v/v
							Isopropyl alcohol	39.9922 ppb v/v
							m,p-Xylene	79.9845 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	39.9922 ppb v/v
							Methyl Ethyl Ketone	39.9922 ppb v/v
							methyl isobutyl ketone	39.9922 ppb v/v
							Methyl methacrylate	39.9922 ppb v/v
							Methyl tert-butyl ether	39.9922 ppb v/v
							Methylene Chloride	39.9922 ppb v/v
							n-Butane	39.9922 ppb v/v
							n-Butanol	39.9922 ppb v/v
							n-Butylbenzene	39.9922 ppb v/v
							n-Decane	39.9922 ppb v/v
							n-Heptane	39.9922 ppb v/v
							n-Hexane	39.9922 ppb v/v
							n-Nonane	39.9922 ppb v/v
							n-Octane	39.9922 ppb v/v
							n-Propylbenzene	39.9922 ppb v/v
							Naphthalene	39.9922 ppb v/v
							Pentane	39.9922 ppb v/v
							Propene	39.9922 ppb v/v
							sec-Butylbenzene	39.9922 ppb v/v
							Styrene	39.9922 ppb v/v
							tert-Butyl alcohol	39.9922 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butylbenzene	39.9922 ppb v/v
							Tetrachloroethene	39.9922 ppb v/v
							Tetrahydrofuran	39.9922 ppb v/v
							Toluene	39.9922 ppb v/v
							trans-1,2-Dichloroethene	39.9922 ppb v/v
							trans-1,3-Dichloropropene	39.9922 ppb v/v
							Trichloroethene	39.9922 ppb v/v
							Trichlorofluoromethane	39.9922 ppb v/v
							Undecane	39.9922 ppb v/v
							Vinyl acetate	39.9922 ppb v/v
							Vinyl chloride	39.9922 ppb v/v
							Xylene, o-	39.9922 ppb v/v
					ATTO15EthCALw_00088	3092 mL	Ethanol	99.9806 ppb v/v
.ATTO15CALSTKi_00094	12/17/17	09/18/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00088	12/19/17	09/19/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL7w_00072	12/19/17	11/08/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00095	3092 mL	1,1,1-Trichloroethane	39.9922 ppb v/v
							1,1,2,2-Tetrachloroethane	39.9922 ppb v/v
							1,1,2-Trichloroethane	39.9922 ppb v/v
							1,1-Dichloroethane	39.9922 ppb v/v
							1,1-Dichloroethene	39.9922 ppb v/v
							1,2,3-Trichlorobenzene	39.9922 ppb v/v
							1,2,3-Trichloropropane	39.9922 ppb v/v
							1,2,4-Trichlorobenzene	39.9922 ppb v/v
							1,2,4-Trimethylbenzene	39.9922 ppb v/v
							1,2-Dibromoethane	39.9922 ppb v/v
							1,2-Dichlorobenzene	39.9922 ppb v/v
							1,2-Dichloroethane	39.9922 ppb v/v
							1,2-Dichloropropane	39.9922 ppb v/v
							1,2-Dichlorotetrafluoroethane	39.9922 ppb v/v
							1,3,5-Trimethylbenzene	39.9922 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Butadiene	39.9922 ppb v/v
							1,3-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dioxane	39.9922 ppb v/v
							2,2,4-Trimethylpentane	39.9922 ppb v/v
							2-Chlorotoluene	39.9922 ppb v/v
							2-Methylbutane	39.9922 ppb v/v
							3-Chloropropene	39.9922 ppb v/v
							4-Ethyltoluene	39.9922 ppb v/v
							4-Isopropyltoluene	39.9922 ppb v/v
							Acetone	39.9922 ppb v/v
							Acetonitrile	39.9922 ppb v/v
							Acrolein	39.9922 ppb v/v
							Acrylonitrile	39.9922 ppb v/v
							Alpha Methyl Styrene	39.9922 ppb v/v
							Benzene	39.9922 ppb v/v
							Benzyl chloride	39.9922 ppb v/v
							Bromodichloromethane	39.9922 ppb v/v
							Bromoethene(Vinyl Bromide)	39.9922 ppb v/v
							Bromoform	39.9922 ppb v/v
							Bromomethane	39.9922 ppb v/v
							Carbon disulfide	39.9922 ppb v/v
							Carbon tetrachloride	39.9922 ppb v/v
							Chlorobenzene	39.9922 ppb v/v
							Chloroethane	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	39.9922 ppb v/v
							Chloromethane	39.9922 ppb v/v
							cis-1,2-Dichloroethene	39.9922 ppb v/v
							cis-1,3-Dichloropropene	39.9922 ppb v/v
							Cumene	39.9922 ppb v/v
							Cyclohexane	39.9922 ppb v/v
							Dibromochloromethane	39.9922 ppb v/v
							Dibromomethane	39.9922 ppb v/v
							Dichlorodifluoromethane	39.9922 ppb v/v
							Dodecane	39.9922 ppb v/v
							Ethyl acetate	39.9922 ppb v/v
							Ethyl ether	39.9922 ppb v/v
							Ethylbenzene	39.9922 ppb v/v
							Freon 22	39.9922 ppb v/v
							Freon TF	39.9922 ppb v/v
							Hexachlorobutadiene	39.9922 ppb v/v
							Isopropyl alcohol	39.9922 ppb v/v
							m,p-Xylene	79.9845 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	39.9922 ppb v/v
							Methyl Ethyl Ketone	39.9922 ppb v/v
							methyl isobutyl ketone	39.9922 ppb v/v
							Methyl methacrylate	39.9922 ppb v/v
							Methyl tert-butyl ether	39.9922 ppb v/v
							Methylene Chloride	39.9922 ppb v/v
							n-Butane	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	39.9922 ppb v/v
							n-Butylbenzene	39.9922 ppb v/v
							n-Decane	39.9922 ppb v/v
							n-Heptane	39.9922 ppb v/v
							n-Hexane	39.9922 ppb v/v
							n-Nonane	39.9922 ppb v/v
							n-Octane	39.9922 ppb v/v
							n-Propylbenzene	39.9922 ppb v/v
							Naphthalene	39.9922 ppb v/v
							Pentane	39.9922 ppb v/v
							Propene	39.9922 ppb v/v
							sec-Butylbenzene	39.9922 ppb v/v
							Styrene	39.9922 ppb v/v
							tert-Butyl alcohol	39.9922 ppb v/v
							tert-Butylbenzene	39.9922 ppb v/v
							Tetrachloroethene	39.9922 ppb v/v
							Tetrahydrofuran	39.9922 ppb v/v
							Toluene	39.9922 ppb v/v
							trans-1,2-Dichloroethene	39.9922 ppb v/v
							trans-1,3-Dichloropropene	39.9922 ppb v/v
							Trichloroethene	39.9922 ppb v/v
							Trichlorofluoromethane	39.9922 ppb v/v
							Undecane	39.9922 ppb v/v
							Vinyl acetate	39.9922 ppb v/v
							Vinyl chloride	39.9922 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylene, o-	39.9922 ppb v/v
					ATTO15EthCALw_00089	3092 mL	Ethanol	99.9806 ppb v/v
.ATTO15CALSTKi_00095	12/19/17	10/17/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dibromomethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00089	01/18/18	10/18/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15GIS_00015							1,2-Dichloroethene, Total	
							1,4-Difluorobenzene	100 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							BFB	100 ppb v/v
							Chlorobenzene-d5	100 ppb v/v
							Chlorobromomethane	100 ppb v/v
							Tentatively Identified Compound	
							Total Alkanes	
							Xylenes, Total	
ATTO15LCSW_00707	11/11/17	08/23/17	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00086	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloroethene, Total	19.9961 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
							Xylenes, Total	29.9942 ppb v/v
.ATTO15LCSSTKi_00086	11/11/17	08/11/17	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00020	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloroethene, Total	400 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
							Xylenes, Total	600 ppb v/v
..ATTO15LCSs_00020	12/19/17		Spectra Gases, Lot CC-250179		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloroethene, Total	2 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
							Xylenes, Total	3 ppm v/v
ATTO15LCSW_00721	12/19/17	11/10/17	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00087	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v

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SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
.ATTO15LCSSTKi_00087	12/19/17	11/10/17	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00020	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15LCSs_00020	12/19/17		Spectra Gases, Lot CC-250179		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
ATTO15LCSW_00725	12/19/17	11/10/17	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00087	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dibromoethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,2-Dichlorotetrafluoroethane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Butadiene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2,2,4-Trimethylpentane	9.99806 ppb v/v
							2-Chlorotoluene	9.99806 ppb v/v
							3-Chloropropene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromodichloromethane	9.99806 ppb v/v
							Bromoethene(Vinyl Bromide)	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cumene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromochloromethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Freon 22	9.99806 ppb v/v
							Freon TF	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	19.9961 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	9.99806 ppb v/v
							Methyl Ethyl Ketone	9.99806 ppb v/v
							methyl isobutyl ketone	9.99806 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butane	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Heptane	9.99806 ppb v/v
							n-Hexane	9.99806 ppb v/v
							n-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butyl alcohol	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylene, o-	9.99806 ppb v/v
.ATTO15LCSSTKi_00087	12/19/17	11/10/17	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00020	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dibromoethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,2-Dichlorotetrafluoroethane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Butadiene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2,2,4-Trimethylpentane	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							3-Chloropropene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							Acetone	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromodichloromethane	200 ppb v/v
							Bromoethene(Vinyl Bromide)	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cumene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromochloromethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Freon 22	200 ppb v/v
							Freon TF	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	400 ppb v/v
							Methyl Butyl Ketone (2-Hexanone)	200 ppb v/v
							Methyl Ethyl Ketone	200 ppb v/v
							methyl isobutyl ketone	200 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butane	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Hexane	200 ppb v/v
							n-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butyl alcohol	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15LCSs_00020	12/19/17		Spectra Gases, Lot CC-250179		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dibromoethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,2-Dichlorotetrafluoroethane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Butadiene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2,2,4-Trimethylpentane	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							3-Chloropropene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	1 ppm v/v
							Acetone	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromodichloromethane	1 ppm v/v
							Bromoethene(Vinyl Bromide)	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cumene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromochloromethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Freon 22	1 ppm v/v
							Freon TF	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl Butyl Ketone (2-Hexanone)	1 ppm v/v
							Methyl Ethyl Ketone	1 ppm v/v
							methyl isobutyl ketone	1 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butane	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Hexane	1 ppm v/v
							n-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butyl alcohol	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
ATTO15WISs_00004							1,2-Dichloroethene, Total	
							1,4-Difluorobenzene	100 ppb v/v
							BFB	100 ppb v/v
							Chlorobenzene-d5	100 ppb v/v
							Chlorobromomethane	100 ppb v/v
							Tentatively Identified Compound	
							Total Alkanes	
							Xylenes, Total	

Reagent

ATTO15CALs_00026

Standard 1003117 was compared o the ISO certified standard in Knoxville in Chrom work list 23318 on instrument C.

Reagent

ATTO15EthCALs_00010

CHEMSERVICE INC.

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9321 • 1-610-692-3026 • Fax 1-610-692-3729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Ethyl alcohol

CATALOG NUMBER	N-11685-1G
LOT NUMBER	5301900
DATE CERTIFIED	07/21/15
EXPIRATION DATE	07/31/21
CAS NUMBER	64-17-5
MOLECULAR FORMULA	C2H6O
MOLECULAR WEIGHT	46.07
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only
ISO GUIDE 34 CERTIFIED	( )

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell
CSMTC

600 Tower Lane • P.O. Box 905 • West Chester, PA 19381-0905
1-800-452-9994 • 1-610-692-7026 • Fax 1-610-692-8999
info@chemservice.com • www.commarsure.com

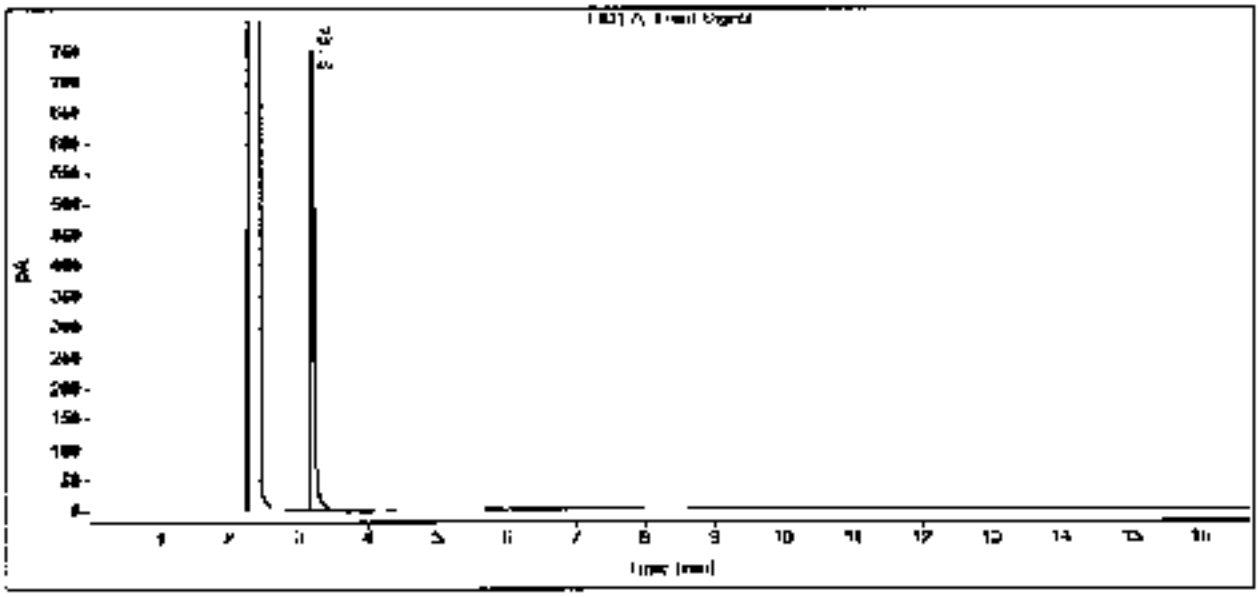
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\0715\SIG1006941.D

Sample name: N-11886

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	7/21/2015 10:30:34 AM	**Location:**	Vial 5
Acq. method.	MIX1.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.184	BB	0.0537	2394.4050	741.5187	100.0000
		Sum	2394.4050		

Reagent

ATTO15GIS_00015

THE LINDE GROUP

Linde

SHIPPED TO: Test America Inc
30 Community Drive Suite 11
South Burlington, VT 05403

PAGE: 1 of 1

ATT0156-15_0005
106702)

CERTIFICATE OF ANALYSIS

Sales#:	115057976	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1415934	**Cylinder #:**	CC-270535
Certification Date:	May-08-2017	**Cylinder Pressure:**	2000 psig
P.O.#:	2670546-Replacement	**Cylinder Valve:**	CGA 350 - Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24066974	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	4000 Liters
Expiration Date:	May-08-2018	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	10% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Bromochloromethane	74-97-5	100 ppb	108 ppb
1,4-Difluorobenzene	540-36-3	100 ppb	109 ppb
Chlorobenzene-d5	3114-55-4	100 ppb	103 ppb
4-Bromofluorobenzene	460-00-4	100 ppb	104 ppb
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Justin Kutz

DATE: May-08-2017

Linde Gas North America LLC

(908) 379-9700 Main (908) 329-9740 Fax
www.LindeUS.com

Reagent

ATTO15LCSs_00020

Standard 1003120 was compared o the ISO certified standard in Knoxville in Chrom
work list 23318 on instrument C.

Method TO15

Volatile Organic Compounds (GC/MS) by Method TO15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Matrix: Air Level: Low Lab File ID: 27883-04.d

Lab ID: LCS 200-123310/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	10.0	9.22	92	67-127	
Carbon tetrachloride	10.0	9.13	91	62-143	
Chlorobenzene	10.0	9.13	91	68-128	
Chloroethane	10.0	9.64	96	65-125	
Chloromethane	10.0	9.34	93	57-126	
cis-1,2-Dichloroethene	10.0	8.92	89	67-127	
1,3-Dichlorobenzene	10.0	9.86	99	67-127	
1,2-Dichlorobenzene	10.0	9.68	97	67-127	
1,1-Dichloroethane	10.0	9.24	92	66-126	
1,2-Dichloroethane	10.0	9.62	96	67-132	
1,1-Dichloroethene	10.0	8.84	88	67-127	
1,2-Dichloropropane	10.0	9.18	92	67-127	
Ethylbenzene	10.0	9.25	93	68-128	
Methylene Chloride	10.0	9.83	98	62-122	
Methyl tert-butyl ether	10.0	9.45	95	67-127	
m,p-Xylene	20.0	18.2	91	68-128	
Naphthalene	10.0	8.84	88	50-121	
Tetrachloroethene	10.0	8.73	87	70-130	
Toluene	10.0	9.15	92	67-127	
trans-1,2-Dichloroethene	10.0	10.4	104	72-132	
1,1,1-Trichloroethane	10.0	9.32	93	70-130	
Trichloroethene	10.0	8.83	88	68-128	
1,3,5-Trimethylbenzene	10.0	9.18	92	65-125	
1,2,4-Trimethylbenzene	10.0	9.39	94	65-125	
Vinyl chloride	10.0	9.18	92	62-125	
Xylene, o-	10.0	8.86	89	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.50	95	69-129	
1,1,2-Trichloroethane	10.0	9.26	93	69-129	
1,2,4-Trichlorobenzene	10.0	9.36	94	59-126	
1,2-Dibromoethane	10.0	9.59	96	70-130	
1,2-Dichlorotetrafluoroethane	10.0	10.4	104	78-138	
Acetone	10.0	10.5	105	64-136	
1,3-Butadiene	10.0	8.82	88	59-125	
2-Chlorotoluene	10.0	9.21	92	67-127	
4-Ethyltoluene	10.0	9.66	97	69-129	
1,4-Dioxane	10.0	10.2	102	66-132	
3-Chloropropene	10.0	10.4	104	53-133	
4-Isopropyltoluene	10.0	9.55	96	67-129	
1,4-Dichlorobenzene	10.0	9.86	99	66-126	
2,2,4-Trimethylpentane	10.0	9.41	94	67-127	
cis-1,3-Dichloropropene	10.0	9.75	97	70-130	
Carbon disulfide	10.0	11.4	114	81-141	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Matrix: Air Level: Low Lab File ID: 27883-04.d

Lab ID: LCS 200-123310/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromoform	10.0	10.3	103	34-170	
Benzyl chloride	10.0	10.7	107	54-135	
Bromomethane	10.0	9.39	94	68-128	
Chloroform	10.0	9.44	94	69-129	
Bromoethene(Vinyl Bromide)	10.0	9.24	92	67-127	
Bromodichloromethane	10.0	9.47	95	69-129	
Dichlorodifluoromethane	10.0	9.45	94	68-128	
Dibromochloromethane	10.0	9.42	94	66-130	
Cumene	10.0	9.06	91	67-127	
Cyclohexane	10.0	9.42	94	69-129	
Tetrahydrofuran	10.0	10.7	107	61-136	
methyl isobutyl ketone	10.0	10.5	105	62-130	
Methyl methacrylate	10.0	10.2	102	70-130	
Freon TF	10.0	9.30	93	68-128	
tert-Butyl alcohol	10.0	10.6	106	64-124	
Hexachlorobutadiene	10.0	9.18	92	62-130	
n-Butylbenzene	10.0	10.3	103	67-127	
Freon 22	10.0	9.53	95	64-128	
n-Hexane	10.0	10.1	101	71-131	
Styrene	10.0	9.30	93	68-128	
sec-Butylbenzene	10.0	9.33	93	66-126	
Methyl Butyl Ketone (2-Hexanone)	10.0	11.0	110	61-127	
Methyl Ethyl Ketone	10.0	10.2	102	62-122	
n-Propylbenzene	10.0	9.38	94	67-127	
Trichlorofluoromethane	10.0	9.19	92	67-127	
Isopropyl alcohol	10.0	10.2	102	55-124	
n-Heptane	10.0	9.53	95	62-130	
n-Butane	10.0	9.69	97	56-130	
trans-1,3-Dichloropropene	10.0	10.0	100	69-129	
tert-Butylbenzene	10.0	9.01	90	63-125	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Matrix: Air Level: Low Lab File ID: 200-27906-003.D

Lab ID: LCS 200-123382/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	10.0	9.91	99	67-127	
Carbon tetrachloride	10.0	11.1	111	62-143	
Chlorobenzene	10.0	10.0	100	68-128	
Chloroethane	10.0	10.0	100	65-125	
Chloromethane	10.0	9.87	99	57-126	
cis-1,2-Dichloroethene	10.0	9.89	99	67-127	
1,3-Dichlorobenzene	10.0	11.0	110	67-127	
1,2-Dichlorobenzene	10.0	10.7	107	67-127	
1,1-Dichloroethane	10.0	10.6	106	66-126	
1,2-Dichloroethane	10.0	10.7	107	67-132	
1,1-Dichloroethene	10.0	9.99	100	67-127	
1,2-Dichloropropane	10.0	10.1	101	67-127	
Ethylbenzene	10.0	10.5	105	68-128	
Methylene Chloride	10.0	10.6	106	62-122	
Methyl tert-butyl ether	10.0	11.1	111	67-127	
m,p-Xylene	20.0	20.8	104	68-128	
Naphthalene	10.0	9.64	96	50-121	
Tetrachloroethene	10.0	9.63	96	70-130	
Toluene	10.0	10.1	101	67-127	
trans-1,2-Dichloroethene	10.0	11.3	113	72-132	
1,1,1-Trichloroethane	10.0	10.6	106	70-130	
Trichloroethene	10.0	10.4	104	68-128	
1,3,5-Trimethylbenzene	10.0	10.6	106	65-125	
1,2,4-Trimethylbenzene	10.0	10.9	109	65-125	
Vinyl chloride	10.0	10.0	100	62-125	
Xylene, o-	10.0	10.2	102	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	69-129	
1,1,2-Trichloroethane	10.0	10.3	103	69-129	
1,2,4-Trichlorobenzene	10.0	9.71	97	59-126	
1,2-Dibromoethane	10.0	10.5	105	70-130	
1,2-Dichlorotetrafluoroethane	10.0	11.3	113	78-138	
Acetone	10.0	11.6	116	64-136	
1,3-Butadiene	10.0	10.0	100	59-125	
2-Chlorotoluene	10.0	10.8	108	67-127	
4-Ethyltoluene	10.0	11.7	117	69-129	
1,4-Dioxane	10.0	10.6	106	66-132	
3-Chloropropene	10.0	10.5	105	53-133	
4-Isopropyltoluene	10.0	11.2	112	67-129	
1,4-Dichlorobenzene	10.0	10.8	108	66-126	
2,2,4-Trimethylpentane	10.0	10.4	104	67-127	
cis-1,3-Dichloropropene	10.0	10.7	107	70-130	
Carbon disulfide	10.0	11.9	119	81-141	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Matrix: Air Level: Low Lab File ID: 200-27906-003.D

Lab ID: LCS 200-123382/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromoform	10.0	11.1	111	34-170	
Benzyl chloride	10.0	11.9	119	54-135	
Bromomethane	10.0	9.95	100	68-128	
Chloroform	10.0	10.5	105	69-129	
Bromoethene(Vinyl Bromide)	10.0	9.75	98	67-127	
Bromodichloromethane	10.0	10.6	106	69-129	
Dichlorodifluoromethane	10.0	10.4	104	68-128	
Dibromochloromethane	10.0	10.3	103	66-130	
Cumene	10.0	10.3	103	67-127	
Cyclohexane	10.0	10.7	107	69-129	
Tetrahydrofuran	10.0	11.8	118	61-136	
methyl isobutyl ketone	10.0	11.7	117	62-130	
Methyl methacrylate	10.0	11.8	118	70-130	
Freon TF	10.0	10.1	101	68-128	
tert-Butyl alcohol	10.0	10.6	106	64-124	
Hexachlorobutadiene	10.0	10.2	102	62-130	
n-Butylbenzene	10.0	11.4	114	67-127	
Freon 22	10.0	10.6	106	64-128	
n-Hexane	10.0	11.3	113	71-131	
Styrene	10.0	11.1	111	68-128	
sec-Butylbenzene	10.0	10.7	107	66-126	
Methyl Butyl Ketone (2-Hexanone)	10.0	11.5	115	61-127	
Methyl Ethyl Ketone	10.0	11.3	113	62-122	
n-Propylbenzene	10.0	10.7	107	67-127	
Trichlorofluoromethane	10.0	9.70	97	67-127	
Isopropyl alcohol	10.0	10.5	105	55-124	
n-Heptane	10.0	10.4	104	62-130	
n-Butane	10.0	10.5	105	56-130	
trans-1,3-Dichloropropene	10.0	10.8	108	69-129	
tert-Butylbenzene	10.0	10.4	104	63-125	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab File ID: 27883-05.d Lab Sample ID: MB 200-123310/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 11/14/2017 13:00

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-123310/4	27883-04.d	11/14/2017 12:07
AA-1	200-40953-5	27883-09.d	11/14/2017 16:21

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab File ID: 200-27906-004.D Lab Sample ID: MB 200-123382/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 11/15/2017 13:36

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-123382/3	200-27906-003.D	11/15/2017 12:45
SV-ES1	200-40953-1	200-27906-008.D	11/15/2017 16:58
SV-ES2	200-40953-3	200-27906-009.D	11/15/2017 17:48

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab File ID: 200-27684-001.D BFB Injection Date: 10/31/2017

Instrument ID: CHG.i BFB Injection Time: 16:32

Analysis Batch No.: 122801

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	16.5	
75	30.0 - 66.0% of mass 95	45.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.9	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	83.9	
175	4.0 - 9.0 % of mass 174	5.8	(7.0) 1
176	93.0 - 101.0% of mass 174	82.0	(97.8) 1
177	5.0 - 9.0% of mass 176	5.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-122801/3	200-27684-003.D	10/31/2017	18:11
	IC 200-122801/4	200-27684-004.D	10/31/2017	19:01
	IC 200-122801/6	200-27684-006.D	10/31/2017	20:42
	IC 200-122801/8	200-27684-008.D	10/31/2017	22:23
	ICIS 200-122801/9	200-27684-009.D	10/31/2017	23:14
	IC 200-122801/10	200-27684-010.D	11/01/2017	00:04
	IC 200-122801/11	200-27684-011.D	11/01/2017	00:55
	IC 200-122801/12	200-27684-012.D	11/01/2017	01:45
	ICV 200-122801/16	200-27684-016.D	11/01/2017	05:07

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab File ID: 200-27906-001.D BFB Injection Date: 11/15/2017

Instrument ID: CHG.i BFB Injection Time: 11:02

Analysis Batch No.: 123382

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.0	
75	30.0 - 66.0% of mass 95	47.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.1	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	76.8	
175	4.0 - 9.0 % of mass 174	5.5	(7.1) 1
176	93.0 - 101.0% of mass 174	75.9	(98.8) 1
177	5.0 - 9.0% of mass 176	5.1	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-123382/2	200-27906-002.D	11/15/2017	11:54
	LCS 200-123382/3	200-27906-003.D	11/15/2017	12:45
	MB 200-123382/4	200-27906-004.D	11/15/2017	13:36
SV-ES1	200-40953-1	200-27906-008.D	11/15/2017	16:58
SV-ES2	200-40953-3	200-27906-009.D	11/15/2017	17:48

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab File ID: 27883-01.d BFB Injection Date: 11/14/2017

Instrument ID: CHW.i BFB Injection Time: 09:29

Analysis Batch No.: 123310

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.5	
75	30.0 - 66.0% of mass 95	47.5	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.2	
173	Less than 2.0% of mass 174	0.6	(0.7) 1
174	50.0 - 120.0% of mass 95	89.0	
175	4.0 - 9.0 % of mass 174	6.4	(7.2) 1
176	93.0 - 101.0% of mass 174	86.8	(97.5) 1
177	5.0 - 9.0% of mass 176	5.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-123310/3	27883-03.d	11/14/2017	11:14
	LCS 200-123310/4	27883-04.d	11/14/2017	12:07
	MB 200-123310/5	27883-05.d	11/14/2017	13:00
AA-1	200-40953-5	27883-09.d	11/14/2017	16:21

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Sample No.: ICIS 200-122801/9 Date Analyzed: 10/31/2017 23:14

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-27684-009.D Heated Purge: (Y/N) N

Calibration ID: 38350

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		464552	9.42	2267534	11.32	2033391	17.27
UPPER LIMIT		650373	9.75	3174548	11.65	2846747	17.60
LOWER LIMIT		278731	9.09	1360520	10.99	1220035	16.94
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-122801/16		477245	9.42	2444162	11.32	2185387	17.27

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Sample No.: CCVIS 200-123382/2 Date Analyzed: 11/15/2017 11:54

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-27906-002.D Heated Purge: (Y/N) N

Calibration ID: 38350

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		405662	9.40	2139264	11.30	1879231	17.26
UPPER LIMIT		567927	9.73	2994970	11.63	2630923	17.59
LOWER LIMIT		243397	9.07	1283558	10.97	1127539	16.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-123382/3		386228	9.40	1907284	11.30	1739738	17.26
MB 200-123382/4		392042	9.40	2020099	11.30	1714394	17.26
200-40953-1	SV-ES1	382092	9.40	1910438	11.30	1672490	17.26
200-40953-3	SV-ES2	387036	9.41	1960883	11.30	1732861	17.26

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Sample No.: ICIS 200-123127/10 Date Analyzed: 11/08/2017 22:44

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27803-10.d Heated Purge: (Y/N) N

Calibration ID: 38408

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		202509	12.39	1094932	14.09	1007633	19.56
UPPER LIMIT		283513	12.72	1532905	14.42	1410686	19.89
LOWER LIMIT		121505	12.06	656959	13.76	604580	19.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-123127/17		209652	12.39	1121346	14.09	1031039	19.56

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Sample No.: CCVIS 200-123310/3 Date Analyzed: 11/14/2017 11:14

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27883-03.d Heated Purge: (Y/N) N

Calibration ID: 38408

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		215838	12.39	1165375	14.09	1072250	19.55
UPPER LIMIT		302173	12.72	1631525	14.42	1501150	19.88
LOWER LIMIT		129503	12.06	699225	13.76	643350	19.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-123310/4		238087	12.39	1277266	14.09	1175386	19.56
MB 200-123310/5		244612	12.38	1304593	14.09	1109525	19.56
200-40953-5	AA-1	175646	12.38	996648	14.09	897759	19.56

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: SV-ES1 Lab Sample ID: 200-40953-1

Matrix: Air Lab File ID: 200-27906-008.D

Analysis Method: TO-15 Date Collected: 11/11/2017 18:30

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 16:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.93		0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.035	0.035
127-18-4	Tetrachloroethene	165.83	2.6		0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
79-01-6	Trichloroethene	131.39	0.62		0.035	0.0091
75-01-4	Vinyl chloride	62.50	0.018	U	0.035	0.018

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: SV-ES1 Lab Sample ID: 200-40953-1

Matrix: Air Lab File ID: 200-27906-008.D

Analysis Method: TO-15 Date Collected: 11/11/2017 18:30

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 16:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	3.7		0.14	0.11
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.14	0.14
127-18-4	Tetrachloroethene	165.83	18		0.24	0.066
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
79-01-6	Trichloroethene	131.39	3.3		0.19	0.049
75-01-4	Vinyl chloride	62.50	0.046	U	0.089	0.046

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-008.D
Lims ID: 200-40953-A-1
Client ID: SV-ES1
Sample Type: Client
Inject. Date: 15-Nov-2017 16:58:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027906-008
Misc. Info.: 40953-01
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Nov-2017 15:43:52 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: phamvu Date: 20-Nov-2017 15:43:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	50112	0.4898	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	13136	0.2930	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390				ND	
5 Chloromethane	50	3.513	3.508	0.005	99	9462	0.4502	
6 Butane	43	3.663	3.663	0.000	99	43237	1.50	
7 Vinyl chloride	62		3.700				ND	
8 Butadiene	54	3.759	3.759	0.000	57	1410	0.0889	
10 Bromomethane	94		4.305				ND	
11 Chloroethane	64		4.487				ND	
13 Vinyl bromide	106		4.802				ND	
14 Trichlorofluoromethane	101	4.872	4.872	0.000	98	20395	0.2256	
20 1,1,2-Trichloro-1,2,2-trif	101	5.760	5.749	0.011	95	4340	0.0729	
21 1,1-Dichloroethene	96		5.808				ND	
22 Acetone	43	6.027	6.027	0.000	100	605893	23.7	
23 Carbon disulfide	76	6.172	6.172	0.000	100	260582	4.01	
24 Isopropyl alcohol	45	6.279	6.263	0.016	99	25543	1.03	
25 3-Chloro-1-propene	41		6.482				ND	
27 Methylene Chloride	49	6.744	6.744	0.000	89	5014	0.2122	
28 2-Methyl-2-propanol	59	6.964	6.953	0.011	94	230896	5.85	
29 Methyl tert-butyl ether	73		7.119				ND	
31 trans-1,2-Dichloroethene	61		7.135				ND	
33 Hexane	57	7.472	7.466	0.006	88	4974	0.1923	
34 1,1-Dichloroethane	63		7.937				ND	
37 cis-1,2-Dichloroethene	96	8.964	8.964	0.000	92	30045	0.9302	
38 2-Butanone (MEK)	72	9.039	9.034	0.005	98	13094	1.44	
* 40 Chlorobromomethane	128	9.403	9.403	0.000	75	382092	10.0	
41 Tetrahydrofuran	42	9.462	9.446	0.016	83	8333	0.4529	
42 Chloroform	83	9.510	9.515	-0.005	88	5071	0.0695	
S 30 1,2-Dichloroethene, Total	61				0		0.9302	
43 Cyclohexane	84	9.756	9.756	0.000	92	2498	0.0722	
44 1,1,1-Trichloroethane	97		9.788				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Carbon tetrachloride	117	10.029	10.024	0.005	96	6130	0.0673	
46 Isooctane	57	10.430	10.436	-0.006	92	12620	0.1039	
47 Benzene	78	10.478	10.484	-0.006	94	22682	0.2360	
48 1,2-Dichloroethane	62		10.666				ND	
49 n-Heptane	43	10.810	10.810	0.000	92	10031	0.2161	
* 50 1,4-Difluorobenzene	114	11.297	11.302	-0.005	94	1910438	10.0	
53 Trichloroethene	95	11.757	11.757	0.000	96	35267	0.6220	
54 1,2-Dichloropropane	63		12.313				ND	
55 Methyl methacrylate	69		12.490				ND	
56 1,4-Dioxane	88	12.586	12.570	0.016	86	4811	0.2709	
58 Dichlorobromomethane	83		12.848				ND	
60 cis-1,3-Dichloropropene	75		13.768				ND	
61 4-Methyl-2-pentanone (MIBK	43	14.084	14.089	-0.005	95	7947	0.1382	
65 Toluene	92	14.351	14.352	-0.001	94	58920	0.7818	
66 trans-1,3-Dichloropropene	75	14.961	14.951	0.010	52	5981	0.0908	
67 1,1,2-Trichloroethane	83		15.325				ND	
68 Tetrachloroethene	166	15.416	15.416	0.000	96	213353	2.62	
69 2-Hexanone	43		15.807				ND	
71 Chlorodibromomethane	129		16.079				ND	
72 Ethylene Dibromide	107		16.352				ND	
* 74 Chlorobenzene-d5	117	17.256	17.256	0.000	87	1672490	10.0	
75 Chlorobenzene	112		17.315				ND	
76 Ethylbenzene	91	17.470	17.470	0.000	99	54512	0.3557	
78 m-Xylene & p-Xylene	106	17.727	17.727	0.000	0	70949	1.16	
79 o-Xylene	106	18.578	18.583	-0.005	97	23046	0.3662	
80 Styrene	104	18.637	18.642	-0.005	98	37823	0.4528	
81 Bromoform	173		19.086				ND	
82 Isopropylbenzene	105	19.321	19.321	0.000	97	11190	0.0664	
S 73 Xylenes, Total	106				0		1.52	
84 1,1,2,2-Tetrachloroethane	83		20.022				ND	
85 N-Propylbenzene	91	20.081	20.086	-0.005	98	12583	0.0660	
88 4-Ethyltoluene	105	20.290	20.290	0.000	53	11162	0.0762	
89 2-Chlorotoluene	91		20.290				ND	M
90 1,3,5-Trimethylbenzene	105	20.407	20.407	0.000	91	12165	0.0914	
92 tert-Butylbenzene	119		20.910				ND	
93 1,2,4-Trimethylbenzene	105	21.012	21.012	0.000	82	35573	0.2757	
94 sec-Butylbenzene	105		21.253				ND	
95 4-Isopropyltoluene	119	21.467	21.467	0.000	96	9304	0.0634	
96 1,3-Dichlorobenzene	146	21.488	21.483	0.005	41	1808	0.0181	
97 1,4-Dichlorobenzene	146	21.622	21.622	0.000	95	2945	0.0297	
98 Benzyl chloride	91		21.830				ND	
100 n-Butylbenzene	91	22.044	22.044	0.000	81	2213	0.0172	
101 1,2-Dichlorobenzene	146	22.162	22.157	0.005	38	1225	0.0131	
103 1,2,4-Trichlorobenzene	180	24.596	24.602	-0.006	1	1296	0.0234	
104 Hexachlorobutadiene	225		24.783				ND	
105 Naphthalene	128	25.067	25.067	0.000	99	38316	0.3775	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

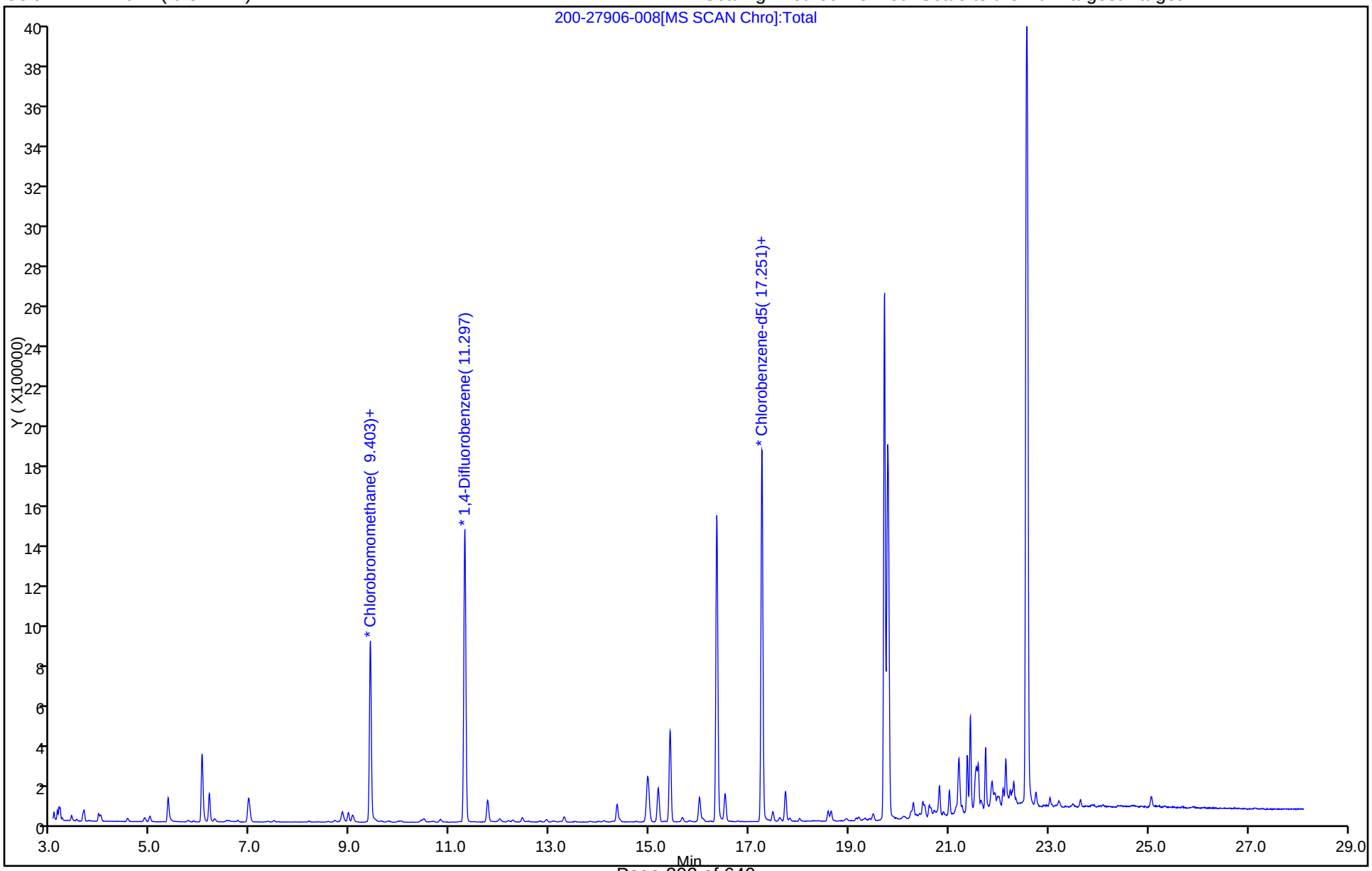
Report Date: 20-Nov-2017 15:44:06 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-008.D

Injection Date:	15-Nov-2017 16:58:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-40953-A-1	Lab Sample ID:	200-40953-1	Worklist Smp#:	8
Client ID:	SV-ES1				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



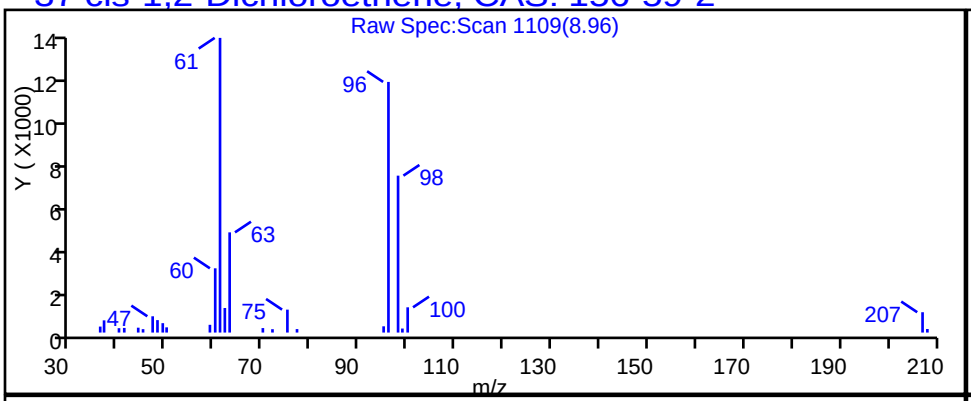
Report Date: 20-Nov-2017 15:44:06 Chrom Revision: 2.2 28-Sep-2017 09:29:16

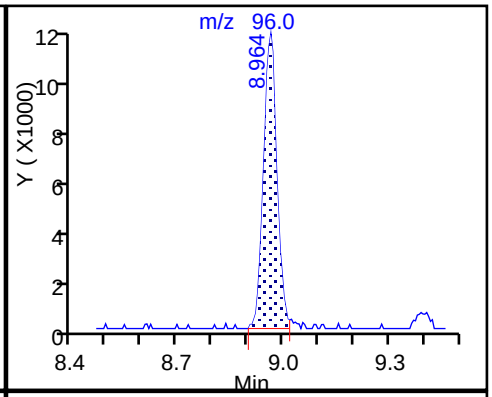
TestAmerica Burlington

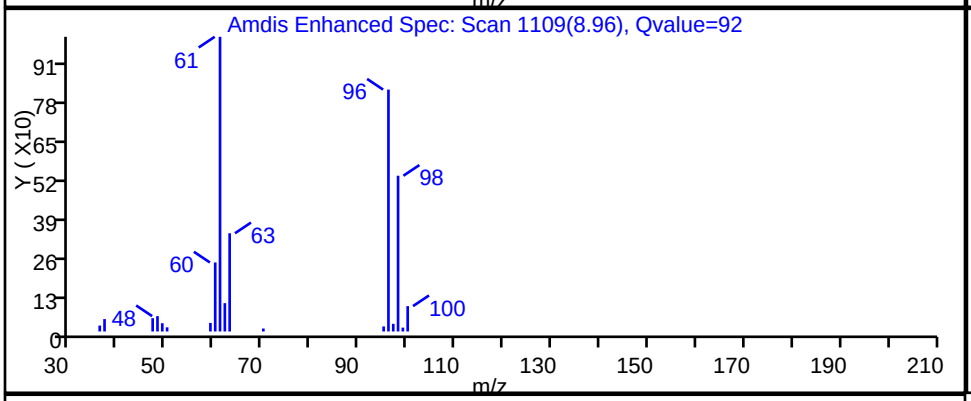
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-008.D

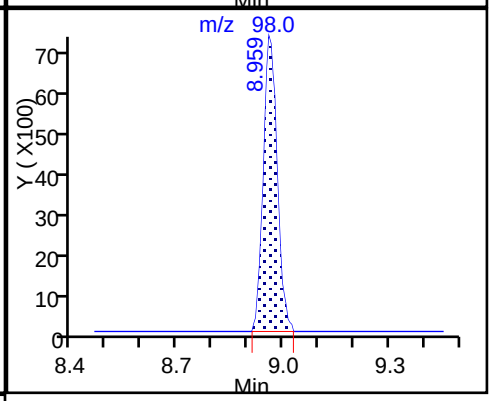
Injection Date:	15-Nov-2017 16:58:30	Instrument ID:	CHG.i		
Lims ID:	200-40953-A-1	Lab Sample ID:	200-40953-1		
Client ID:	SV-ES1				
Operator ID:	vtp	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

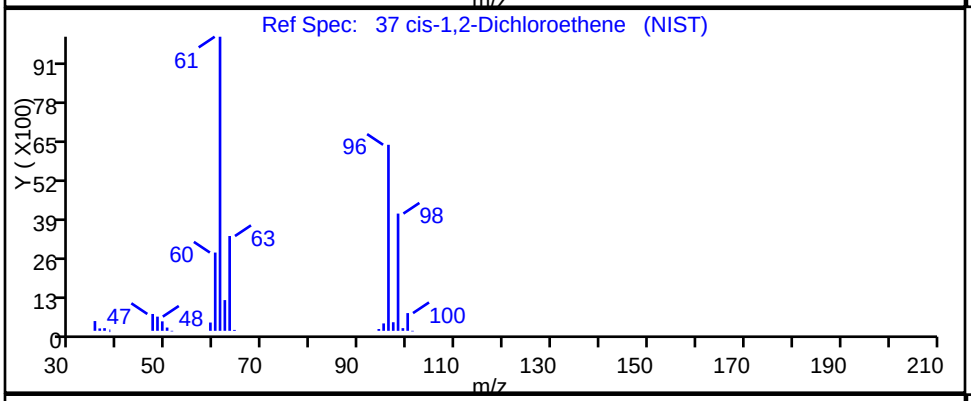
37 cis-1,2-Dichloroethene, CAS: 156-59-2

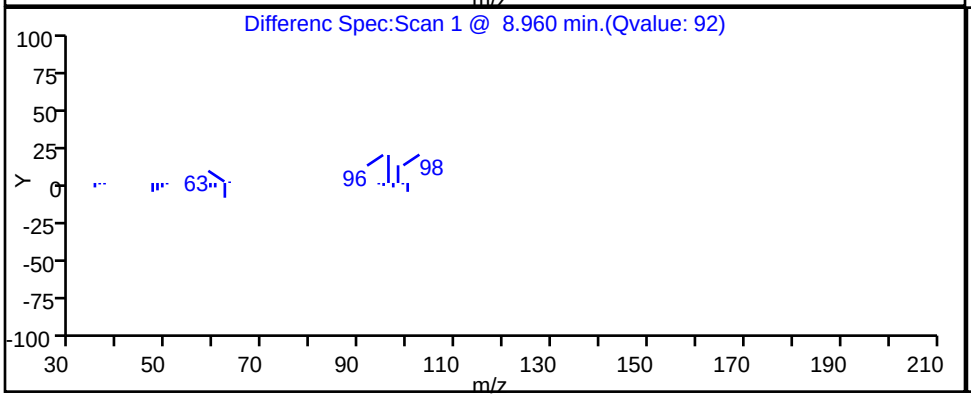


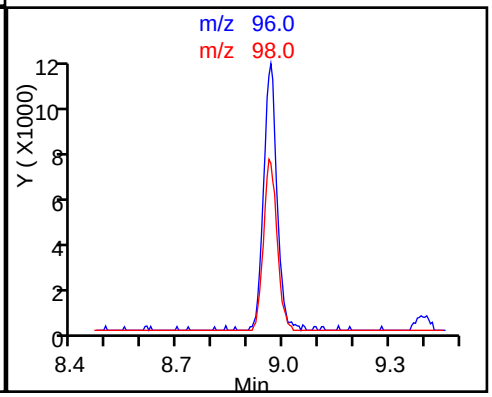












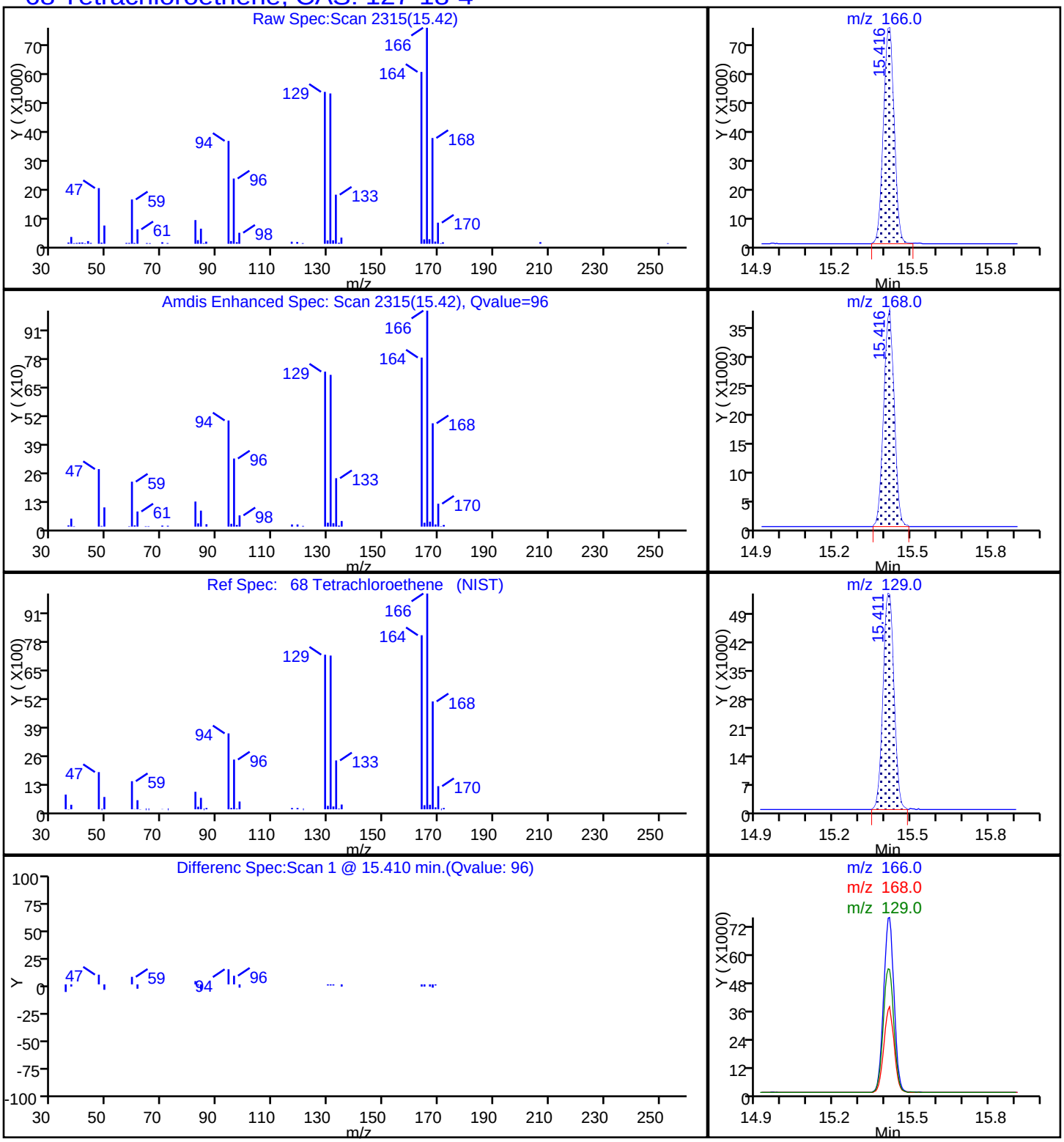
Report Date: 20-Nov-2017 15:44:07 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-008.D

Injection Date:	15-Nov-2017 16:58:30	Instrument ID:	CHG.i		
Lims ID:	200-40953-A-1	Lab Sample ID:	200-40953-1		
Client ID:	SV-ES1				
Operator ID:	vtp	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



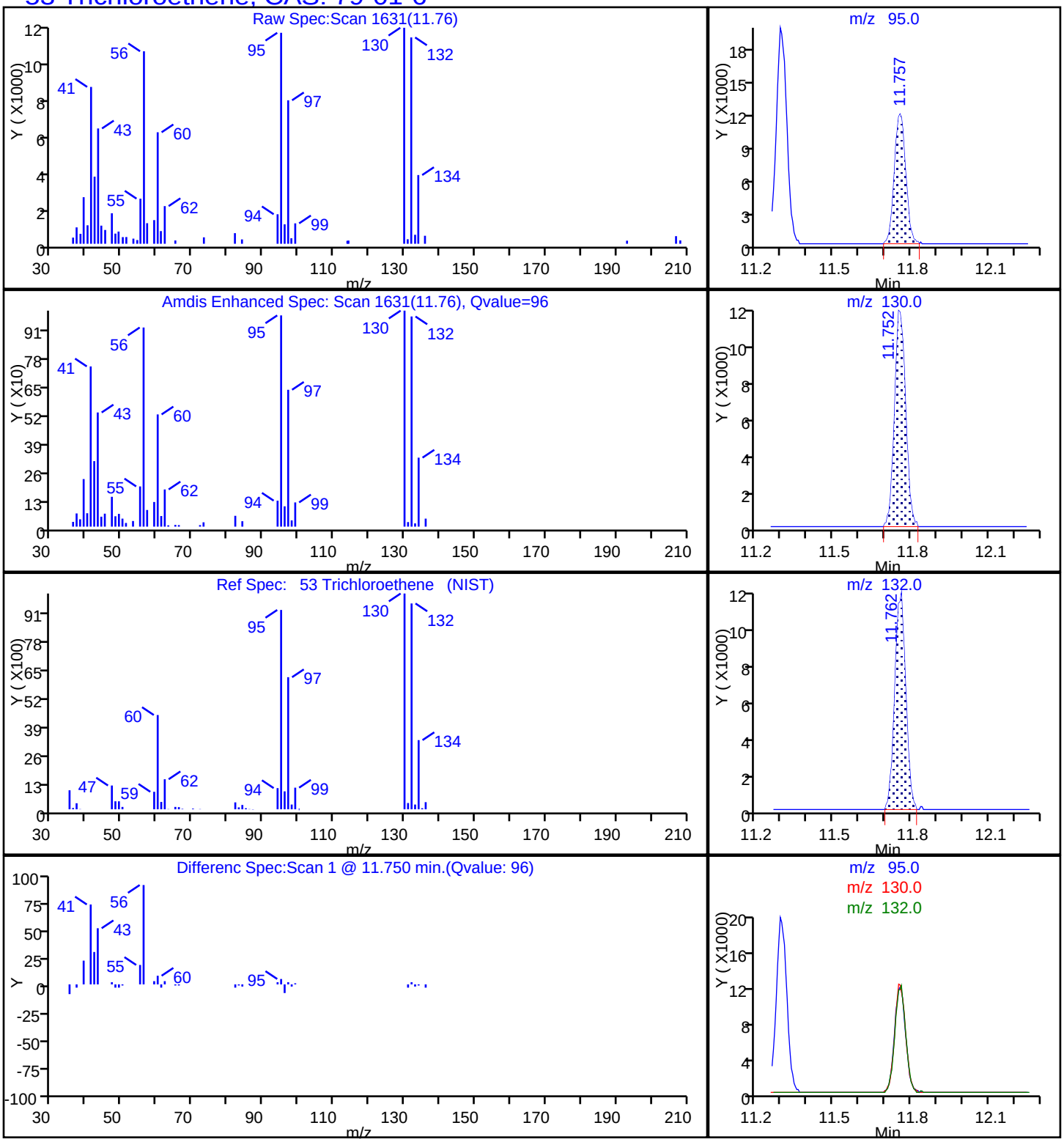
Report Date: 20-Nov-2017 15:44:07 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-008.D

Injection Date:	15-Nov-2017 16:58:30	Instrument ID:	CHG.i		
Lims ID:	200-40953-A-1	Lab Sample ID:	200-40953-1		
Client ID:	SV-ES1				
Operator ID:	vtp	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: SV-ES2 Lab Sample ID: 200-40953-3

Matrix: Air Lab File ID: 200-27906-009.D

Analysis Method: TO-15 Date Collected: 11/11/2017 18:04

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 17:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.035	0.035
127-18-4	Tetrachloroethene	165.83	0.081		0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
79-01-6	Trichloroethene	131.39	0.0091	U	0.035	0.0091
75-01-4	Vinyl chloride	62.50	0.018	U	0.035	0.018

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: SV-ES2 Lab Sample ID: 200-40953-3

Matrix: Air Lab File ID: 200-27906-009.D

Analysis Method: TO-15 Date Collected: 11/11/2017 18:04

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 17:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.14	0.11
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.14	0.14
127-18-4	Tetrachloroethene	165.83	0.55		0.24	0.066
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
79-01-6	Trichloroethene	131.39	0.049	U	0.19	0.049
75-01-4	Vinyl chloride	62.50	0.046	U	0.089	0.046

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-009.D
Lims ID: 200-40953-A-3
Client ID: SV-ES2
Sample Type: Client
Inject. Date: 15-Nov-2017 17:48:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027906-009
Misc. Info.: 40953-03
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 20-Nov-2017 15:48:40 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: phamvu Date: 20-Nov-2017 15:48:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.187	3.181	0.006	99	49506	0.4777	
3 Chlorodifluoromethane	51	3.229	3.219	0.010	95	14012	0.3085	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390				ND	
5 Chloromethane	50	3.518	3.508	0.010	99	84807	3.98	
6 Butane	43	3.668	3.663	0.005	96	96711	3.32	
7 Vinyl chloride	62		3.700				ND	
8 Butadiene	54	3.764	3.759	0.005	80	673	0.0419	
10 Bromomethane	94		4.305				ND	
11 Chloroethane	64		4.487				ND	
13 Vinyl bromide	106		4.802				ND	
14 Trichlorofluoromethane	101	4.883	4.872	0.011	98	20832	0.2275	
20 1,1,2-Trichloro-1,2,2-trif	101	5.755	5.749	0.006	80	4407	0.0730	
21 1,1-Dichloroethene	96		5.808				ND	
22 Acetone	43	6.043	6.027	0.016	100	411939	15.9	
23 Carbon disulfide	76	6.182	6.172	0.010	99	3963	0.0602	
24 Isopropyl alcohol	45	6.289	6.263	0.026	99	155991	6.22	
25 3-Chloro-1-propene	41		6.482				ND	
27 Methylene Chloride	49	6.755	6.744	0.011	92	3613	0.1509	
28 2-Methyl-2-propanol	59	6.985	6.953	0.032	97	34273	0.8571	
29 Methyl tert-butyl ether	73		7.119				ND	
31 trans-1,2-Dichloroethene	61		7.135				ND	
33 Hexane	57	7.477	7.466	0.011	82	3665	0.1398	
34 1,1-Dichloroethane	63		7.937				ND	
37 cis-1,2-Dichloroethene	96		8.964				ND	
38 2-Butanone (MEK)	72	9.045	9.034	0.011	97	16721	1.82	
* 40 Chlorobromomethane	128	9.408	9.403	0.005	75	387036	10.0	
41 Tetrahydrofuran	42		9.446				ND	
42 Chloroform	83	9.521	9.515	0.006	97	6149	0.0832	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
43 Cyclohexane	84	9.761	9.756	0.005	50	1110	0.0312	
44 1,1,1-Trichloroethane	97		9.788				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Carbon tetrachloride	117	10.024	10.024	0.000	94	5960	0.0637	
46 Isooctane	57	10.430	10.436	-0.006	64	13143	0.1054	
47 Benzene	78	10.484	10.484	0.000	95	27456	0.2783	
48 1,2-Dichloroethane	62		10.666				ND	
49 n-Heptane	43		10.810				ND	
* 50 1,4-Difluorobenzene	114	11.302	11.302	0.000	94	1960883	10.0	
53 Trichloroethene	95		11.757				ND	
54 1,2-Dichloropropane	63		12.313				ND	
55 Methyl methacrylate	69		12.490				ND	
56 1,4-Dioxane	88		12.570				ND	
58 Dichlorobromomethane	83		12.848				ND	
60 cis-1,3-Dichloropropene	75		13.768				ND	
61 4-Methyl-2-pentanone (MIBK	43	14.089	14.089	0.000	95	11241	0.1905	
65 Toluene	92	14.351	14.352	-0.001	94	97321	1.25	
66 trans-1,3-Dichloropropene	75		14.951				ND	
67 1,1,2-Trichloroethane	83		15.325				ND	
68 Tetrachloroethene	166	15.411	15.416	-0.005	94	6818	0.0809	M
69 2-Hexanone	43	15.807	15.807	0.000	91	16500	0.2954	
71 Chlorodibromomethane	129		16.079				ND	
72 Ethylene Dibromide	107		16.352				ND	
* 74 Chlorobenzene-d5	117	17.256	17.256	0.000	86	1732861	10.0	
75 Chlorobenzene	112	17.337	17.315	0.022	36	2084	0.0193	
76 Ethylbenzene	91	17.476	17.470	0.006	99	165307	1.04	
78 m-Xylene & p-Xylene	106	17.727	17.727	0.000	0	299851	4.71	
79 o-Xylene	106	18.583	18.583	0.000	98	144334	2.21	
80 Styrene	104	18.642	18.642	0.000	90	18528	0.2141	
81 Bromoform	173		19.086				ND	
82 Isopropylbenzene	105	19.327	19.321	0.006	97	10359	0.0593	
S 73 Xylenes, Total	106				0		6.93	
84 1,1,2,2-Tetrachloroethane	83		20.022				ND	
85 N-Propylbenzene	91		20.086				ND	
89 2-Chlorotoluene	91		20.290				ND	
88 4-Ethyltoluene	105	20.290	20.290	0.000	90	12288	0.0810	M
90 1,3,5-Trimethylbenzene	105	20.407	20.407	0.000	91	12036	0.0873	
92 tert-Butylbenzene	119		20.910				ND	
93 1,2,4-Trimethylbenzene	105	21.012	21.012	0.000	98	34020	0.2545	
94 sec-Butylbenzene	105		21.253				ND	
95 4-Isopropyltoluene	119	21.461	21.467	-0.006	97	13900	0.0914	
96 1,3-Dichlorobenzene	146	21.488	21.483	0.005	17	835	0.008089	7
97 1,4-Dichlorobenzene	146	21.627	21.622	0.005	42	3053	0.0297	
98 Benzyl chloride	91	21.830	21.830	0.000	87	1322	0.0118	
100 n-Butylbenzene	91	22.034	22.044	-0.010	78	5915	0.0443	
101 1,2-Dichlorobenzene	146		22.157				ND	
103 1,2,4-Trichlorobenzene	180	24.602	24.602	0.000	1	1141	0.0199	
104 Hexachlorobutadiene	225		24.783				ND	
105 Naphthalene	128	25.067	25.067	0.000	99	66698	0.6342	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

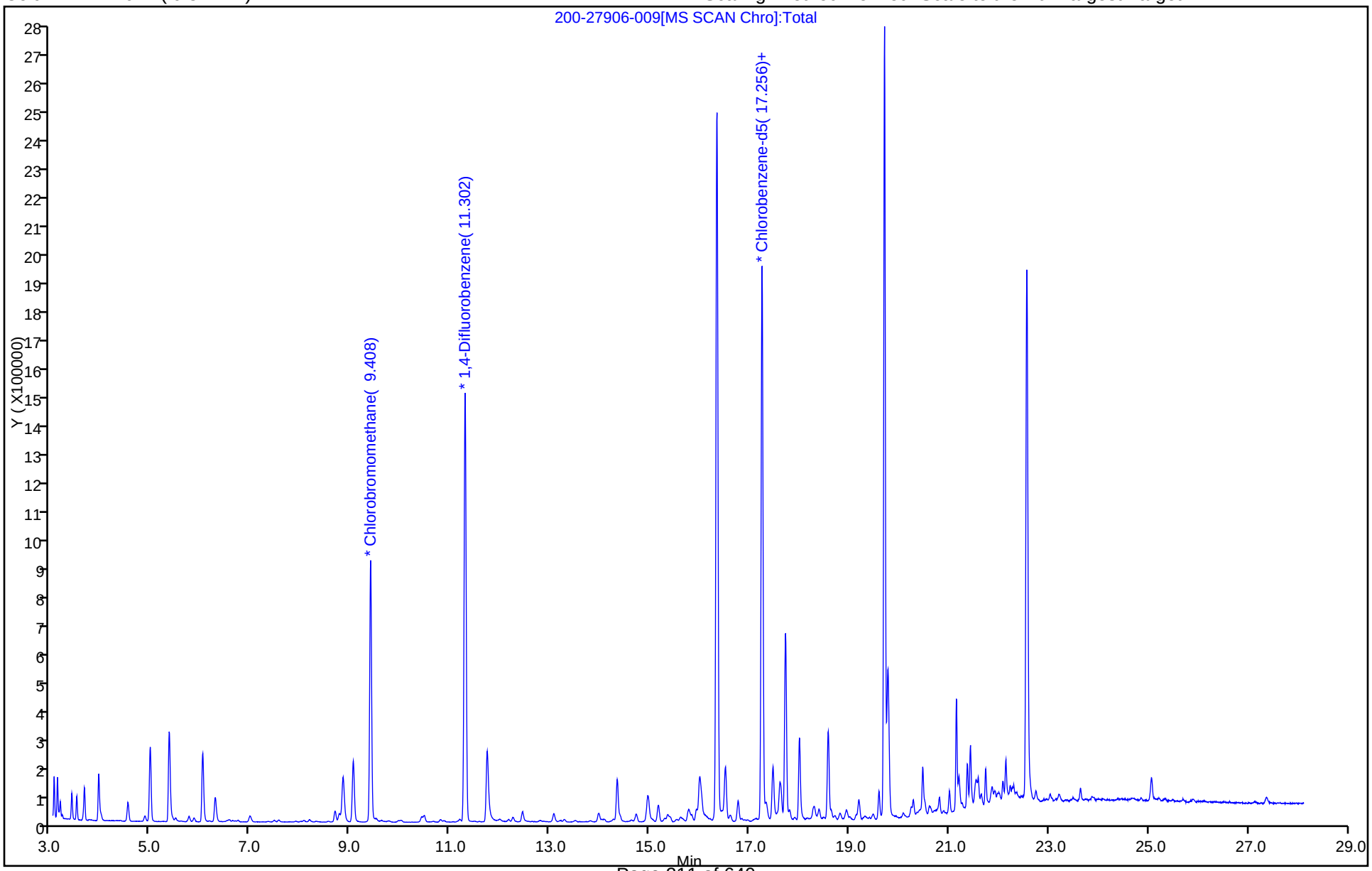
Report Date: 20-Nov-2017 15:49:07 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-009.D

Injection Date:	15-Nov-2017 17:48:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-40953-A-3	Lab Sample ID:	200-40953-3	Worklist Smp#:	9
Client ID:	SV-ES2				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



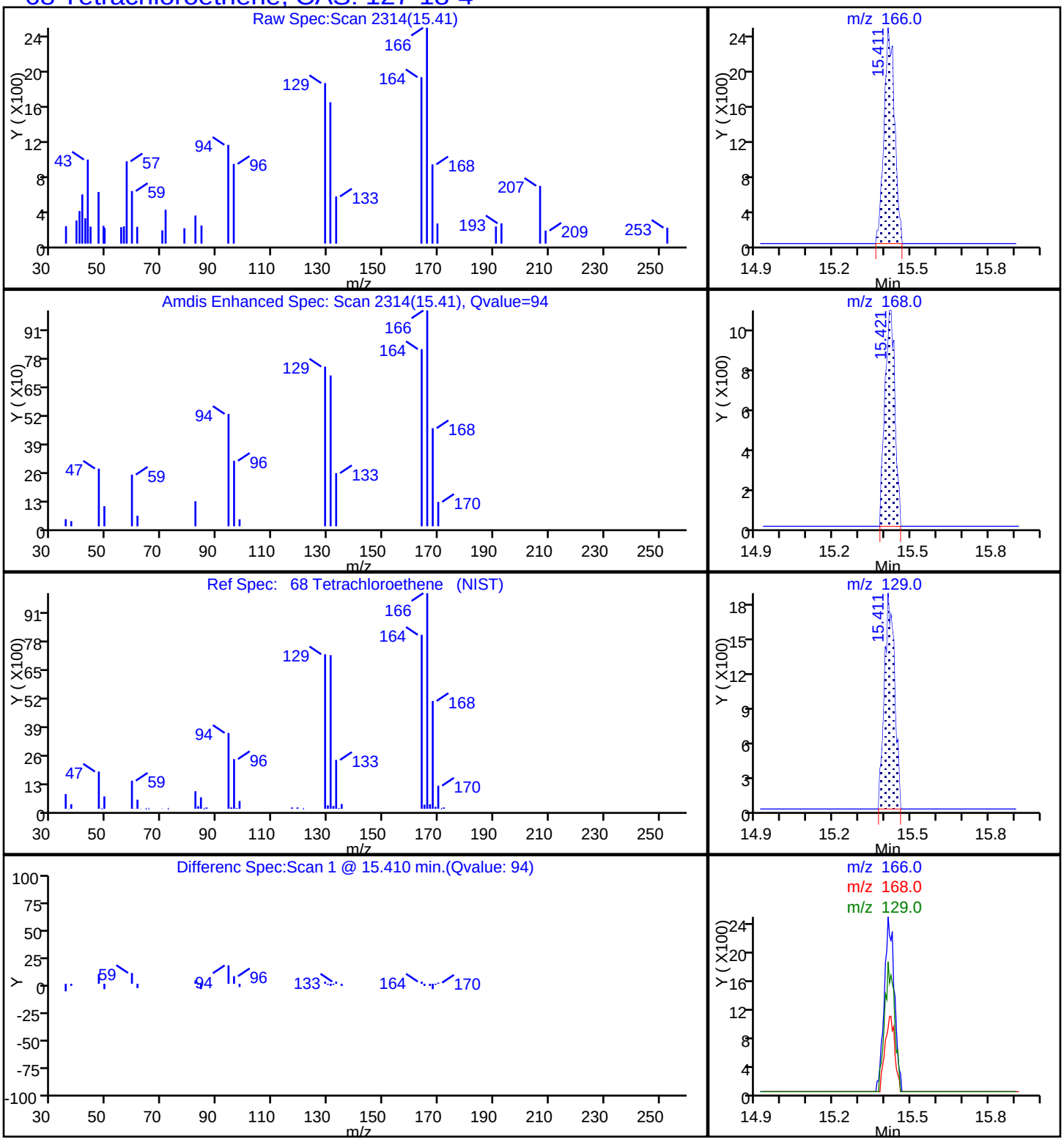
Report Date: 20-Nov-2017 15:49:08 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-009.D

Injection Date:	15-Nov-2017 17:48:30	Instrument ID:	CHG.i		
Lims ID:	200-40953-A-3	Lab Sample ID:	200-40953-3		
Client ID:	SV-ES2				
Operator ID:	vtp	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

TestAmerica Burlington

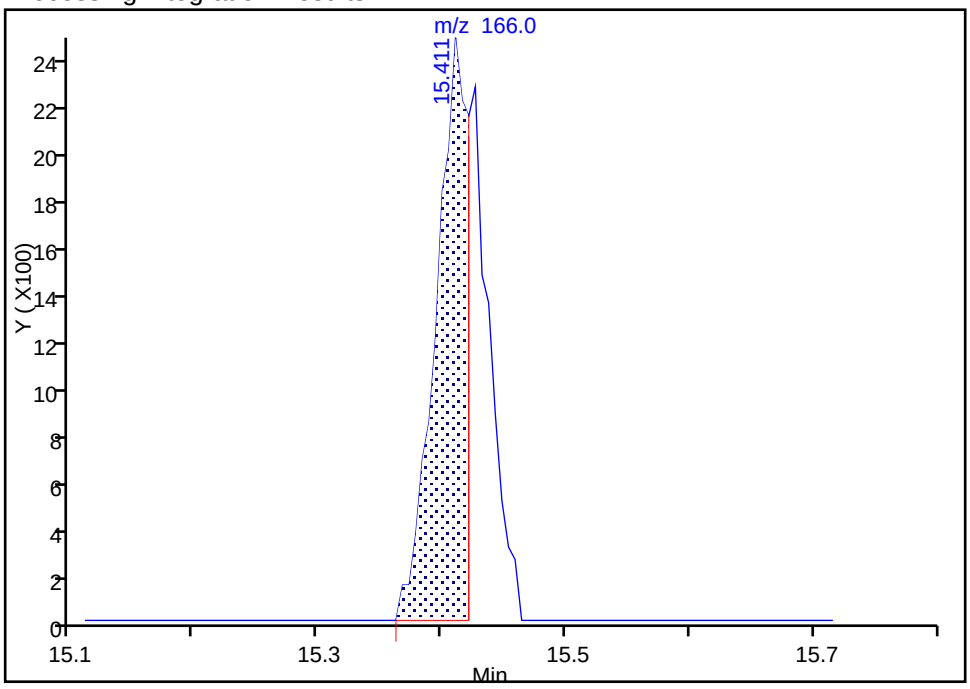
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-009.D				
Injection Date:	15-Nov-2017 17:48:30	Instrument ID:	CHG.i		
Lims ID:	200-40953-A-3	Lab Sample ID:	200-40953-3		
Client ID:	SV-ES2				
Operator ID:	vtp	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

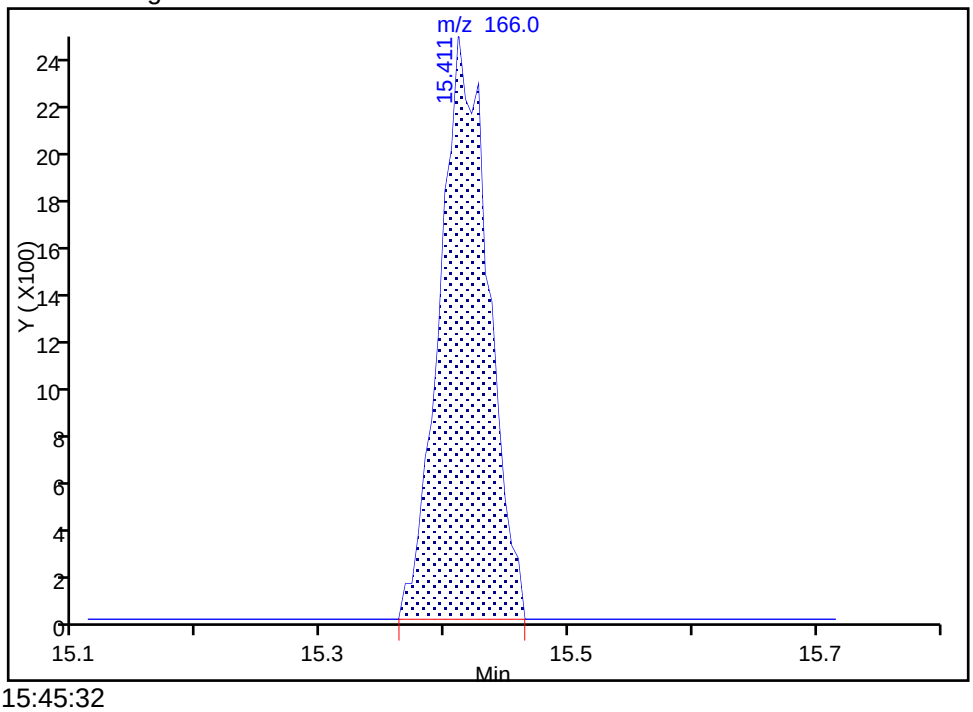
Processing Integration Results

RT: 15.41
Area: 4543
Amount: 0.053897
Amount Units: ppb v/v



Manual Integration Results

RT: 15.41
Area: 6818
Amount: 0.080888
Amount Units: ppb v/v



Reviewer: phamvu, 20-Nov-2017 15:45:32

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: AA-1 Lab Sample ID: 200-40953-5

Matrix: Air Lab File ID: 27883-09.d

Analysis Method: TO-15 Date Collected: 11/11/2017 14:35

Sample wt/vol: 200(mL) Date Analyzed: 11/14/2017 16:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123310 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.035	0.035
127-18-4	Tetrachloroethene	165.83	0.034	J	0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
79-01-6	Trichloroethene	131.39	0.0091	U	0.035	0.0091
75-01-4	Vinyl chloride	62.50	0.018	U	0.035	0.018

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: AA-1 Lab Sample ID: 200-40953-5

Matrix: Air Lab File ID: 27883-09.d

Analysis Method: TO-15 Date Collected: 11/11/2017 14:35

Sample wt/vol: 200(mL) Date Analyzed: 11/14/2017 16:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123310 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.14	0.11
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.14	0.14
127-18-4	Tetrachloroethene	165.83	0.23	J	0.24	0.066
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
79-01-6	Trichloroethene	131.39	0.049	U	0.19	0.049
75-01-4	Vinyl chloride	62.50	0.046	U	0.089	0.046

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-09.d
Lims ID: 200-40953-A-5
Client ID: AA-1
Sample Type: Client
Inject. Date: 14-Nov-2017 16:21:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027883-009
Misc. Info.: 40953-05
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 21-Nov-2017 09:52:14 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: phamvu Date: 21-Nov-2017 09:52:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	5.186	5.181	0.005	99	33933	0.4986	
3 Chlorodifluoromethane	51	5.267	5.261	0.005	96	10667	0.2801	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.582				ND	
5 Chloromethane	50	5.791	5.775	0.016	98	12240	0.5449	
6 Butane	43	6.053	6.048	0.005	99	37903	0.8790	
7 Vinyl chloride	62		6.101				ND	
8 Butadiene	54		6.198				ND	
10 Bromomethane	94		6.995				ND	
11 Chloroethane	64		7.246				ND	
13 Vinyl bromide	106		7.653				ND	
14 Trichlorofluoromethane	101	7.749	7.744	0.005	97	14527	0.2188	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.749	0.000	95	3879	0.0755	
21 1,1-Dichloroethene	96		8.814				ND	
22 Acetone	43	9.011	9.011	0.000	98	92434	2.38	
23 Carbon disulfide	76	9.199	9.204	-0.005	94	1572	0.0240	
24 Isopropyl alcohol	45	9.231	9.215	0.016	100	23375	0.5282	
25 3-Chloro-1-propene	41		9.509				ND	
27 Methylene Chloride	49	9.771	9.771	0.000	94	4732	0.1637	
28 2-Methyl-2-propanol	59		9.894				ND	
29 Methyl tert-butyl ether	73		10.103				ND	
31 trans-1,2-Dichloroethene	61		10.167				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
33 Hexane	57	10.477	10.488	-0.011	94	3362	0.0729	
34 1,1-Dichloroethane	63		10.959				ND	
37 cis-1,2-Dichloroethene	96		11.959				ND	
38 2-Butanone (MEK)	72	11.991	11.981	0.010	91	2881	0.2080	
41 Tetrahydrofuran	42		12.382				ND	
* 40 Chlorobromomethane	128	12.382	12.387	-0.005	99	175646	10.0	
42 Chloroform	83		12.478				ND	
43 Cyclohexane	84	12.735	12.740	-0.005	50	1029	0.0244	M
44 1,1,1-Trichloroethane	97		12.756				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
45 Carbon tetrachloride	117	12.981	12.981	0.000	96	3759	0.0623	
46 Isooctane	57	13.334	13.329	0.005	93	5917	0.0352	
47 Benzene	78	13.393	13.393	0.000	98	11923	0.1224	
48 1,2-Dichloroethane	62		13.543				ND	
49 n-Heptane	43		13.650				ND	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	996648	10.0	
53 Trichloroethene	95		14.516				ND	
54 1,2-Dichloropropane	63		15.008				ND	
55 Methyl methacrylate	69		15.094				ND	
56 1,4-Dioxane	88		15.174				ND	
58 Dichlorobromomethane	83		15.469				ND	
60 cis-1,3-Dichloropropene	75		16.292				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.528				ND	
65 Toluene	92	16.833	16.838	-0.005	93	16895	0.2451	
66 trans-1,3-Dichloropropene	75		17.362				ND	
67 1,1,2-Trichloroethane	83		17.715				ND	
68 Tetrachloroethene	166	17.822	17.833	-0.011	94	2007	0.0341	
69 2-Hexanone	43		18.106				ND	
71 Chlorodibromomethane	129		18.438				ND	
72 Ethylene Dibromide	107		18.716				ND	
* 74 Chlorobenzene-d5	117	19.556	19.550	0.006	87	897759	10.0	
75 Chlorobenzene	112		19.609				ND	
76 Ethylbenzene	91	19.737	19.743	-0.006	93	3326	0.0216	M
78 m-Xylene & p-Xylene	106	19.973	19.978	-0.005	0	3389	0.0564	
S 73 Xylenes, Total	106				0		0.0797	
79 o-Xylene	106	20.765	20.749	0.016	22	1395	0.0233	M
80 Styrene	104		20.797				ND	
81 Bromoform	173		21.187				ND	
82 Isopropylbenzene	105		21.359				ND	
84 1,1,2,2-Tetrachloroethane	83		21.952				ND	
85 N-Propylbenzene	91		22.027				ND	
88 4-Ethyltoluene	105		22.204				ND	
89 2-Chlorotoluene	91		22.225				ND	
90 1,3,5-Trimethylbenzene	105		22.300				ND	
92 tert-Butylbenzene	119		22.776				ND	
93 1,2,4-Trimethylbenzene	105	22.867	22.873	-0.006	91	1964	0.0137	
94 sec-Butylbenzene	105		23.097				ND	
95 4-Isopropyltoluene	119		23.295				ND	
96 1,3-Dichlorobenzene	146		23.338				ND	
97 1,4-Dichlorobenzene	146		23.477				ND	
98 Benzyl chloride	91		23.680				ND	
100 n-Butylbenzene	91		23.889				ND	
101 1,2-Dichlorobenzene	146		24.044				ND	
103 1,2,4-Trichlorobenzene	180		26.719				ND	
104 Hexachlorobutadiene	225		26.912				ND	
105 Naphthalene	128		27.254				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

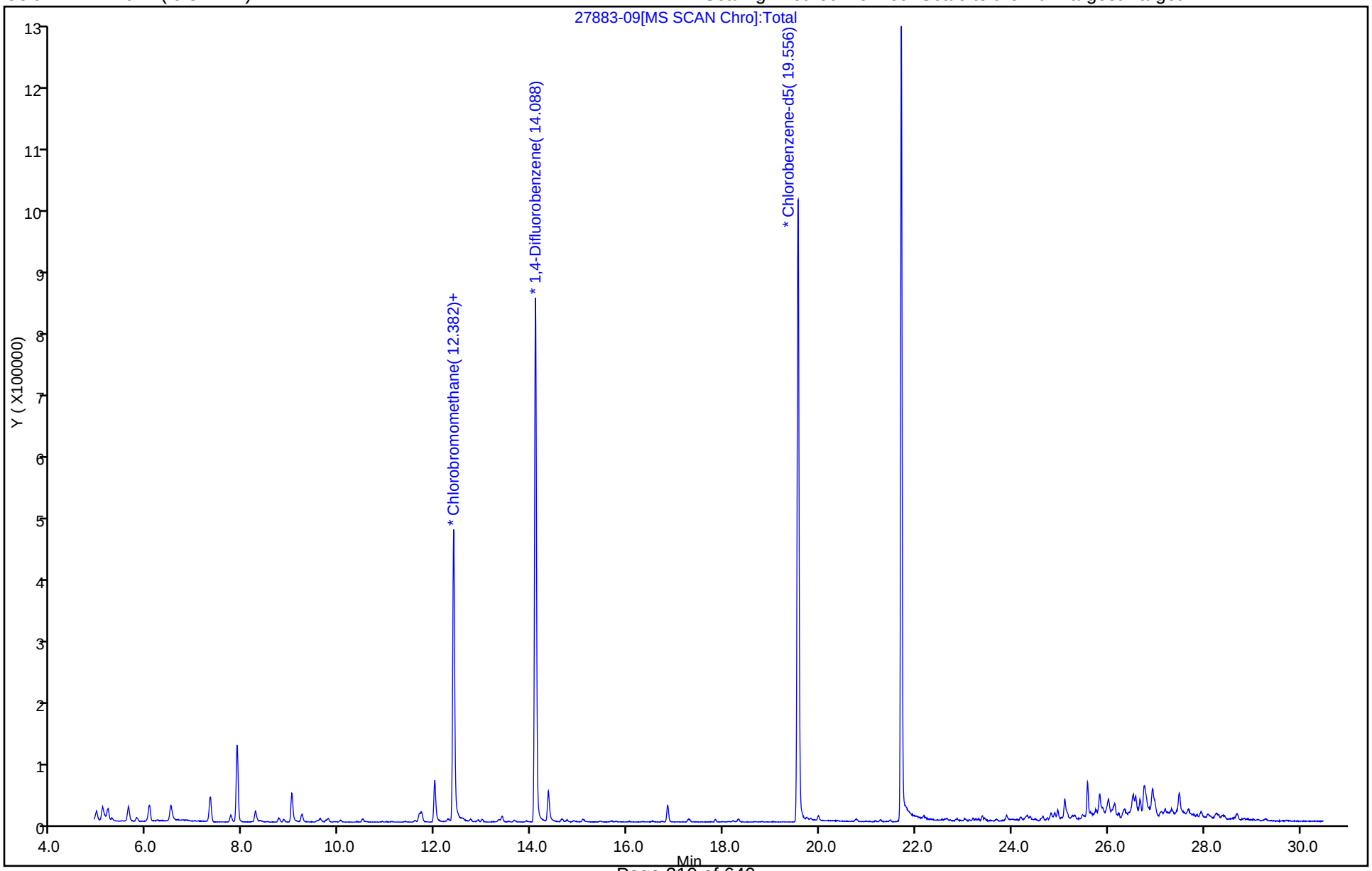
Report Date: 21-Nov-2017 09:52:45 Chrom Revision: 2.2 13-Nov-2017 17:19:06

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-09.d

Injection Date:	14-Nov-2017 16:21:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	200-40953-A-5	Lab Sample ID:	200-40953-5	Worklist Smp#:	9
Client ID:	AA-1				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



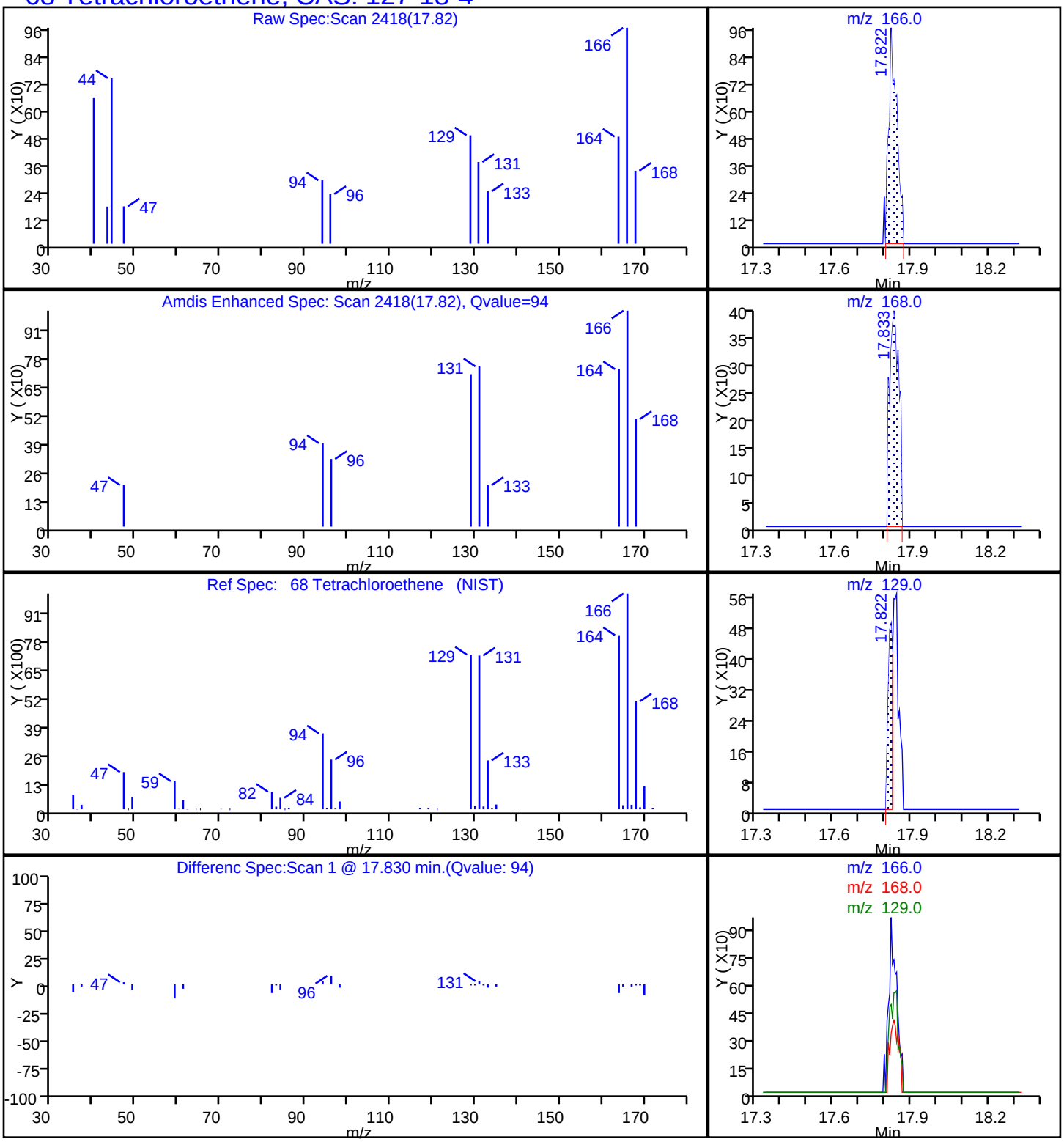
Report Date: 21-Nov-2017 09:52:46 Chrom Revision: 2.2 13-Nov-2017 17:19:06

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-09.d

Injection Date:	14-Nov-2017 16:21:30	Instrument ID:	CHW.i		
Lims ID:	200-40953-A-5	Lab Sample ID:	200-40953-5		
Client ID:	AA-1				
Operator ID:	pad	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-122801/3	200-27684-003.D
Level 2	IC 200-122801/4	200-27684-004.D
Level 3	IC 200-122801/6	200-27684-006.D
Level 4	IC 200-122801/8	200-27684-008.D
Level 5	ICIS 200-122801/9	200-27684-009.D
Level 6	IC 200-122801/10	200-27684-010.D
Level 7	IC 200-122801/11	200-27684-011.D
Level 8	IC 200-122801/12	200-27684-012.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.4152	+++++ 0.3833	+++++ 0.3626	0.4781	0.4442	Ave		0.4167				11.1		30.0			
Dichlorodifluoromethane	+++++ 2.6308	+++++ 2.4461	2.8136 2.1715	3.1327	2.8723	Ave		2.6778				12.7		30.0			
Freon 22	+++++ 1.1337	+++++ 1.0566	1.2937 0.9668	1.3685	1.2219	Ave		1.1735				12.8		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.9971	2.3902 1.8502	2.2660 1.6371	2.4556	2.2035	Ave		2.1142				14.1		30.0			
Chloromethane	+++++ 0.5234	+++++ 0.4878	0.6321 0.4591	0.6255	0.5725	Ave		0.5501				13.1		30.0			
n-Butane	+++++ 0.7260	+++++ 0.6829	0.8269 0.6233	0.8674	0.7934	Ave		0.7533				12.3		30.0			
Vinyl chloride	0.6999 0.6239	0.6978 0.5929	0.6744 0.5431	0.7259	0.6874	Ave		0.6557				9.6		30.0			
1,3-Butadiene	0.3888 0.4032	0.4447 0.3843	0.4432 0.3527	0.4630	0.4411	Ave		0.4151				9.2		30.0			
Bromomethane	+++++ 0.7516	0.8728 0.7368	0.7951 0.6749	0.8768	0.8361	Ave		0.7920				9.5		30.0			
Chloroethane	+++++ 0.2360	+++++ 0.2369	0.2605 0.2170	0.2731	0.2626	Ave		0.2477				8.5		30.0			
Isopentane	+++++ 0.4232	0.6073 0.4171	0.5059 0.3794	0.4921	0.4791	Ave		0.4720				15.9		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.7693	0.8683 0.7633	0.8217 0.6941	0.8791	0.8568	Ave		0.8075				8.4		30.0			
Trichlorofluoromethane	+++++ 2.2224	2.5975 2.1862	2.5018 1.9209	2.6312	2.5027	Ave		2.3661				11.1		30.0			
n-Pentane	+++++ 0.6537	+++++ 0.6391	0.7567 0.5926	0.7509	0.7259	Ave		0.6865				9.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.1801	+++++ 0.1642	0.2121 0.1380	0.1964	0.1814	Ave		0.1787				14.4		30.0			
Ethyl ether	+++++ 0.2747	0.2939 0.2841	0.2935 0.2644	0.3354	0.3175	Ave		0.2948				8.3		30.0			
Freon TF	+++++ 1.4802	1.7457 1.4125	1.6209 1.3153	1.7240	1.6149	Ave		1.5591				10.3		30.0			
Acrolein	+++++ 0.0905	+++++ 0.0935	+++++ 0.0870	0.1025	0.1041	Ave		0.0955				7.8		30.0			
1,1-Dichloroethene	0.6192 0.6444	0.7979 0.6249	0.7245 0.5976	0.7313	0.6985	Ave		0.6798				10.2		30.0			
Acetone	+++++ 0.6191	+++++ 0.6355	+++++ 0.5740	0.7981	0.7121	Ave		0.6677				13.2		30.0			
Carbon disulfide	+++++ 1.6679	+++++ 1.5844	1.7460 1.5211	1.8932	1.7899	Ave		1.7004				8.1		30.0			
Isopropyl alcohol	+++++ 0.6712	+++++ 0.5936	+++++ 0.5280	0.7433	0.7033	Ave		0.6479				13.4		30.0			
3-Chloropropene	+++++ 0.5401	0.5746 0.5192	0.5808 0.4827	0.6331	0.5757	Ave		0.5580				8.7		30.0			
Acetonitrile	+++++ 0.2137	+++++ 0.2291	+++++ 0.2157	0.2721	0.2506	Ave		0.2362				10.5		30.0			
Methylene Chloride	+++++ 0.5972	+++++ 0.5654	0.6734 0.5312	0.6979	0.6458	Ave		0.6185				10.5		30.0			
tert-Butyl alcohol	+++++ 1.1076	+++++ 0.9359	+++++ 0.8586	1.1484	1.1153	Ave		1.0332				12.4		30.0			
Methyl tert-butyl ether	+++++ 1.4814	1.6669 1.4816	1.5426 1.3344	1.7784	1.6798	Ave		1.5665				9.6		30.0			
trans-1,2-Dichloroethene	+++++ 0.8175	0.8813 0.7714	0.8703 0.7195	0.9491	0.8861	Ave		0.8422				9.2		30.0			
Acrylonitrile	+++++ 0.2353	+++++ 0.2541	0.2439 0.2464	0.2889	0.2737	Ave		0.2570				7.9		30.0			
n-Hexane	+++++ 0.6562	0.7697 0.6280	0.6592 0.5886	0.7337	0.7044	Ave		0.6771				9.2		30.0			
1,1-Dichloroethane	1.0422 1.1027	1.2649 1.0602	1.1670 0.9890	1.2724	1.1989	Ave		1.1372				9.2		30.0			
Vinyl acetate	+++++ 0.9076	+++++ 0.9710	+++++ 0.8910	1.1324	1.0694	Ave		0.9943				10.5		30.0			
cis-1,2-Dichloroethene	0.9721 0.8032	0.8797 0.7741	0.8474 0.7329	0.8993	0.8542	Ave		0.8454				8.9		30.0			
Methyl Ethyl Ketone	+++++ 0.2299	+++++ 0.2290	0.2426 0.2015	0.2675	0.2536	Ave		0.2374				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0337	+++++ 0.0337	+++++ 0.0306	0.0391	0.0388	Ave		0.0352				10.4		30.0			
Tetrahydrofuran	+++++ 0.0932	+++++ 0.0896	+++++ 0.0791	0.1121	0.1076	Ave		0.0963				14.0		30.0			
Chloroform	+++++ 1.8460	2.0090 1.7870	1.9466 1.6571	2.1193	2.0083	Ave		1.9105				8.2		30.0			
Cyclohexane	+++++ 0.1825	0.1894 0.1658	0.1797 0.1524	0.2026	0.1960	Ave		0.1812				9.6		30.0			
1,1,1-Trichloroethane	+++++ 0.4389	0.4617 0.3967	0.4420 0.3657	0.4953	0.4720	Ave		0.4389				10.2		30.0			
Carbon tetrachloride	0.4091 0.5082	0.4524 0.4632	0.4603 0.4291	0.5532	0.5409	Ave		0.4771				10.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.6401	0.6731 0.5733	0.6446 0.5141	0.7105	0.6954	Ave		0.6359				11.0		30.0			
Benzene	+++++ 0.4866	0.5813 0.4428	0.5380 0.4073	0.5462	0.5195	Ave		0.5031				12.2		30.0			
1,2-Dichloroethane	+++++ 0.2922	0.2986 0.2675	0.2892 0.2481	0.3319	0.3153	Ave		0.2918				9.6		30.0			
n-Heptane	+++++ 0.2395	0.2808 0.2135	0.2498 0.1867	0.2696	0.2612	Ave		0.2430				13.6		30.0			
n-Butanol	+++++ 0.0819	+++++ 0.0622	+++++ 0.0560	0.0728	0.0780	Ave		0.0702				15.4		30.0			
Trichloroethene	0.2929 0.3075	0.3019 0.2762	0.2927 0.2576	0.3241	0.3213	Ave		0.2968				7.5		30.0			
1,2-Dichloropropane	+++++ 0.1989	0.2255 0.1911	0.2174 0.1777	0.2321	0.2205	Ave		0.2090				9.6		30.0			
Methyl methacrylate	+++++ 0.1526	+++++ 0.1479	0.1130 0.1305	0.1642	0.1670	Ave		0.1459				14.2		30.0			
Dibromomethane	+++++ 0.3056	0.2937 0.2851	0.2785 0.2794	0.3206	0.3187	Ave		0.2974				6.0		30.0			
1,4-Dioxane	+++++ 0.1012	+++++ 0.0823	+++++ 0.0696	0.1066	0.1051	Ave		0.0929				17.5		30.0			
Bromodichloromethane	+++++ 0.5309	0.4699 0.4885	0.4711 0.4575	0.5747	0.5633	Ave		0.5080				9.4		30.0			
cis-1,3-Dichloropropene	+++++ 0.3362	0.3075 0.3195	0.3033 0.3030	0.3687	0.3574	Ave		0.3279				8.2		30.0			
Methyl isobutyl ketone	+++++ 0.3476	+++++ 0.2842	0.2371 0.2407	0.3505	0.3453	Ave		0.3009				18.0		30.0			
Toluene	+++++ 0.4310	0.4927 0.4201	0.4398 0.4034	0.4941	0.4731	Ave		0.4506				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.3603	0.4123 0.3184	0.3792 0.2723	0.4179	0.4011	Ave		0.3659				14.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.3392	0.3619 0.3252	0.3153 0.3202	0.3749	0.3758	Ave		0.3447				7.5		30.0			
1,1,2-Trichloroethane	+++++ 0.2456	0.2542 0.2322	0.2528 0.2150	0.2804	0.2689	Ave		0.2499				8.7		30.0			
Tetrachloroethene	0.4769 0.5069	0.4865 0.4697	0.4656 0.4395	0.5270	0.5192	Ave		0.4864				6.1		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.3892	+++++ 0.3027	0.2504 0.2513	0.3700	0.3706	Ave		0.3224				19.5		30.0			
Dibromochloromethane	+++++ 0.6662	0.4527 0.6284	0.4974 0.5869	0.7005	0.6753	Ave		0.6011				15.7		30.0			
1,2-Dibromoethane	+++++ 0.4905	0.4084 0.4695	0.4285 0.4513	0.5382	0.5218	Ave		0.4726				10.1		30.0			
Chlorobenzene	+++++ 0.6215	0.6082 0.6003	0.6000 0.5855	0.6806	0.6682	Ave		0.6235				5.9		30.0			
Ethylbenzene	+++++ 0.9006	0.8997 0.8837	0.8961 0.7879	1.0366	1.0101	Ave		0.9164				9.1		30.0			
n-Nonane	+++++ 0.3661	0.3862 0.3451	0.3575 0.3025	0.4213	0.4123	Ave		0.3701				11.0		30.0			
m,p-Xylene	+++++ 0.3625	0.3555 0.3609	0.3529 0.3171	0.4150	0.4057	Ave		0.3671				9.1		30.0			
Xylene, o-	+++++ 0.3749	0.3484 0.3721	0.3570 0.3384	0.4246	0.4183	Ave		0.3762				8.9		30.0			
Styrene	+++++ 0.5423	0.3462 0.5379	0.3876 0.5057	0.5828	0.5938	Ave		0.4995				19.2		30.0			
Bromoform	+++++ 0.5997	0.3087 0.5931	0.4106 0.5694	0.6525	0.6240	Ave		0.5369				23.7		30.0			
Cumene	+++++ 1.0056	0.9626 0.9924	0.9451 0.8779	1.1436	1.1256	Ave		1.0075				9.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.5660	0.5350 0.5321	0.5246 0.4497	0.6496	0.6280	Ave		0.5550				12.2		30.0			
n-Propylbenzene	+++++ 1.1732	0.9839 1.1309	1.0647 0.9627	1.3416	1.3179	Ave		1.1393				13.2		30.0			
1,2,3-Trichloropropane	+++++ 0.4288	+++++ 0.4034	0.4339 0.3372	0.5028	0.4787	Ave		0.4308				13.5		30.0			
n-Decane	+++++ 0.3596	+++++ 0.3171	0.3160 0.2370	0.4551	0.4277	Ave		0.3521				22.8		30.0			
2-Chlorotoluene	+++++ 0.8174	0.7838 0.7520	0.8298 0.5898	0.9695	0.9293	Ave		0.8102				15.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Ethyltoluene	+++++ 0.9446	0.7031 0.8809	0.7742 0.6914	1.0712	1.0656	Ave		0.8759				18.2		30.0			
1,3,5-Trimethylbenzene	+++++ 0.8295	0.6847 0.8066	0.7085 0.7126	0.9152	0.9146	Ave		0.7960				12.2		30.0			
Alpha Methyl Styrene	+++++ 0.4266	0.2013 0.4230	0.2517 0.3946	0.4352	0.4599	Ave		0.3703				27.3		30.0			
tert-Butylbenzene	+++++ 0.7853	0.6789 0.7685	0.6819 0.6816	0.8644	0.8580	Ave		0.7598				10.8		30.0			
1,2,4-Trimethylbenzene	+++++ 0.8291	0.5863 0.7981	0.6724 0.7001	0.9072	0.9077	Ave		0.7715				15.9		30.0			
sec-Butylbenzene	+++++ 1.1524	0.8760 1.1215	0.9475 0.9644	1.2831	1.2756	Ave		1.0886				14.9		30.0			
4-Isopropyltoluene	+++++ 0.9888	0.6085 0.9411	0.7122 0.7666	1.0580	1.0649	Ave		0.8772				20.6		30.0			
1,3-Dichlorobenzene	+++++ 0.6562	0.3993 0.6354	0.5209 0.5491	0.6921	0.7170	Ave		0.5957				18.8		30.0			
1,4-Dichlorobenzene	+++++ 0.6507	0.3988 0.6348	0.4968 0.5918	0.6701	0.7047	Ave		0.5925				18.3		30.0			
Benzyl chloride	+++++ 0.7743	0.3185 0.7187	0.4647 0.6251	0.7816	0.8242	Ave		0.6439				29.2		30.0			
n-Butylbenzene	+++++ 0.8779	0.5688 0.8177	0.5865 0.6768	0.9347	0.9362	Ave		0.7712				20.6		30.0			
n-Undecane	+++++ 0.4296	+++++ 0.3517	+++++ 0.2826	0.3954	0.4111	Ave		0.3741				15.7		30.0			
1,2-Dichlorobenzene	+++++ 0.6030	0.4087 0.5915	0.4667 0.5485	0.6366	0.6495	Ave		0.5578				16.1		30.0			
n-Dodecane	+++++ 0.3829	+++++ 0.2139	+++++ 0.2064	0.2192	0.3077	Ave		0.2660				29.0		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4233	+++++ 0.3330	0.2554 0.3338	0.2881	0.3501	Ave		0.3306				17.4		30.0			
Hexachlorobutadiene	+++++ 0.3798	0.3466 0.3462	0.3154 0.2858	0.3780	0.3562	Ave		0.3440				9.8		30.0			
Naphthalene	+++++ 0.8113	+++++ 0.5964	0.4989 0.6139	0.4923	0.6285	Ave		0.6069				19.1		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3606	+++++ 0.2554	0.2273 0.2667	0.2381	0.2895	Ave		0.2729				17.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-122801/3	200-27684-003.D
Level 2	IC 200-122801/4	200-27684-004.D
Level 3	IC 200-122801/6	200-27684-006.D
Level 4	IC 200-122801/8	200-27684-008.D
Level 5	ICIS 200-122801/9	200-27684-009.D
Level 6	IC 200-122801/10	200-27684-010.D
Level 7	IC 200-122801/11	200-27684-011.D
Level 8	IC 200-122801/12	200-27684-012.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 288858	+++++ 371509	+++++ 705471	110125	206293	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1830261	+++++ 2370959	64836 4225320	721612	1334072	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 788724	+++++ 1024099	29812 1881224	315243	567544	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1389422	22114 1793362	52217 3185391	565645	1023424	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 364150	+++++ 472830	14567 893246	144089	265919	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 505060	+++++ 661874	19055 1212865	199795	368520	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1188 434022	6456 574677	15540 1056854	167201	319281	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	660 280526	4114 372449	10212 686374	106649	204862	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 522883	8075 714159	18321 1313179	201978	388334	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 164211	+++++ 229649	6003 422211	62904	121958	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 294399	5619 404276	11657 738179	113355	222524	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 535197	8033 739840	18936 1350622	202506	397935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1546141	24032 2119054	57650 3737707	606090	1162393	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 454800	+++++ 619452	17436 1153079	172966	337147	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 167454	+++++ 318336	48943 671440	90530	126416	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 191103	2719 275332	6764 514423	77270	147482	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1029816	16151 1369127	37352 2559330	397132	750069	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 62970	+++++ 90631	+++++ 169307	23616	48359	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	1051 448342	7382 605668	16694 1162776	168462	324413	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 430688	+++++ 615974	+++++ 1116798	183833	330731	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1160404	+++++ 1535681	40234 2959783	436089	831356	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 466941	+++++ 575382	+++++ 1027361	171229	326665	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 375748	5316 503253	13384 939266	145830	267397	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 148662	+++++ 222051	+++++ 419619	62684	116401	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 415479	+++++ 548041	15517 1033626	160752	299939	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 770545	+++++ 907136	+++++ 1670682	264540	518002	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1030634	15422 1436073	35548 2596407	409660	780221	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 568765	8154 747680	20054 1400096	218636	411577	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 163667	+++++ 246281	5620 479524	66538	127120	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 456551	7121 608697	15190 1145288	169012	327169	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1769 767145	11703 1027664	26891 1924463	293103	556847	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 631451	+++++ 941133	+++++ 1733760	260845	496699	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	1650 558815	8139 750280	19528 1426091	207158	396744	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 159929	+++++ 222007	5591 392089	61610	117810	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 23431	+++++ 32685	+++++ 59457	9001	18019	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 316752	+++++ 451316	+++++ 805247	127596	243947	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1284278	18587 1732083	44856 3224397	488172	932791	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 620141	8680 835488	20272 1552006	230598	444287	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1491086	21156 1998608	49861 3724231	563759	1070123	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	3498 1726824	20730 2333958	51932 4369976	629628	1226306	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2174799	30848 2888728	72723 5235847	808723	1576643	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1653342	26637 2231047	60696 4148159	621681	1177842	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 992711	13683 1347924	32625 2526732	377718	714814	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 813730	12870 1075682	28179 1900932	306815	592192	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 278285	+++++ 313587	+++++ 569896	82836	176747	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2504 1044768	13836 1391598	33018 2622950	368941	728382	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 675758	10335 962608	24532 1810091	264222	499813	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 518606	+++++ 744958	12752 1329121	186851	378650	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1038478	13457 1436410	31424 2845366	364889	722529	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 343947	+++++ 414450	+++++ 708387	121317	238269	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1803900	21534 2461314	53144 4659234	654152	1276986	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1142127	14091 1610002	34215 3085802	419604	810183	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl isobutyl ketone	DFBZ	Ave	+++++ 1181111	+++++ 1432118	26748 2451057	398933	782839	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1284820	19837 1871988	43722 3810219	497519	961740	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1224331	18892 1604188	42784 2772822	475654	909239	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1152532	16584 1638576	35574 3261222	426767	852057	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 732148	10235 1034497	25134 2031011	282336	546631	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	3523 1510998	19587 2093255	46287 4151645	530672	1055534	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1160292	+++++ 1348953	24895 2373613	372494	753473	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1986064	18227 2800077	49457 5543482	705338	1372975	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1462271	16441 2092357	42604 4263093	541869	1060790	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1852598	24486 2674894	59656 5530454	685252	1358418	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2684801	36221 3937777	89090 7442405	1043689	2053469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1091445	15550 1537833	35540 2857088	424163	838275	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2161316	28625 3216699	70180 5989678	835615	1649434	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1117707	14025 1657968	35497 3195930	427527	850432	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1616636	13938 2396763	38539 4776981	586803	1207203	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1787881	12429 2642858	40822 5378528	657036	1268501	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2997659	38752 4422458	93966 8292058	1151512	2288316	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1687377	21537 2371229	52161 4247235	654030	1276717	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3497327	39610 5039638	105859 9092970	1350803	2679317	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1278214	+++++ 1797737	43136 3184706	506208	973190	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1072035	+++++ 1412902	31417 2238176	458263	869589	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2436743	31556 3350936	82499 5570917	976203	1889187	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2815949	28307 3925461	76971 6530620	1078530	2166412	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2472905	27566 3594212	70439 6731346	921445	1859409	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1271674	8106 1884878	25026 3727213	438218	934986	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2341159	27331 3424346	67800 6438367	870375	1744293	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 122801

SDG No.: 200-40953-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/31/2017 18:11 Calibration End Date: 11/01/2017 01:45 Calibration ID: 38350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2471637	23602 3556498	66847 6612413	913488	1845328	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3435404	35268 4997382	94204 9108955	1291895	2593313	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2947690	24498 4193861	70812 7241161	1065233	2164845	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1956108	16074 2831655	51786 5186095	696904	1457712	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1939645	16055 2828954	49396 5589588	674737	1432658	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2308339	12822 3202720	46201 5904742	786959	1675688	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2617181	22900 3643641	58316 6392567	941151	1903286	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1280546	+++++ 1567050	+++++ 2669229	398117	835764	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1797585	16455 2635949	46403 5180894	640939	1320448	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1141592	+++++ 953156	+++++ 1949303	220697	625463	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1262003	+++++ 1483714	25392 3152666	290054	711846	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1132197	13955 1542878	31361 2699376	380623	724112	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2418540	+++++ 2657687	49604 5798879	495640	1277809	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1075074	+++++ 1138122	22596 2519312	239688	588485	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-003.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Oct-2017 18:11:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-003
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:09 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:54:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.138	3.128	0.010	61	2018	0.0351	0.1001	
2 Dichlorodifluoromethane	85	3.192	3.181	0.011	97	5498	0.0351	0.0424	
3 Chlorodifluoromethane	51	3.229	3.219	0.010	94	3447	0.0351	0.0607	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.395	3.395	0.000	85	4115	0.0351	0.0402	
5 Chloromethane	50	3.529	3.513	0.016	91	1004	0.0351	0.0377	
6 Butane	43	3.668	3.668	0.000	93	2025	0.0351	0.0556	
7 Vinyl chloride	62	3.716	3.705	0.011	92	1188	0.0351	0.0374	
8 Butadiene	54	3.764	3.764	0.000	29	660	0.0351	0.0329	
10 Bromomethane	94	4.321	4.310	0.011	96	1514	0.0351	0.0395	
11 Chloroethane	64	4.508	4.492	0.016	1	450	0.0351	0.0375	
12 2-Methylbutane	43	4.551	4.540	0.011	26	1085	0.0351	0.0475	
13 Vinyl bromide	106	4.818	4.813	0.005	88	1492	0.0351	0.0382	
14 Trichlorofluoromethane	101	4.877	4.882	-0.005	96	4840	0.0351	0.0423	
16 Pentane	43	4.995	4.989	0.006	64	1797	0.0351	0.0541	
17 Ethanol	45	5.412	5.359	0.053	63	699	0.0702	0.0808	
18 Ethyl ether	59	5.460	5.428	0.032	1	51	0.0351	0.003575	
20 1,1,2-Trichloro-1,2,2-trif	101	5.760	5.760	0.000	93	2960	0.0351	0.0392	
19 Acrolein	56		5.770				ND	ND	
21 1,1-Dichloroethene	96	5.824	5.819	0.005	93	1051	0.0351	0.0320	M
22 Acetone	43	6.102	6.049	0.053	97	3609	0.0351	0.1117	
23 Carbon disulfide	76	6.193	6.188	0.005	94	3430	0.0351	0.0417	
24 Isopropyl alcohol	45	6.348	6.279	0.069	9	1053	0.0351	0.0336	
25 3-Chloro-1-propene	41	6.493	6.498	-0.005	1	528	0.0351	0.0196	
26 Acetonitrile	41	6.685	6.642	0.043	23	526	0.0351	0.0460	
27 Methylene Chloride	49	6.760	6.755	0.005	58	1993	0.0351	0.0666	
28 2-Methyl-2-propanol	59		6.974				ND	ND	
29 Methyl tert-butyl ether	73	7.204	7.135	0.069	1	2355	0.0351	0.0311	
31 trans-1,2-Dichloroethene	61	7.140	7.151	-0.011	1	675	0.0351	0.0166	
32 Acrylonitrile	53		7.311				ND	ND	
33 Hexane	57	7.472	7.488	-0.016	67	1310	0.0351	0.0400	
34 1,1-Dichloroethane	63	7.953	7.953	0.000	92	1769	0.0351	0.0321	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.044	8.017	0.027	1	660	0.0351	0.0137	
37 cis-1,2-Dichloroethene	96	8.980	8.980	0.000	82	1650	0.0351	0.0403	M
38 2-Butanone (MEK)	72		9.055				ND	ND	
39 Ethyl acetate	88		9.077				ND	ND	
* 40 Chlorobromomethane	128	9.419	9.424	-0.005	73	483904	10.0	10.0	
41 Tetrahydrofuran	42	9.531	9.467	0.064	42	477	0.0351	0.0203	
42 Chloroform	83	9.542	9.537	0.005	69	1741	0.0351	0.0188	
S 30 1,2-Dichloroethene, Total	61				0		0.0702	0.0569	
43 Cyclohexane	84	9.767	9.772	-0.005	44	856	0.0351	0.0194	
44 1,1,1-Trichloroethane	97	9.810	9.804	0.006	91	2811	0.0351	0.0263	
45 Carbon tetrachloride	117	10.040	10.045	-0.005	76	3498	0.0351	0.0301	
46 Isooctane	57		10.451				ND	ND	
47 Benzene	78	10.500	10.500	0.000	94	6341	0.0351	0.0517	
48 1,2-Dichloroethane	62		10.682				ND	ND	
49 n-Heptane	43	10.837	10.826	0.011	85	1730	0.0351	0.0292	
* 50 1,4-Difluorobenzene	114	11.318	11.318	0.000	93	2437595	10.0	10.0	
52 n-Butanol	56	11.821	11.757	0.064	71	1476	0.0351	0.0863	
53 Trichloroethene	95	11.784	11.778	0.006	93	2504	0.0351	0.0346	
54 1,2-Dichloropropane	63	12.335	12.340	-0.005	80	1089	0.0351	0.0214	
A 51 GRO	1	12.420	(4.530-20.310)		0	829732	0.0351	0	
55 Methyl methacrylate	69		12.511				ND	ND	
57 Dibromomethane	174	12.581	12.586	-0.005	96	3233	0.0351	0.0446	
56 1,4-Dioxane	88	12.645	12.591	0.054	1	160	0.0351	0.007062	
58 Dichlorobromomethane	83	12.864	12.870	-0.006	93	3498	0.0351	0.0282	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	85	1363	0.0351	0.0171	
61 4-Methyl-2-pentanone (MIBK	43	14.153	14.111	0.042	5	1903	0.0351	0.0259	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	925211	0.0351	0	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	11037	NC	NC	
65 Toluene	92	14.367	14.373	-0.006	90	2434	0.0351	0.0256	
A 62 C8 Range	1	14.438	(14.371-14.471)		0	12943	NC	NC	
64 n-Octane	43	14.421	14.421	0.000	91	2751	0.0351	0.0308	
66 trans-1,3-Dichloropropene	75	14.983	14.972	0.011	42	1032	0.0351	0.0123	
67 1,1,2-Trichloroethane	83		15.341				ND	ND	
68 Tetrachloroethene	166	15.427	15.432	-0.005	63	3523	0.0351	0.0344	M
69 2-Hexanone	43	15.849	15.828	0.021	7	986	0.0351	0.0145	
71 Chlorodibromomethane	129	16.095	16.101	-0.006	82	2405	0.0351	0.0190	
72 Ethylene Dibromide	107	16.379	16.374	0.005	23	1800	0.0351	0.0181	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	85	2106127	10.0	10.0	
75 Chlorobenzene	112	17.337	17.337	0.000	89	3460	0.0351	0.0264	
76 Ethylbenzene	91	17.502	17.492	0.010	94	5542	0.0351	0.0287	
77 n-Nonane	57	17.625	17.625	0.000	83	1986	0.0351	0.0255	
78 m-Xylene & p-Xylene	106	17.748	17.748	0.000	0	3743	0.0702	0.0484	
79 o-Xylene	106	18.615	18.599	0.016	92	1503	0.0351	0.0190	
80 Styrene	104	18.663	18.658	0.005	20	1948	0.0351	0.0185	
81 Bromoform	173	19.113	19.107	0.006	88	1806	0.0351	0.0160	
82 Isopropylbenzene	105	19.337	19.337	0.000	95	5375	0.0351	0.0253	
S 73 Xylenes, Total	106				0		0.1052	0.0674	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	97	1427713	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.043	20.038	0.005	90	2763	0.0351	0.0236	
85 N-Propylbenzene	91	20.108	20.102	0.006	98	5893	0.0351	0.0246	
86 1,2,3-Trichloropropane	75		20.134				ND	ND	
87 n-Decane	57	20.306	20.300	0.006	62	2065	0.0351	0.0278	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.300	20.306	-0.006	78	4789	0.0351	0.0260	
89 2-Chlorotoluene	91	20.306	20.306	0.000	92	4935	0.0351	0.0289	
90 1,3,5-Trimethylbenzene	105	20.423	20.418	0.005	92	4475	0.0351	0.0267	
91 Alpha Methyl Styrene	118	20.798	20.803	-0.005	19	795	0.0351	0.0102	
92 tert-Butylbenzene	119	20.932	20.926	0.006	90	4467	0.0351	0.0279	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	96	3714	0.0351	0.0229	
94 sec-Butylbenzene	105	21.269	21.263	0.006	97	5240	0.0351	0.0229	
95 4-Isopropyltoluene	119	21.483	21.477	0.006	95	4679	0.0351	0.0253	
96 1,3-Dichlorobenzene	146	21.499	21.493	0.006	92	3858	0.0351	0.0307	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	95	4416	0.0351	0.0354	
98 Benzyl chloride	91	21.846	21.846	0.000	92	3225	0.0351	0.0238	
100 n-Butylbenzene	91	22.060	22.055	0.005	97	5521	0.0351	0.0340	
99 Undecane	57	22.087	22.092	-0.005	93	2889	0.0351	0.0367	
101 1,2-Dichlorobenzene	146	22.173	22.167	0.006	90	4265	0.0351	0.0363	
102 Dodecane	57	23.655	23.655	0.000	92	3066	0.0351	0.0547	
103 1,2,4-Trichlorobenzene	180	24.623	24.617	0.006	56	5278	0.0351	0.0758	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	88	4304	0.0351	0.0594	
105 Naphthalene	128	25.088	25.088	0.000	99	10901	0.0351	0.0853	
106 1,2,3-Trichlorobenzene	180	25.548	25.548	0.000	75	5704	0.0351	0.0992	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated

Reagents:

ATTO15CAL1w_00178	Amount Added: 35.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

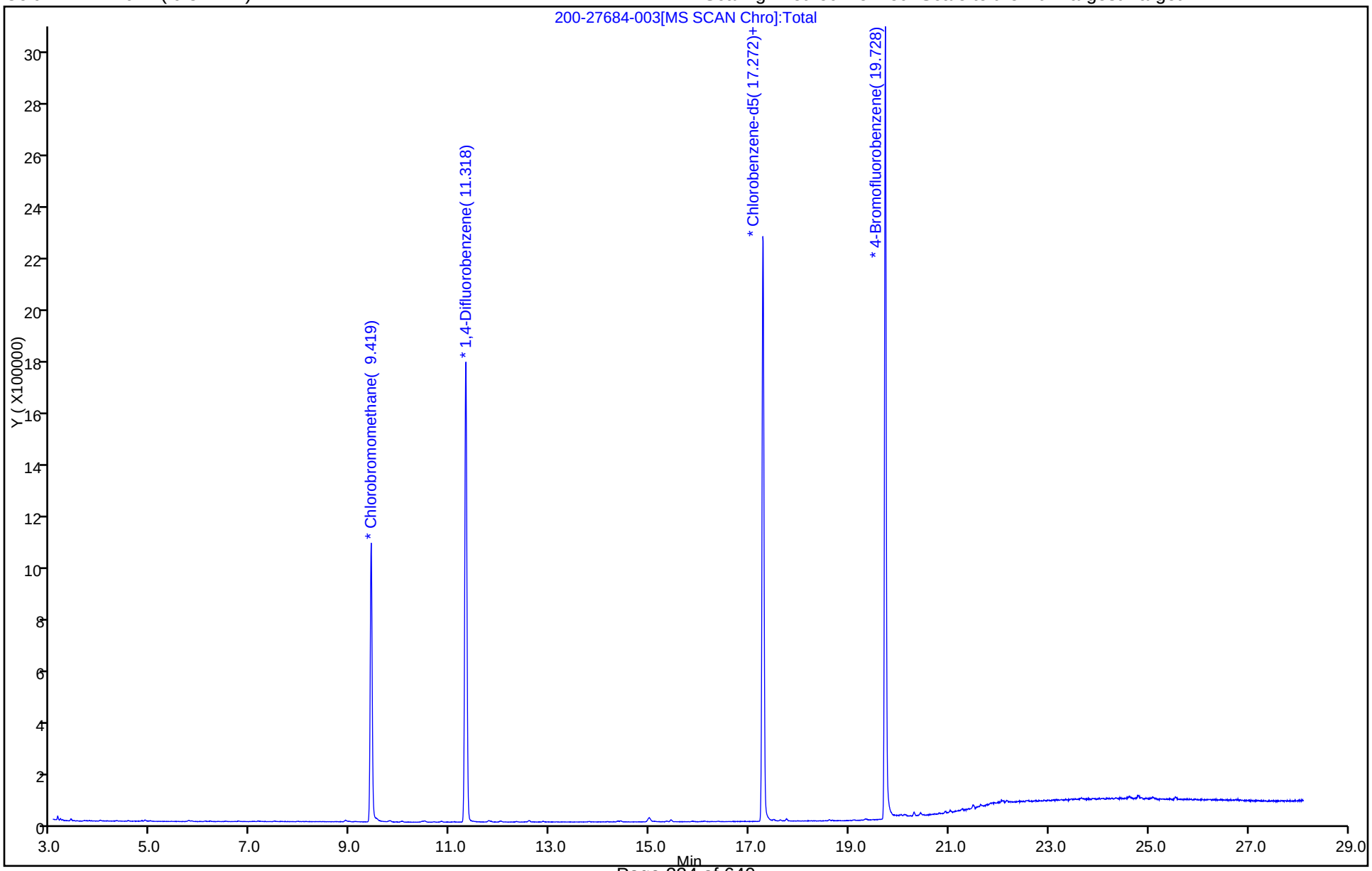
Report Date: 01-Nov-2017 10:59:10 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-003.D

Injection Date:	31-Oct-2017 18:11:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

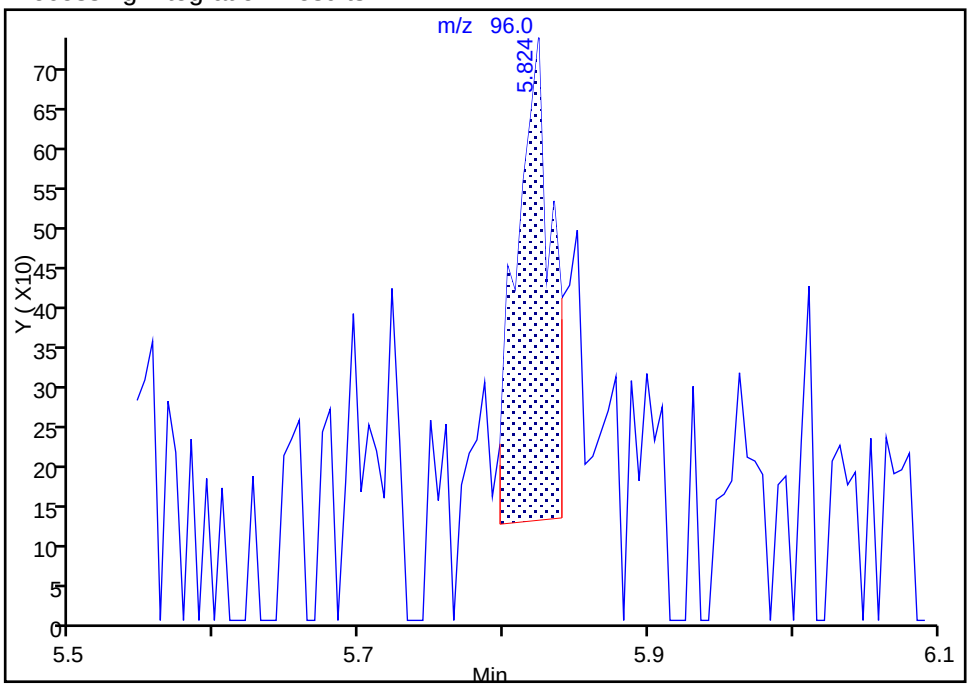
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-003.D
Injection Date: 31-Oct-2017 18:11:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

21 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

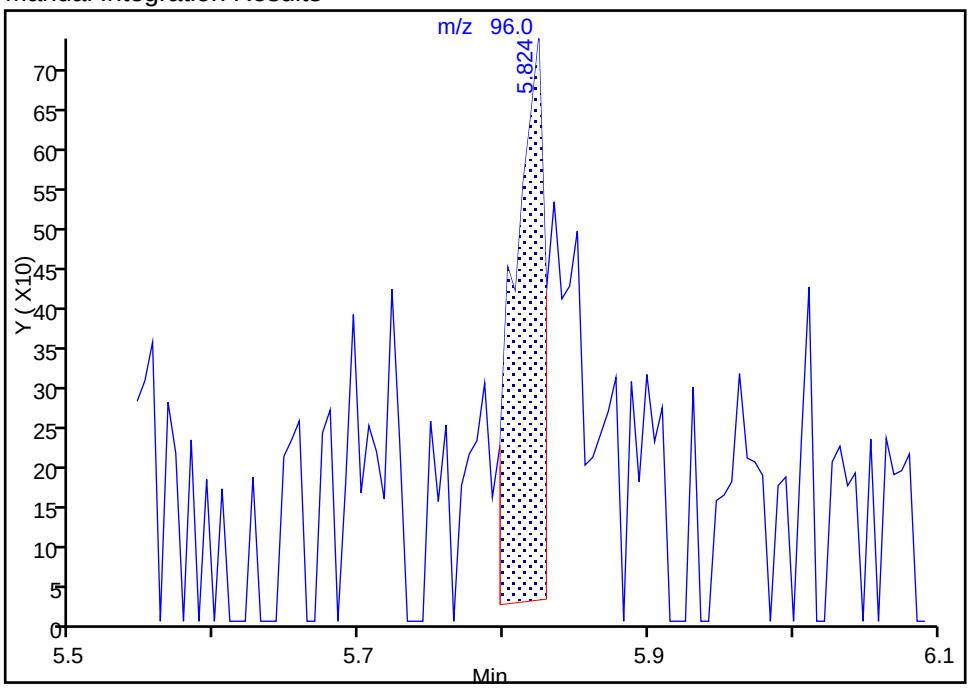
Processing Integration Results

RT: 5.82
Area: 1045
Amount: 0.031369
Amount Units: ppb v/v



Manual Integration Results

RT: 5.82
Area: 1051
Amount: 0.031950
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 09:52:00
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

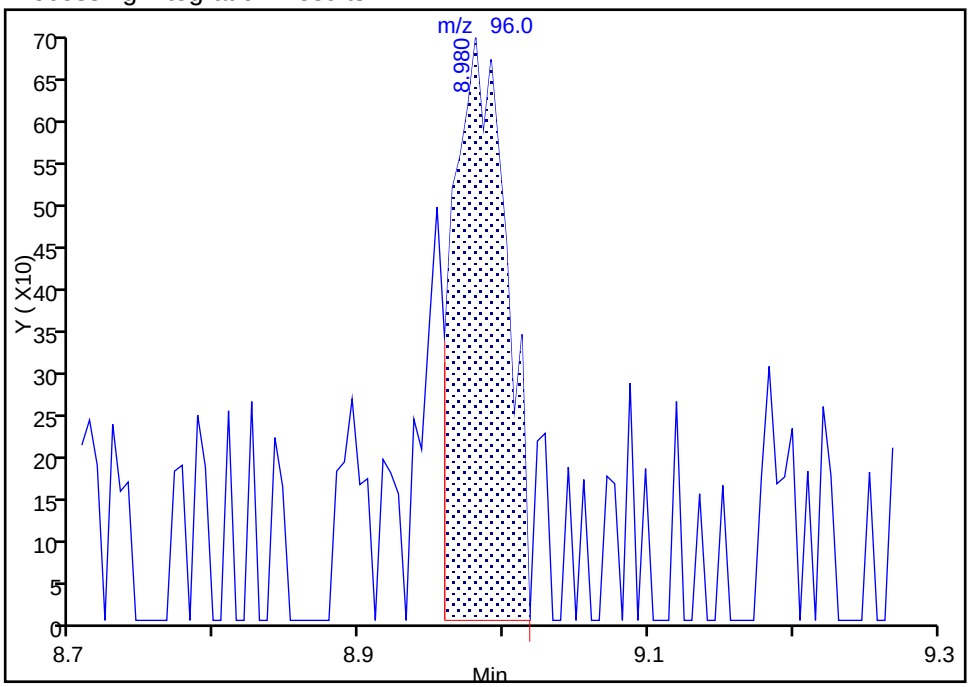
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-003.D				
Injection Date:	31-Oct-2017 18:11:30	Instrument ID:	CHG.i		
Lims ID:	ic				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

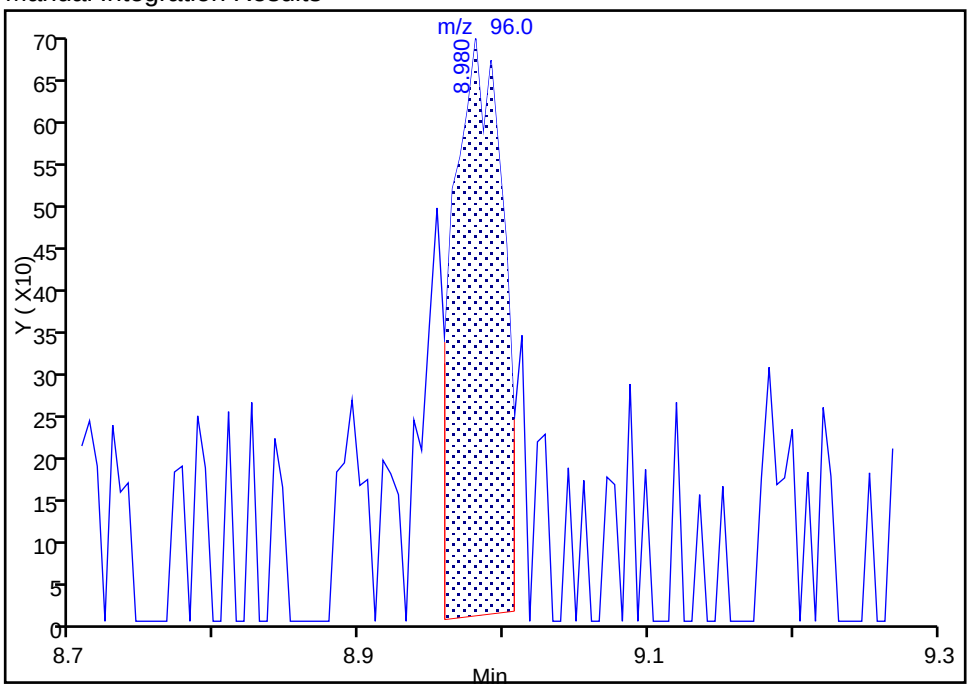
Processing Integration Results

RT: 8.98
Area: 1782
Amount: 0.044515
Amount Units: ppb v/v



Manual Integration Results

RT: 8.98
Area: 1650
Amount: 0.040335
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 09:52:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

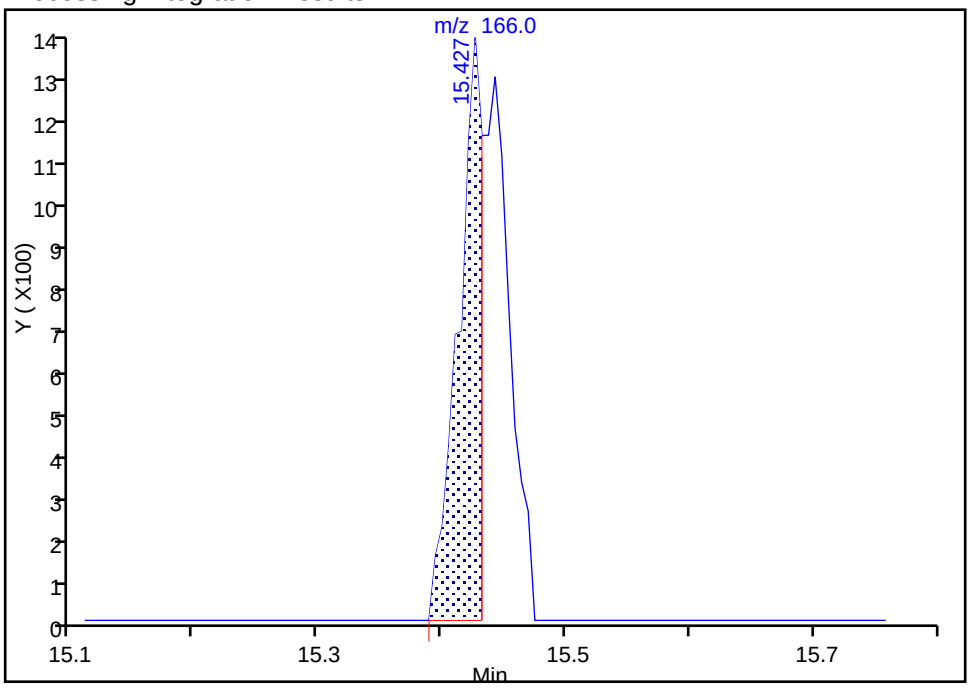
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-003.D				
Injection Date:	31-Oct-2017 18:11:30	Instrument ID:	CHG.i		
Lims ID:	ic				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

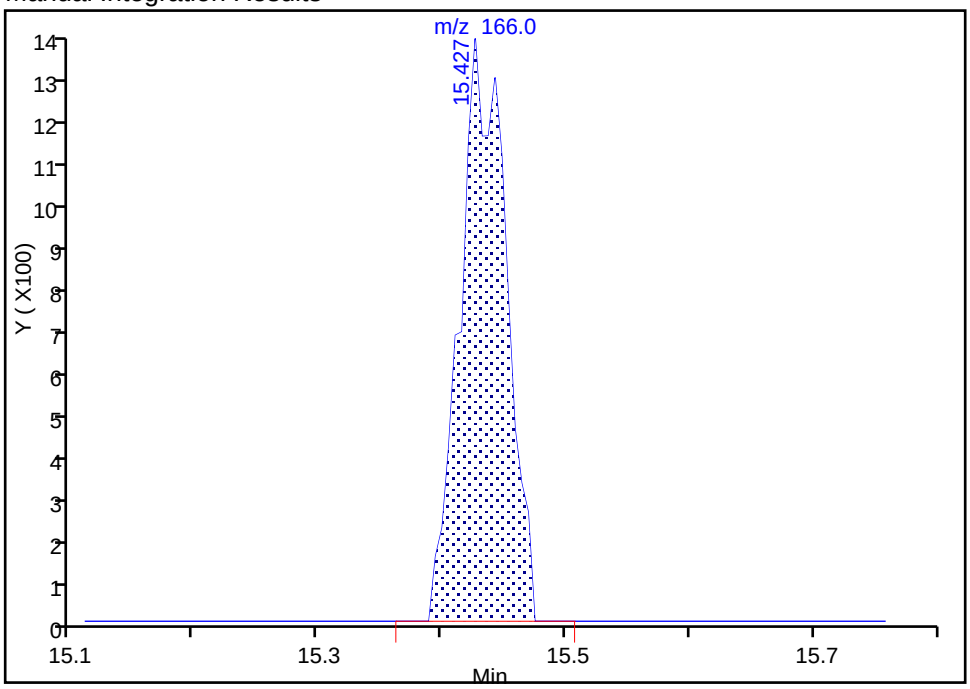
Processing Integration Results

RT: 15.43
Area: 1836
Amount: 0.019039
Amount Units: ppb v/v



Manual Integration Results

RT: 15.43
Area: 3523
Amount: 0.034389
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 09:53:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

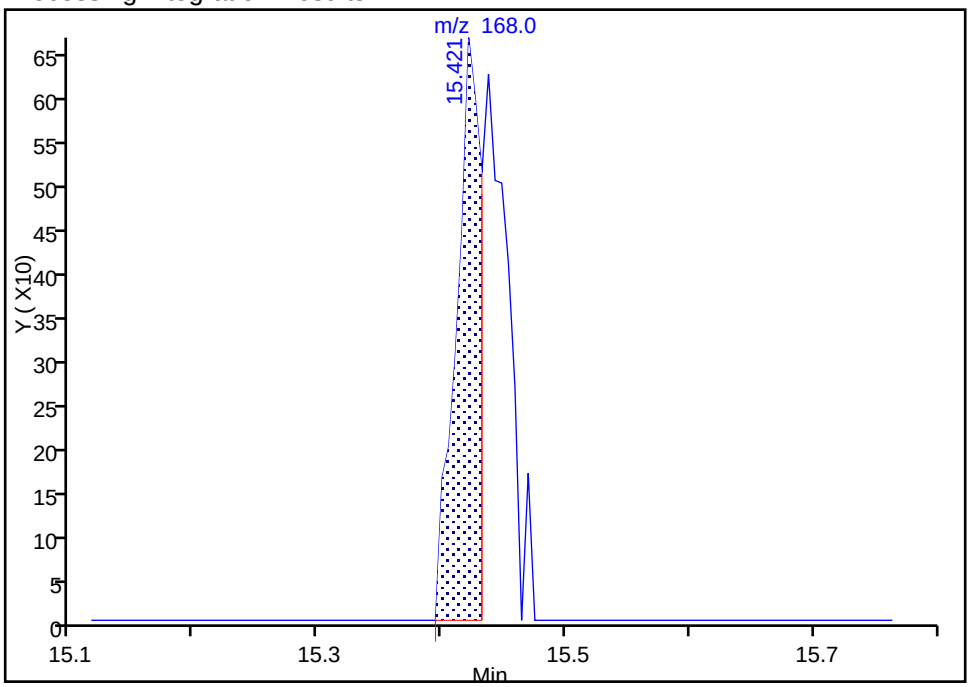
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-003.D
Injection Date: 31-Oct-2017 18:11:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 2

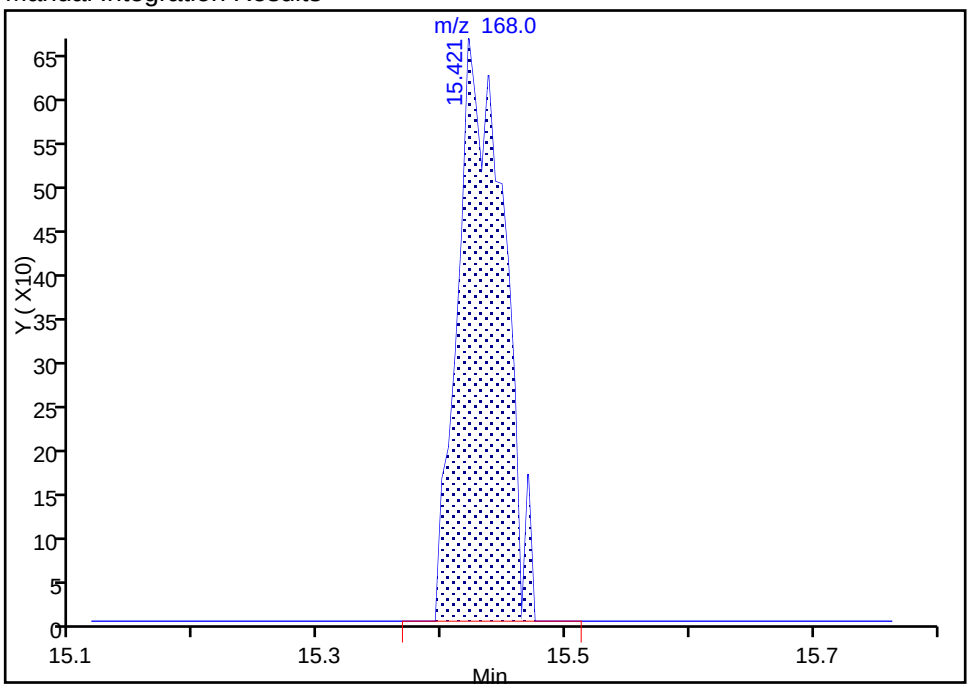
Processing Integration Results

RT: 15.42
Area: 931
Amount: 0.019039
Amount Units: ppb v/v



Manual Integration Results

RT: 15.42
Area: 1727
Amount: 0.034389
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 09:53:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-004.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Oct-2017 19:01:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-004
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:11 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:55:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.128	0.000	44	6261	0.2004	0.3256	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	98	28148	0.2004	0.2277	
3 Chlorodifluoromethane	51	3.224	3.219	0.005	96	15042	0.2004	0.2777	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.395	3.395	0.000	86	22114	0.2004	0.2266	
5 Chloromethane	50	3.518	3.513	0.005	98	6977	0.2004	0.2748	
6 Butane	43	3.657	3.668	-0.011	96	9589	0.2004	0.2758	
7 Vinyl chloride	62	3.700	3.705	-0.005	97	6456	0.2004	0.2133	
8 Butadiene	54	3.759	3.764	-0.005	94	4114	0.2004	0.2147	
10 Bromomethane	94	4.305	4.310	-0.005	95	8075	0.2004	0.2209	
11 Chloroethane	64	4.497	4.492	0.005	53	2446	0.2004	0.2139	
12 2-Methylbutane	43	4.545	4.540	0.005	89	5619	0.2004	0.2579	
13 Vinyl bromide	106	4.802	4.813	-0.011	96	8033	0.2004	0.2155	
14 Trichlorofluoromethane	101	4.877	4.882	-0.005	98	24032	0.2004	0.2200	
16 Pentane	43	4.979	4.989	-0.010	98	8671	0.2004	0.2737	
17 Ethanol	45	5.380	5.359	0.021	95	4634	0.4009	0.5618	
18 Ethyl ether	59	5.450	5.428	0.022	92	2719	0.2004	0.1998	
20 1,1,2-Trichloro-1,2,2-trif	101	5.755	5.760	-0.006	95	16151	0.2004	0.2244	
19 Acrolein	56	5.776	5.770	0.006	79	1300	0.2004	0.2948	
21 1,1-Dichloroethene	96	5.813	5.819	-0.006	98	7382	0.2004	0.2353	
22 Acetone	43	6.065	6.049	0.016	99	27867	0.2004	0.9042	
23 Carbon disulfide	76	6.182	6.188	-0.006	99	17573	0.2004	0.2239	
24 Isopropyl alcohol	45	6.300	6.279	0.021	98	7240	0.2004	0.2421	
25 3-Chloro-1-propene	41	6.487	6.498	-0.011	93	5316	0.2004	0.2064	
26 Acetonitrile	41	6.664	6.642	0.022	90	2150	0.2004	0.1972	
27 Methylene Chloride	49	6.750	6.755	-0.005	91	7159	0.2004	0.2508	
28 2-Methyl-2-propanol	59	6.990	6.974	0.016	96	9846	0.2004	0.2065	
29 Methyl tert-butyl ether	73	7.167	7.135	0.032	94	15422	0.2004	0.2133	
31 trans-1,2-Dichloroethene	61	7.140	7.151	-0.011	90	8154	0.2004	0.2098	
32 Acrylonitrile	53	7.311	7.311	0.000	87	1968	0.2004	0.1659	
33 Hexane	57	7.477	7.488	-0.011	89	7121	0.2004	0.2278	
34 1,1-Dichloroethane	63	7.953	7.953	0.000	98	11703	0.2004	0.2230	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.028	8.017	0.011	100	7796	0.2004	0.1699	
37 cis-1,2-Dichloroethene	96	8.970	8.980	-0.010	90	8139	0.2004	0.2086	
38 2-Butanone (MEK)	72	9.077	9.055	0.022	97	3050	0.2004	0.2784	
39 Ethyl acetate	88		9.077				ND	ND	
* 40 Chlorobromomethane	128	9.414	9.424	-0.010	87	461582	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.467	0.038	70	5330	0.2004	0.2420	
42 Chloroform	83	9.526	9.537	-0.011	96	18587	0.2004	0.2108	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.4183	
43 Cyclohexane	84	9.761	9.772	-0.011	93	8680	0.2004	0.2095	M
44 1,1,1-Trichloroethane	97	9.788	9.804	-0.016	95	21156	0.2004	0.2108	
45 Carbon tetrachloride	117	10.024	10.045	-0.021	98	20730	0.2004	0.1901	
46 Isooctane	57	10.452	10.451	0.001	98	30848	0.2004	0.2122	
47 Benzene	78	10.489	10.500	-0.011	95	26637	0.2004	0.2316	
48 1,2-Dichloroethane	62	10.682	10.682	0.000	98	13683	0.2004	0.2051	
49 n-Heptane	43	10.821	10.826	-0.005	89	12870	0.2004	0.2316	
* 50 1,4-Difluorobenzene	114	11.313	11.318	-0.005	93	2286293	10.0	10.0	
52 n-Butanol	56	11.789	11.757	0.032	93	5913	0.2004	0.3686	
53 Trichloroethene	95	11.773	11.778	-0.005	97	13836	0.2004	0.2039	
54 1,2-Dichloropropane	63	12.335	12.340	-0.005	85	10335	0.2004	0.2162	
A 51 GRO	1	12.420	(4.530-20.310)		0	4416789	0.2004	0	
55 Methyl methacrylate	69	12.517	12.511	0.006	95	5156	0.2004	0.1546	
57 Dibromomethane	174	12.581	12.586	-0.005	96	13457	0.2004	0.1979	
56 1,4-Dioxane	88	12.634	12.591	0.043	92	5136	0.2004	0.2417	
58 Dichlorobromomethane	83	12.864	12.870	-0.006	99	21534	0.2004	0.1854	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	92	14091	0.2004	0.1879	
61 4-Methyl-2-pentanone (MIBK	43	14.137	14.111	0.026	97	11397	0.2004	0.1657	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	5330153	0.2004	0	
65 Toluene	92	14.368	14.373	-0.005	95	19837	0.2004	0.2192	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	78246	NC	NC	
64 n-Octane	43	14.421	14.421	0.000	88	18892	0.2004	0.2258	
A 62 C8 Range	1	14.421	(14.371-14.471)		0	77316	NC	NC	
66 trans-1,3-Dichloropropene	75	14.972	14.972	0.000	95	16584	0.2004	0.2105	
67 1,1,2-Trichloroethane	83	15.336	15.341	-0.005	97	10235	0.2004	0.2039	
68 Tetrachloroethene	166	15.432	15.432	0.000	95	19587	0.2004	0.2005	
69 2-Hexanone	43	15.844	15.828	0.016	95	12391	0.2004	0.1914	
71 Chlorodibromomethane	129	16.095	16.101	-0.006	97	18227	0.2004	0.1510	
72 Ethylene Dibromide	107	16.374	16.374	0.000	99	16441	0.2004	0.1732	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	86	2008534	10.0	10.0	
75 Chlorobenzene	112	17.337	17.337	0.000	97	24486	0.2004	0.1955	
76 Ethylbenzene	91	17.492	17.492	0.000	98	36221	0.2004	0.1968	
77 n-Nonane	57	17.620	17.625	-0.005	86	15550	0.2004	0.2092	
78 m-Xylene & p-Xylene	106	17.749	17.748	0.001	0	28625	0.4009	0.3882	
79 o-Xylene	106	18.604	18.599	0.005	98	14025	0.2004	0.1856	
80 Styrene	104	18.663	18.658	0.005	96	13938	0.2004	0.1389	
81 Bromoform	173	19.102	19.107	-0.005	94	12429	0.2004	0.1153	
82 Isopropylbenzene	105	19.337	19.337	0.000	96	38752	0.2004	0.1915	
S 73 Xylenes, Total	106				0		0.6013	0.5738	
* 83 4-Bromofluorobenzene	95	19.723	19.728	-0.005	97	1381753	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.038	20.038	0.000	98	21537	0.2004	0.1932	
85 N-Propylbenzene	91	20.102	20.102	0.000	99	39610	0.2004	0.1731	
86 1,2,3-Trichloropropane	75	20.135	20.134	0.000	98	17417	0.2004	0.2013	
87 n-Decane	57	20.300	20.300	0.000	60	12470	0.2004	0.1763	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.300	20.306	-0.006	96	31556	0.2004	0.1939	
88 4-Ethyltoluene	105	20.306	20.306	0.000	81	28307	0.2004	0.1609	
90 1,3,5-Trimethylbenzene	105	20.418	20.418	0.000	92	27566	0.2004	0.1724	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	91	8106	0.2004	0.1090	
92 tert-Butylbenzene	119	20.926	20.926	0.000	91	27331	0.2004	0.1791	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	97	23602	0.2004	0.1523	
94 sec-Butylbenzene	105	21.269	21.263	0.006	98	35268	0.2004	0.1613	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	97	24498	0.2004	0.1391	
96 1,3-Dichlorobenzene	146	21.493	21.493	0.000	97	16074	0.2004	0.1343	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	96	16055	0.2004	0.1349	
98 Benzyl chloride	91	21.841	21.846	-0.005	97	12822	0.2004	0.0991	
100 n-Butylbenzene	91	22.055	22.055	0.000	98	22900	0.2004	0.1478	
99 Undecane	57	22.092	22.092	0.000	93	12779	0.2004	0.1701	
101 1,2-Dichlorobenzene	146	22.167	22.167	0.000	95	16455	0.2004	0.1469	
102 Dodecane	57	23.660	23.655	0.005	97	10501	0.2004	0.1965	
103 1,2,4-Trichlorobenzene	180	24.618	24.617	0.001	93	8831	0.2004	0.1330	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	95	13955	0.2004	0.2020	
105 Naphthalene	128	25.094	25.088	0.006	99	15979	0.2004	0.1311	
106 1,2,3-Trichlorobenzene	180	25.548	25.548	0.000	93	9099	0.2004	0.1660	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00178	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

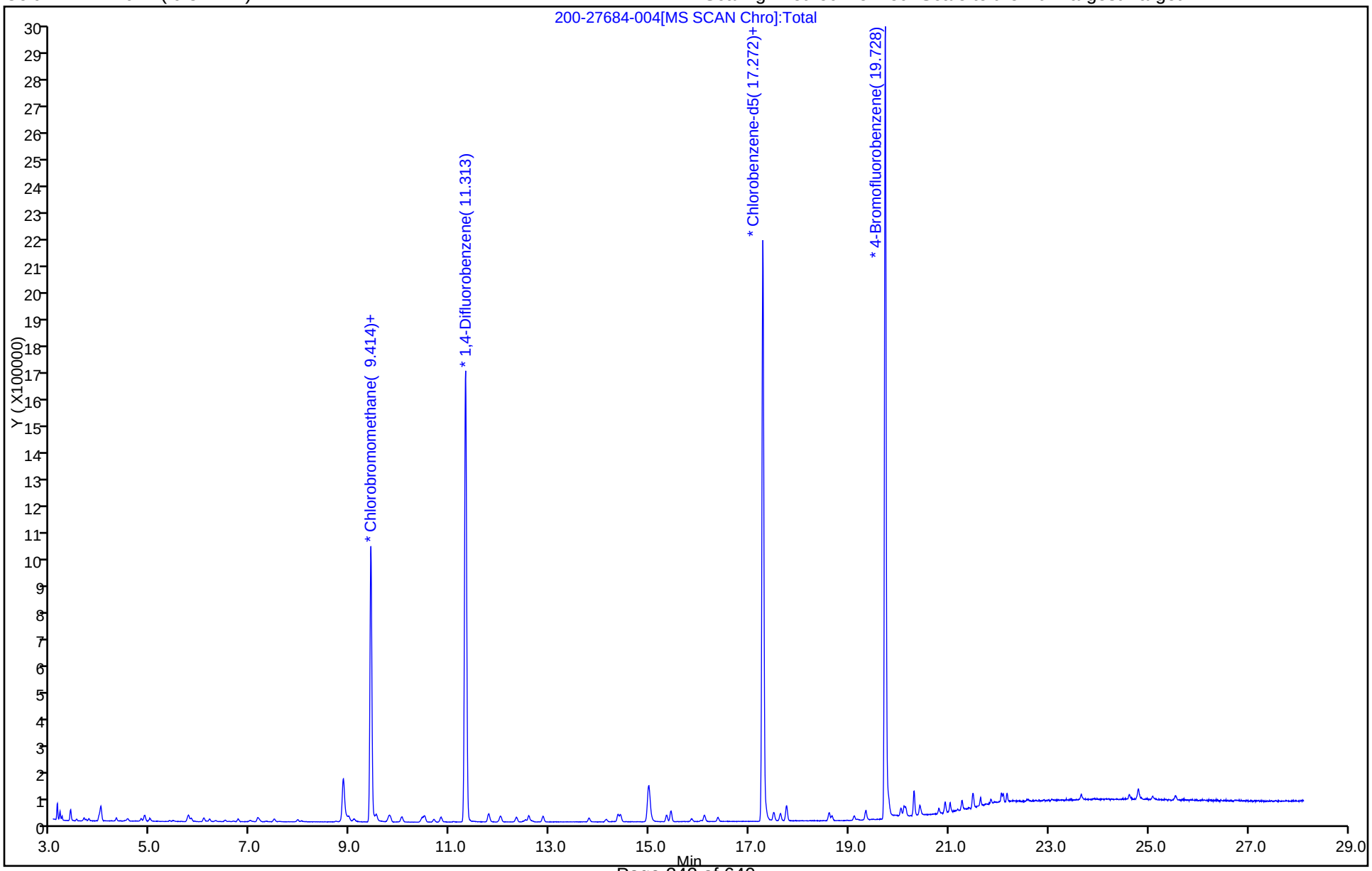
Report Date: 01-Nov-2017 10:59:11 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-004.D

Injection Date:	31-Oct-2017 19:01:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

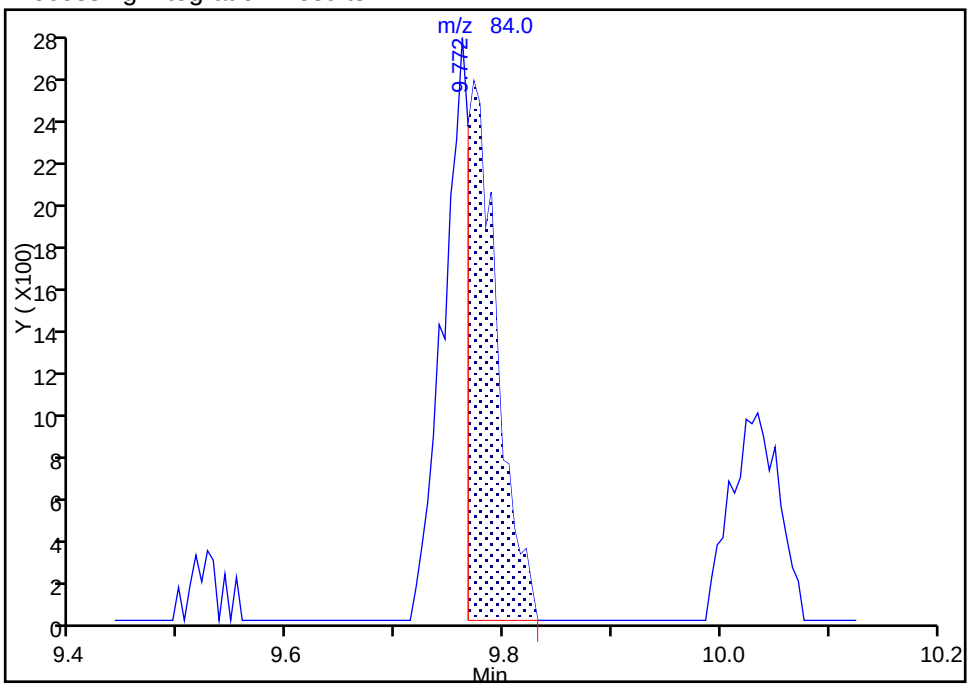
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-004.D				
Injection Date:	31-Oct-2017 19:01:30	Instrument ID:	CHG.i		
Lims ID:	ic				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

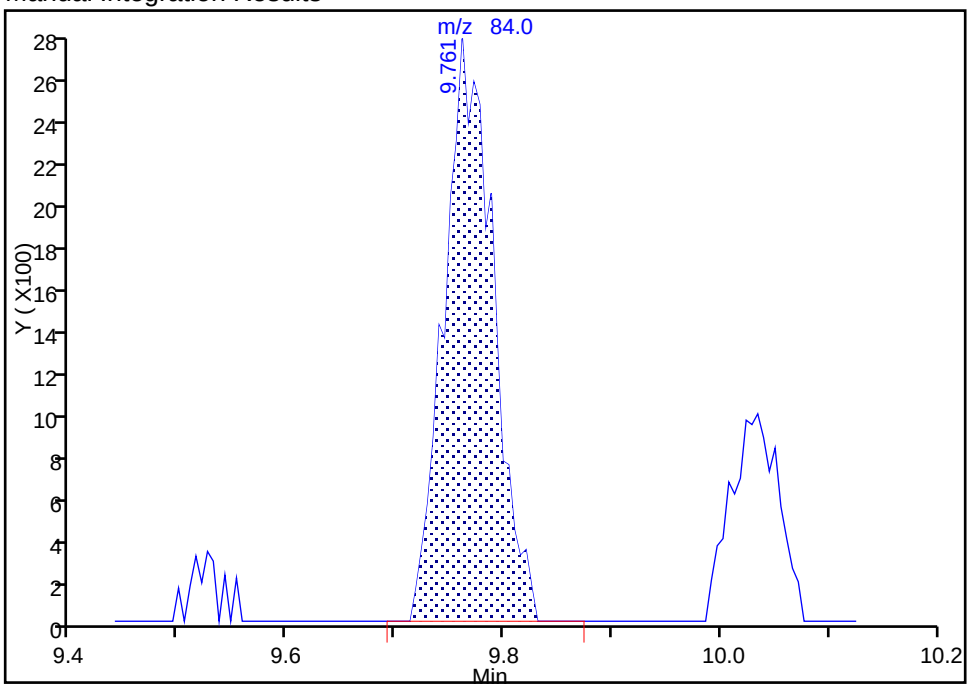
Processing Integration Results

RT: 9.77
Area: 4914
Amount: 0.126832
Amount Units: ppb v/v



Manual Integration Results

RT: 9.76
Area: 8680
Amount: 0.209519
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 09:55:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-006.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 31-Oct-2017 20:42:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-006
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:18 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:56:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.128	0.000	95	11025	0.5005	0.5747	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	64836	0.5005	0.5258	
3 Chlorodifluoromethane	51	3.224	3.219	0.005	97	29812	0.5005	0.5517	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.395	3.395	0.000	88	52217	0.5005	0.5364	
5 Chloromethane	50	3.513	3.513	0.000	98	14567	0.5005	0.5751	
6 Butane	43	3.663	3.668	-0.005	95	19055	0.5005	0.5493	
7 Vinyl chloride	62	3.705	3.705	0.000	97	15540	0.5005	0.5147	
8 Butadiene	54	3.759	3.764	-0.005	93	10212	0.5005	0.5343	
10 Bromomethane	94	4.310	4.310	0.000	96	18321	0.5005	0.5024	
11 Chloroethane	64	4.492	4.492	0.000	96	6003	0.5005	0.5264	
12 2-Methylbutane	43	4.535	4.540	-0.005	88	11657	0.5005	0.5364	
13 Vinyl bromide	106	4.813	4.813	0.000	98	18936	0.5005	0.5093	
14 Trichlorofluoromethane	101	4.877	4.882	-0.005	98	57650	0.5005	0.5292	
16 Pentane	43	4.989	4.989	0.000	99	17436	0.5005	0.5516	
17 Ethanol	45	5.359	5.359	0.000	96	48943	5.01	5.95	
18 Ethyl ether	59	5.444	5.428	0.016	95	6764	0.5005	0.4983	
20 1,1,2-Trichloro-1,2,2-trif	101	5.754	5.760	-0.006	97	37352	0.5005	0.5203	
19 Acrolein	56	5.781	5.770	0.011	91	2737	0.5005	0.6222	
21 1,1-Dichloroethene	96	5.819	5.819	0.000	98	16694	0.5005	0.5333	
22 Acetone	43	6.059	6.049	0.010	99	30828	0.5005	1.00	
23 Carbon disulfide	76	6.177	6.188	-0.011	99	40234	0.5005	0.5139	
24 Isopropyl alcohol	45	6.300	6.279	0.021	99	13690	0.5005	0.4589	
25 3-Chloro-1-propene	41	6.493	6.498	-0.005	98	13384	0.5005	0.5209	
26 Acetonitrile	41	6.653	6.642	0.011	95	4671	0.5005	0.4294	
27 Methylene Chloride	49	6.749	6.755	-0.006	86	15517	0.5005	0.5449	
28 2-Methyl-2-propanol	59	6.996	6.974	0.022	95	22570	0.5005	0.4744	
29 Methyl tert-butyl ether	73	7.156	7.135	0.021	95	35548	0.5005	0.4928	
31 trans-1,2-Dichloroethene	61	7.145	7.151	-0.006	96	20054	0.5005	0.5171	
32 Acrylonitrile	53	7.317	7.311	0.006	93	5620	0.5005	0.4748	
33 Hexane	57	7.482	7.488	-0.006	90	15190	0.5005	0.4872	
34 1,1-Dichloroethane	63	7.948	7.953	-0.005	98	26891	0.5005	0.5136	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.017	8.017	0.000	99	20435	0.5005	0.4464	
37 cis-1,2-Dichloroethene	96	8.980	8.980	0.000	89	19528	0.5005	0.5017	
38 2-Butanone (MEK)	72	9.055	9.055	0.000	99	5591	0.5005	0.5116	
39 Ethyl acetate	88	9.077	9.077	0.000	97	455	0.5005	0.2810	
* 40 Chlorobromomethane	128	9.414	9.424	-0.010	74	460456	10.0	10.0	
41 Tetrahydrofuran	42	9.494	9.467	0.027	80	11141	0.5005	0.5131	
42 Chloroform	83	9.526	9.537	-0.011	97	44856	0.5005	0.5099	
S 30 1,2-Dichloroethene, Total	61				0		1.00	1.02	
43 Cyclohexane	84	9.767	9.772	-0.005	94	20272	0.5005	0.4963	
44 1,1,1-Trichloroethane	97	9.804	9.804	0.000	96	49861	0.5005	0.5040	
45 Carbon tetrachloride	117	10.029	10.045	-0.016	98	51932	0.5005	0.4829	
46 Isooctane	57	10.446	10.451	-0.005	98	72723	0.5005	0.5073	
47 Benzene	78	10.494	10.500	-0.006	95	60696	0.5005	0.5352	
48 1,2-Dichloroethane	62	10.676	10.682	-0.006	98	32625	0.5005	0.4959	
49 n-Heptane	43	10.826	10.826	0.000	90	28179	0.5005	0.5144	
* 50 1,4-Difluorobenzene	114	11.313	11.318	-0.005	94	2254303	10.0	10.0	
52 n-Butanol	56	11.794	11.757	0.037	51	8465	0.5005	0.5351	
53 Trichloroethene	95	11.773	11.778	-0.005	96	33018	0.5005	0.4935	
54 1,2-Dichloropropane	63	12.329	12.340	-0.011	88	24532	0.5005	0.5206	
A 51 GRO	1	12.420	(4.530-20.310)		0	8337570	0.5005	0	
55 Methyl methacrylate	69	12.511	12.511	0.000	95	12752	0.5005	0.3878	
57 Dibromomethane	174	12.586	12.586	0.000	96	31424	0.5005	0.4688	
56 1,4-Dioxane	88	12.629	12.591	0.038	94	10724	0.5005	0.5118	
58 Dichlorobromomethane	83	12.864	12.870	-0.006	98	53144	0.5005	0.4641	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	93	34215	0.5005	0.4628	
61 4-Methyl-2-pentanone (MIBK	43	14.127	14.111	0.016	97	26748	0.5005	0.3943	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	11056357	0.5005	0	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	174076	NC	NC	
65 Toluene	92	14.367	14.373	-0.006	95	43722	0.5005	0.4884	
A 62 C8 Range	1	14.421	(14.371-14.471)		0	173753	NC	NC	
64 n-Octane	43	14.416	14.421	-0.005	90	42784	0.5005	0.5187	
66 trans-1,3-Dichloropropene	75	14.977	14.972	0.005	96	35574	0.5005	0.4578	
67 1,1,2-Trichloroethane	83	15.341	15.341	0.000	98	25134	0.5005	0.5063	
68 Tetrachloroethene	166	15.432	15.432	0.000	97	46287	0.5005	0.4790	
69 2-Hexanone	43	15.839	15.828	0.011	95	24895	0.5005	0.3887	
71 Chlorodibromomethane	129	16.101	16.101	0.000	97	49457	0.5005	0.4142	
72 Ethylene Dibromide	107	16.368	16.374	-0.006	97	42604	0.5005	0.4538	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	89	1986660	10.0	10.0	
75 Chlorobenzene	112	17.337	17.337	0.000	96	59656	0.5005	0.4816	
76 Ethylbenzene	91	17.492	17.492	0.000	98	89090	0.5005	0.4894	
77 n-Nonane	57	17.625	17.625	0.000	91	35540	0.5005	0.4833	
78 m-Xylene & p-Xylene	106	17.748	17.748	0.000	0	70180	1.00	0.9623	
79 o-Xylene	106	18.604	18.599	0.005	97	35497	0.5005	0.4749	
80 Styrene	104	18.663	18.658	0.005	98	38539	0.5005	0.3884	
81 Bromoform	173	19.107	19.107	0.000	95	40822	0.5005	0.3827	
82 Isopropylbenzene	105	19.337	19.337	0.000	97	93966	0.5005	0.4694	
S 73 Xylenes, Total	106				0		1.50	1.44	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	97	1389444	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.038	20.038	0.000	99	52161	0.5005	0.4731	
85 N-Propylbenzene	91	20.102	20.102	0.000	99	105859	0.5005	0.4677	
86 1,2,3-Trichloropropane	75	20.134	20.134	0.000	99	43136	0.5005	0.5040	
87 n-Decane	57	20.300	20.300	0.000	93	31417	0.5005	0.4492	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.306	20.306	0.000	89	76971	0.5005	0.4424	
89 2-Chlorotoluene	91	20.306	20.306	0.000	97	82499	0.5005	0.5125	
90 1,3,5-Trimethylbenzene	105	20.423	20.418	0.005	93	70439	0.5005	0.4454	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	90	25026	0.5005	0.3402	
92 tert-Butylbenzene	119	20.926	20.926	0.000	91	67800	0.5005	0.4492	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	98	66847	0.5005	0.4361	
94 sec-Butylbenzene	105	21.269	21.263	0.006	99	94204	0.5005	0.4356	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	96	70812	0.5005	0.4064	
96 1,3-Dichlorobenzene	146	21.493	21.493	0.000	98	51786	0.5005	0.4376	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	95	49396	0.5005	0.4196	
98 Benzyl chloride	91	21.846	21.846	0.000	98	46201	0.5005	0.3612	
100 n-Butylbenzene	91	22.055	22.055	0.000	97	58316	0.5005	0.3806	
99 Undecane	57	22.092	22.092	0.000	95	29008	0.5005	0.3903	
101 1,2-Dichlorobenzene	146	22.167	22.167	0.000	95	46403	0.5005	0.4187	
102 Dodecane	57	23.655	23.655	0.000	95	23840	0.5005	0.4511	
103 1,2,4-Trichlorobenzene	180	24.617	24.617	0.000	93	25392	0.5005	0.3866	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	95	31361	0.5005	0.4589	
105 Naphthalene	128	25.094	25.088	0.006	99	49604	0.5005	0.4114	
106 1,2,3-Trichlorobenzene	180	25.548	25.548	0.000	95	22596	0.5005	0.4167	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL2w_00245	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

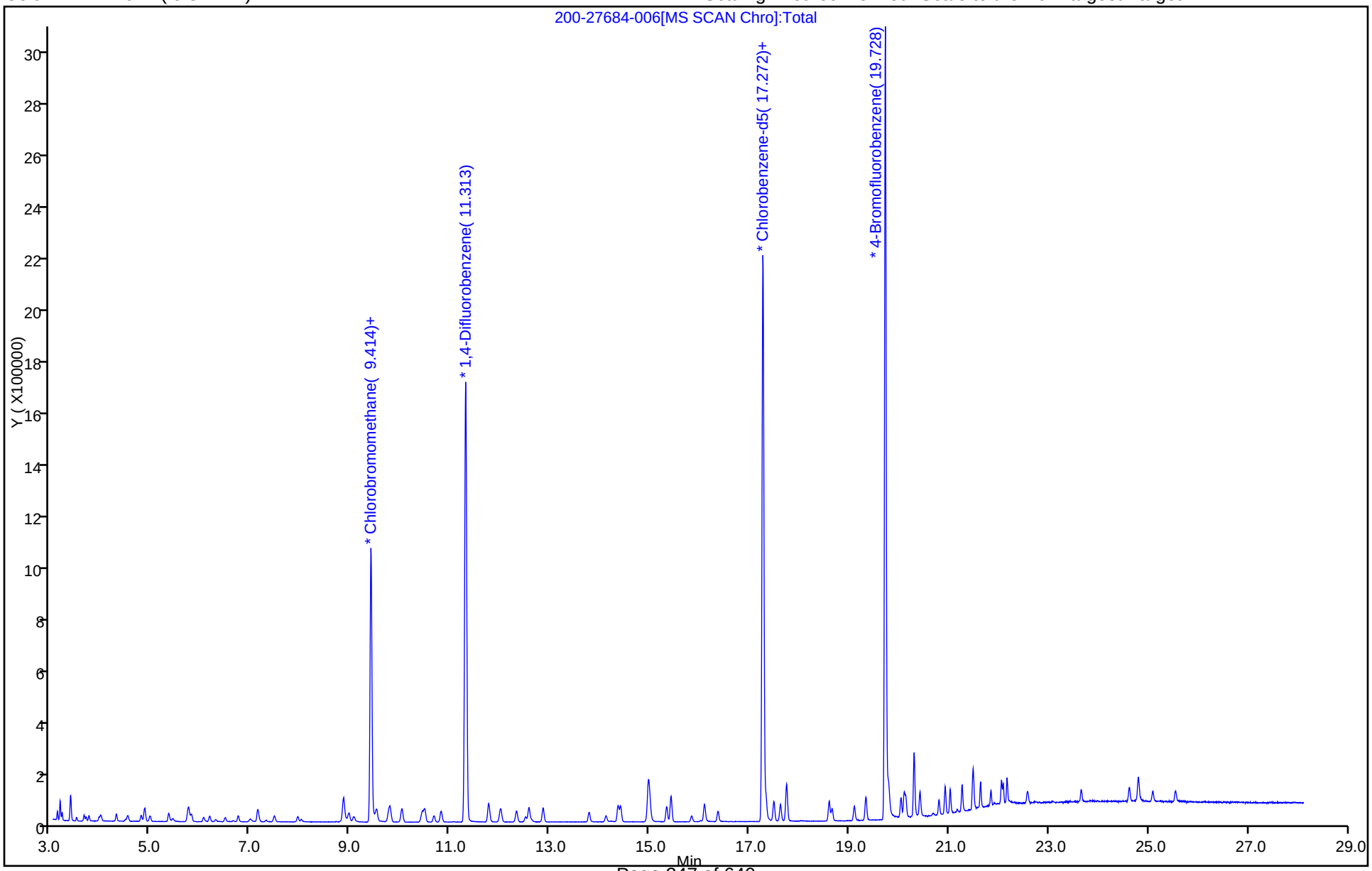
Report Date: 01-Nov-2017 10:59:19 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-006.D

Injection Date:	31-Oct-2017 20:42:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-008.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Oct-2017 22:23:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-008
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:25 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:57:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.128	-0.006	96	110125	4.99	5.73	
2 Dichlorodifluoromethane	85	3.176	3.181	-0.005	99	721612	4.99	5.84	
3 Chlorodifluoromethane	51	3.213	3.219	-0.006	96	315243	4.99	5.82	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.384	3.395	-0.011	93	565645	4.99	5.80	
5 Chloromethane	50	3.507	3.513	-0.006	99	144089	4.99	5.68	
6 Butane	43	3.657	3.668	-0.011	96	199795	4.99	5.75	
7 Vinyl chloride	62	3.700	3.705	-0.005	98	167201	4.99	5.53	
8 Butadiene	54	3.754	3.764	-0.010	94	106649	4.99	5.57	
10 Bromomethane	94	4.305	4.310	-0.005	98	201978	4.99	5.53	
11 Chloroethane	64	4.486	4.492	-0.006	98	62904	4.99	5.50	
12 2-Methylbutane	43	4.535	4.540	-0.005	87	113355	4.99	5.21	
13 Vinyl bromide	106	4.802	4.813	-0.011	98	202506	4.99	5.44	
14 Trichlorofluoromethane	101	4.872	4.882	-0.010	99	606090	4.99	5.55	
16 Pentane	43	4.984	4.989	-0.005	98	172966	4.99	5.46	
17 Ethanol	45	5.353	5.359	-0.006	97	90530	10.0	11.0	
18 Ethyl ether	59	5.423	5.428	-0.005	96	77270	4.99	5.68	
20 1,1,2-Trichloro-1,2,2-trif	101	5.749	5.760	-0.011	95	397132	4.99	5.52	
19 Acrolein	56	5.760	5.770	-0.010	94	23616	4.99	5.36	
21 1,1-Dichloroethene	96	5.813	5.819	-0.006	97	168462	4.99	5.37	
22 Acetone	43	6.038	6.049	-0.011	100	183833	4.99	5.97	
23 Carbon disulfide	76	6.177	6.188	-0.011	99	436089	4.99	5.56	
24 Isopropyl alcohol	45	6.273	6.279	-0.006	100	171229	4.99	5.73	
25 3-Chloro-1-propene	41	6.487	6.498	-0.011	95	145830	4.99	5.66	
26 Acetonitrile	41	6.637	6.642	-0.005	98	62684	4.99	5.75	
27 Methylene Chloride	49	6.749	6.755	-0.006	90	160752	4.99	5.63	
28 2-Methyl-2-propanol	59	6.969	6.974	-0.005	94	264540	4.99	5.55	
29 Methyl tert-butyl ether	73	7.129	7.135	-0.006	95	409660	4.99	5.67	
31 trans-1,2-Dichloroethene	61	7.140	7.151	-0.011	94	218636	4.99	5.63	
32 Acrylonitrile	53	7.306	7.311	-0.005	92	66538	4.99	5.61	
33 Hexane	57	7.477	7.488	-0.011	89	169012	4.99	5.41	
34 1,1-Dichloroethane	63	7.948	7.953	-0.005	99	293103	4.99	5.59	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.012	8.017	-0.005	100	260845	4.99	5.69	
37 cis-1,2-Dichloroethene	96	8.975	8.980	-0.005	89	207158	4.99	5.31	
38 2-Butanone (MEK)	72	9.050	9.055	-0.005	100	61610	4.99	5.63	
39 Ethyl acetate	88	9.077	9.077	-0.001	99	9001	4.99	5.55	
* 40 Chlorobromomethane	128	9.414	9.424	-0.010	74	461386	10.0	10.0	
41 Tetrahydrofuran	42	9.462	9.467	-0.005	86	127596	4.99	5.81	
42 Chloroform	83	9.531	9.537	-0.006	96	488172	4.99	5.54	
S 30 1,2-Dichloroethene, Total	61				0		9.99	10.9	
43 Cyclohexane	84	9.772	9.772	0.000	94	230598	4.99	5.58	
44 1,1,1-Trichloroethane	97	9.799	9.804	-0.005	94	563759	4.99	5.63	
45 Carbon tetrachloride	117	10.034	10.045	-0.011	98	629628	4.99	5.79	
46 Isooctane	57	10.446	10.451	-0.005	98	808723	4.99	5.58	
47 Benzene	78	10.494	10.500	-0.006	95	621681	4.99	5.42	
48 1,2-Dichloroethane	62	10.681	10.682	-0.001	99	377718	4.99	5.68	
49 n-Heptane	43	10.821	10.826	-0.006	92	306815	4.99	5.54	
* 50 1,4-Difluorobenzene	114	11.313	11.318	-0.005	93	2279821	10.0	10.0	
52 n-Butanol	56	11.757	11.757	0.000	92	82836	4.99	5.18	
53 Trichloroethene	95	11.773	11.778	-0.005	98	368941	4.99	5.45	
54 1,2-Dichloropropane	63	12.334	12.340	-0.006	88	264222	4.99	5.54	
A 51 GRO	1	12.420	(4.530-20.310)		0	88656146	4.99	0	
55 Methyl methacrylate	69	12.506	12.511	-0.005	95	186851	4.99	5.62	
57 Dibromomethane	174	12.581	12.586	-0.005	97	364889	4.99	5.38	
56 1,4-Dioxane	88	12.586	12.591	-0.005	65	121317	4.99	5.73	
58 Dichlorobromomethane	83	12.864	12.870	-0.006	98	654152	4.99	5.65	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	93	419604	4.99	5.61	
61 4-Methyl-2-pentanone (MIBK	43	14.111	14.111	0.000	98	398933	4.99	5.82	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	132021439	4.99	0	
65 Toluene	92	14.367	14.373	-0.006	94	497519	4.99	5.47	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	2068256	NC	NC	
64 n-Octane	43	14.421	14.421	0.000	91	475654	4.99	5.70	
A 62 C8 Range	1	14.438	(14.371-14.471)		0	1901263	NC	NC	
66 trans-1,3-Dichloropropene	75	14.972	14.972	0.000	96	426767	4.99	5.43	
67 1,1,2-Trichloroethane	83	15.341	15.341	0.000	98	282336	4.99	5.60	
68 Tetrachloroethene	166	15.432	15.432	0.000	96	530672	4.99	5.41	
69 2-Hexanone	43	15.828	15.828	0.000	94	372494	4.99	5.73	
71 Chlorodibromomethane	129	16.101	16.101	0.000	97	705338	4.99	5.82	
72 Ethylene Dibromide	107	16.368	16.374	-0.006	98	541869	4.99	5.69	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	85	2016752	10.0	10.0	
75 Chlorobenzene	112	17.331	17.337	-0.006	95	685252	4.99	5.45	
76 Ethylbenzene	91	17.492	17.492	0.000	98	1043689	4.99	5.65	
77 n-Nonane	57	17.620	17.625	-0.005	89	424163	4.99	5.68	
78 m-Xylene & p-Xylene	106	17.748	17.748	0.000	0	835615	9.99	11.3	
79 o-Xylene	106	18.599	18.599	0.000	99	427527	4.99	5.63	
80 Styrene	104	18.658	18.658	0.000	98	586803	4.99	5.83	
81 Bromoform	173	19.102	19.107	-0.005	96	657036	4.99	6.07	
82 Isopropylbenzene	105	19.337	19.337	0.000	96	1151512	4.99	5.67	
S 73 Xylenes, Total	106				0		15.0	16.9	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	96	1408037	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.038	20.038	0.000	99	654030	4.99	5.84	
85 N-Propylbenzene	91	20.102	20.102	0.000	99	1350803	4.99	5.88	
86 1,2,3-Trichloropropane	75	20.134	20.134	0.000	98	506208	4.99	5.83	
87 n-Decane	57	20.300	20.300	0.000	93	458263	4.99	6.45	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.306	20.306	0.000	92	976203	4.99	5.97	
88 4-Ethyltoluene	105	20.306	20.306	0.000	89	1078530	4.99	6.11	
90 1,3,5-Trimethylbenzene	105	20.418	20.418	0.000	93	921445	4.99	5.74	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	91	438218	4.99	5.87	
92 tert-Butylbenzene	119	20.926	20.926	0.000	91	870375	4.99	5.68	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	97	913488	4.99	5.87	
94 sec-Butylbenzene	105	21.263	21.263	0.000	99	1291895	4.99	5.88	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	97	1065233	4.99	6.02	
96 1,3-Dichlorobenzene	146	21.493	21.493	0.000	97	696904	4.99	5.80	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	95	674737	4.99	5.65	
98 Benzyl chloride	91	21.841	21.846	-0.005	98	786959	4.99	6.06	
100 n-Butylbenzene	91	22.055	22.055	0.000	99	941151	4.99	6.05	
99 Undecane	57	22.092	22.092	0.000	95	398117	4.99	5.28	
101 1,2-Dichlorobenzene	146	22.167	22.167	0.000	97	640939	4.99	5.70	
102 Dodecane	57	23.654	23.655	-0.001	97	220697	4.99	4.11	
103 1,2,4-Trichlorobenzene	180	24.617	24.617	0.000	94	290054	4.99	4.35	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	97	380623	4.99	5.49	
105 Naphthalene	128	25.088	25.088	0.000	99	495640	4.99	4.05	
106 1,2,3-Trichlorobenzene	180	25.543	25.548	-0.005	95	239688	4.99	4.35	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL3w_00189	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

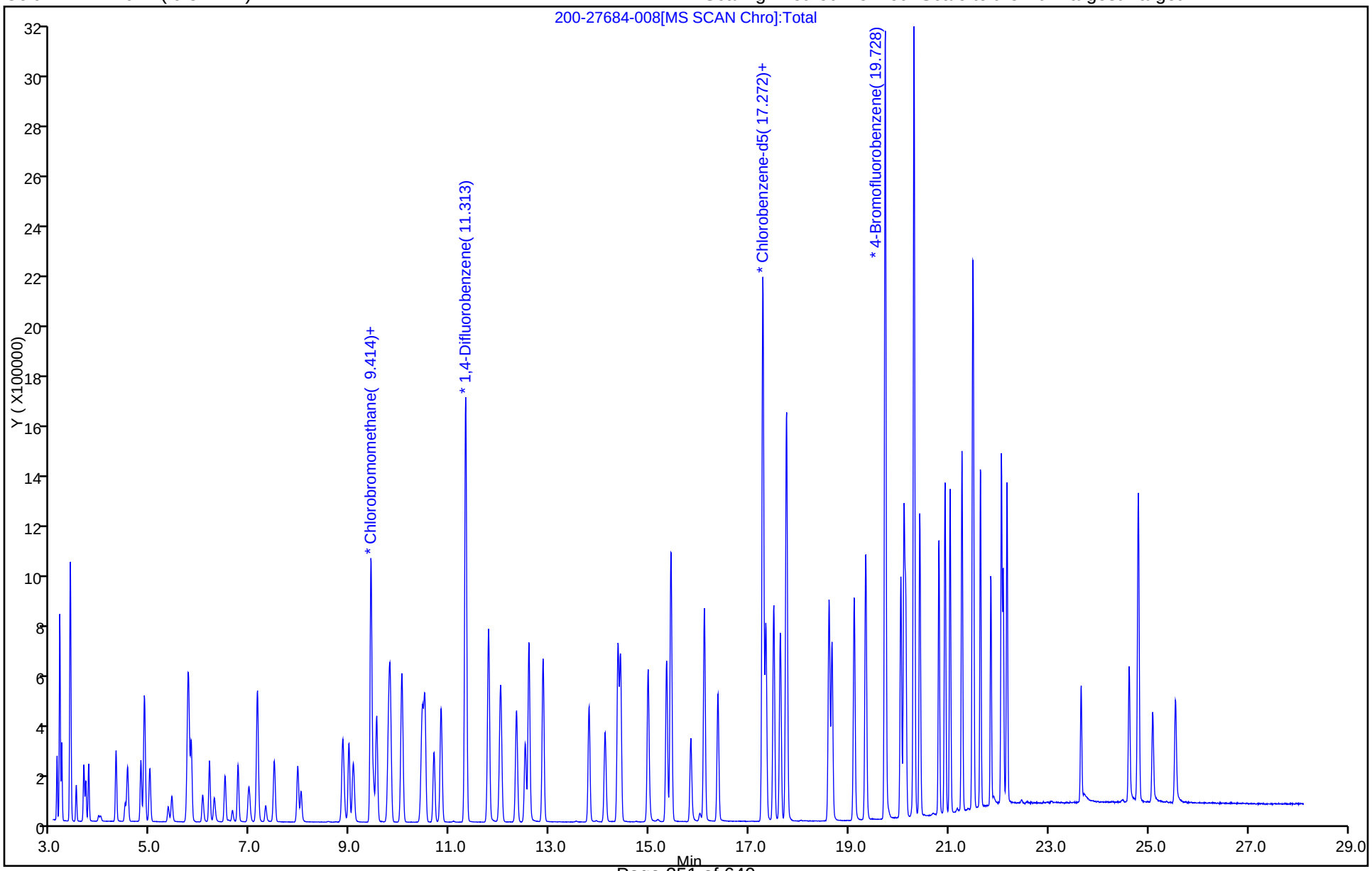
Report Date: 01-Nov-2017 10:59:26 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-008.D

Injection Date:	31-Oct-2017 22:23:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-009.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 31-Oct-2017 23:14:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-009
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:28 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:51:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.128	0.000	96	206293	10.0	10.7	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	1334072	10.0	10.7	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	567544	10.0	10.4	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.395	3.395	0.000	97	1023424	10.0	10.4	
5 Chloromethane	50	3.513	3.513	0.000	99	265919	10.0	10.4	
6 Butane	43	3.668	3.668	0.000	96	368520	10.0	10.5	
7 Vinyl chloride	62	3.705	3.705	0.000	98	319281	10.0	10.5	
8 Butadiene	54	3.764	3.764	0.000	93	204862	10.0	10.6	
10 Bromomethane	94	4.310	4.310	0.000	98	388334	10.0	10.6	
11 Chloroethane	64	4.492	4.492	0.000	99	121958	10.0	10.6	
12 2-Methylbutane	43	4.540	4.540	0.000	88	222524	10.0	10.1	
13 Vinyl bromide	106	4.813	4.813	0.000	98	397935	10.0	10.6	
14 Trichlorofluoromethane	101	4.882	4.882	0.000	99	1162393	10.0	10.6	
16 Pentane	43	4.989	4.989	0.000	98	337147	10.0	10.6	
17 Ethanol	45	5.359	5.359	0.000	96	126416	15.0	15.2	
18 Ethyl ether	59	5.428	5.428	0.000	96	147482	10.0	10.8	
20 1,1,2-Trichloro-1,2,2-trif	101	5.760	5.760	0.000	95	750069	10.0	10.4	
19 Acrolein	56	5.770	5.770	0.000	94	48359	10.0	10.9	
21 1,1-Dichloroethene	96	5.819	5.819	0.000	97	324413	10.0	10.3	
22 Acetone	43	6.049	6.049	0.000	99	330731	10.0	10.7	
23 Carbon disulfide	76	6.188	6.188	0.000	99	831356	10.0	10.5	
24 Isopropyl alcohol	45	6.279	6.279	0.000	100	326665	10.0	10.9	
25 3-Chloro-1-propene	41	6.498	6.498	0.000	94	267397	10.0	10.3	
26 Acetonitrile	41	6.642	6.642	0.000	98	116401	10.0	10.6	
27 Methylene Chloride	49	6.755	6.755	0.000	89	299939	10.0	10.4	
28 2-Methyl-2-propanol	59	6.974	6.974	0.000	94	518002	10.0	10.8	
29 Methyl tert-butyl ether	73	7.135	7.135	0.000	95	780221	10.0	10.7	
31 trans-1,2-Dichloroethene	61	7.151	7.151	0.000	94	411577	10.0	10.5	
32 Acrylonitrile	53	7.311	7.311	0.000	92	127120	10.0	10.6	
33 Hexane	57	7.488	7.488	0.000	90	327169	10.0	10.4	
34 1,1-Dichloroethane	63	7.953	7.953	0.000	99	556847	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.017	8.017	0.000	100	496699	10.0	10.8	
37 cis-1,2-Dichloroethene	96	8.980	8.980	0.000	90	396744	10.0	10.1	
38 2-Butanone (MEK)	72	9.055	9.055	0.000	99	117810	10.0	10.7	
39 Ethyl acetate	88	9.077	9.077	0.000	99	18019	10.0	11.0	
* 40 Chlorobromomethane	128	9.424	9.424	0.000	73	464552	10.0	10.0	
41 Tetrahydrofuran	42	9.467	9.467	0.000	85	243947	10.0	11.2	
42 Chloroform	83	9.537	9.537	0.000	96	932791	10.0	10.5	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.6	
43 Cyclohexane	84	9.772	9.772	0.000	94	444287	10.0	10.8	
44 1,1,1-Trichloroethane	97	9.804	9.804	0.000	94	1070123	10.0	10.8	
45 Carbon tetrachloride	117	10.045	10.045	0.000	97	1226306	10.0	11.3	
46 Isooctane	57	10.451	10.451	0.000	98	1576643	10.0	10.9	
47 Benzene	78	10.500	10.500	0.000	95	1177842	10.0	10.3	
48 1,2-Dichloroethane	62	10.682	10.682	0.000	99	714814	10.0	10.8	
49 n-Heptane	43	10.826	10.826	0.000	91	592192	10.0	10.7	
* 50 1,4-Difluorobenzene	114	11.318	11.318	0.000	93	2267534	10.0	10.0	
52 n-Butanol	56	11.757	11.757	0.000	90	176747	10.0	11.1	
53 Trichloroethene	95	11.778	11.778	0.000	98	728382	10.0	10.8	
54 1,2-Dichloropropane	63	12.340	12.340	0.000	88	499813	10.0	10.5	
A 51 GRO	1	12.420	(4.530-20.310)		0	170287498	10.0	0	
55 Methyl methacrylate	69	12.511	12.511	0.000	95	378650	10.0	11.4	
57 Dibromomethane	174	12.586	12.586	0.000	96	722529	10.0	10.7	
56 1,4-Dioxane	88	12.591	12.591	0.000	89	238269	10.0	11.3	
58 Dichlorobromomethane	83	12.870	12.870	0.000	98	1276986	10.0	11.1	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	93	810183	10.0	10.9	
61 4-Methyl-2-pentanone (MIBK	43	14.111	14.111	0.000	97	782839	10.0	11.5	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	258649743	10.0	0	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	3816490	NC	NC	
65 Toluene	92	14.373	14.373	0.000	95	961740	10.0	10.5	
A 62 C8 Range	1	14.421	(14.371-14.471)		0	3816221	NC	NC	
64 n-Octane	43	14.421	14.421	0.000	90	909239	10.0	11.0	
66 trans-1,3-Dichloropropene	75	14.972	14.972	0.000	96	852057	10.0	10.9	
67 1,1,2-Trichloroethane	83	15.341	15.341	0.000	98	546631	10.0	10.8	
68 Tetrachloroethene	166	15.432	15.432	0.000	96	1055534	10.0	10.7	
69 2-Hexanone	43	15.828	15.828	0.000	94	753473	10.0	11.5	
71 Chlorodibromomethane	129	16.101	16.101	0.000	97	1372975	10.0	11.2	
72 Ethylene Dibromide	107	16.374	16.374	0.000	99	1060790	10.0	11.0	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	85	2033391	10.0	10.0	
75 Chlorobenzene	112	17.337	17.337	0.000	96	1358418	10.0	10.7	
76 Ethylbenzene	91	17.492	17.492	0.000	98	2053469	10.0	11.0	
77 n-Nonane	57	17.625	17.625	0.000	87	838275	10.0	11.1	
78 m-Xylene & p-Xylene	106	17.748	17.748	0.000	0	1649434	20.0	22.1	
79 o-Xylene	106	18.599	18.599	0.000	99	850432	10.0	11.1	
80 Styrene	104	18.658	18.658	0.000	98	1207203	10.0	11.9	
81 Bromoform	173	19.107	19.107	0.000	96	1268501	10.0	11.6	
82 Isopropylbenzene	105	19.337	19.337	0.000	96	2288316	10.0	11.2	
S 73 Xylenes, Total	106				0		30.0	33.2	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	97	1431149	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.038	20.038	0.000	99	1276717	10.0	11.3	
85 N-Propylbenzene	91	20.102	20.102	0.000	99	2679317	10.0	11.6	
86 1,2,3-Trichloropropane	75	20.134	20.134	0.000	99	973190	10.0	11.1	
87 n-Decane	57	20.300	20.300	0.000	93	869589	10.0	12.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.306	20.306	0.000	89	2166412	10.0	12.2	
89 2-Chlorotoluene	91	20.306	20.306	0.000	91	1889187	10.0	11.5	
90 1,3,5-Trimethylbenzene	105	20.418	20.418	0.000	93	1859409	10.0	11.5	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	91	934986	10.0	12.4	
92 tert-Butylbenzene	119	20.926	20.926	0.000	92	1744293	10.0	11.3	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	97	1845328	10.0	11.8	
94 sec-Butylbenzene	105	21.263	21.263	0.000	99	2593313	10.0	11.7	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	98	2164845	10.0	12.1	
96 1,3-Dichlorobenzene	146	21.493	21.493	0.000	96	1457712	10.0	12.0	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	96	1432658	10.0	11.9	
98 Benzyl chloride	91	21.846	21.846	0.000	99	1675688	10.0	12.8	
100 n-Butylbenzene	91	22.055	22.055	0.000	99	1903286	10.0	12.1	
99 Undecane	57	22.092	22.092	0.000	94	835764	10.0	11.0	
101 1,2-Dichlorobenzene	146	22.167	22.167	0.000	97	1320448	10.0	11.6	
102 Dodecane	57	23.655	23.655	0.000	97	625463	10.0	11.6	
103 1,2,4-Trichlorobenzene	180	24.617	24.617	0.000	94	711846	10.0	10.6	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	97	724112	10.0	10.4	
105 Naphthalene	128	25.088	25.088	0.000	99	1277809	10.0	10.4	
106 1,2,3-Trichlorobenzene	180	25.548	25.548	0.000	95	588485	10.0	10.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL4w_00645	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

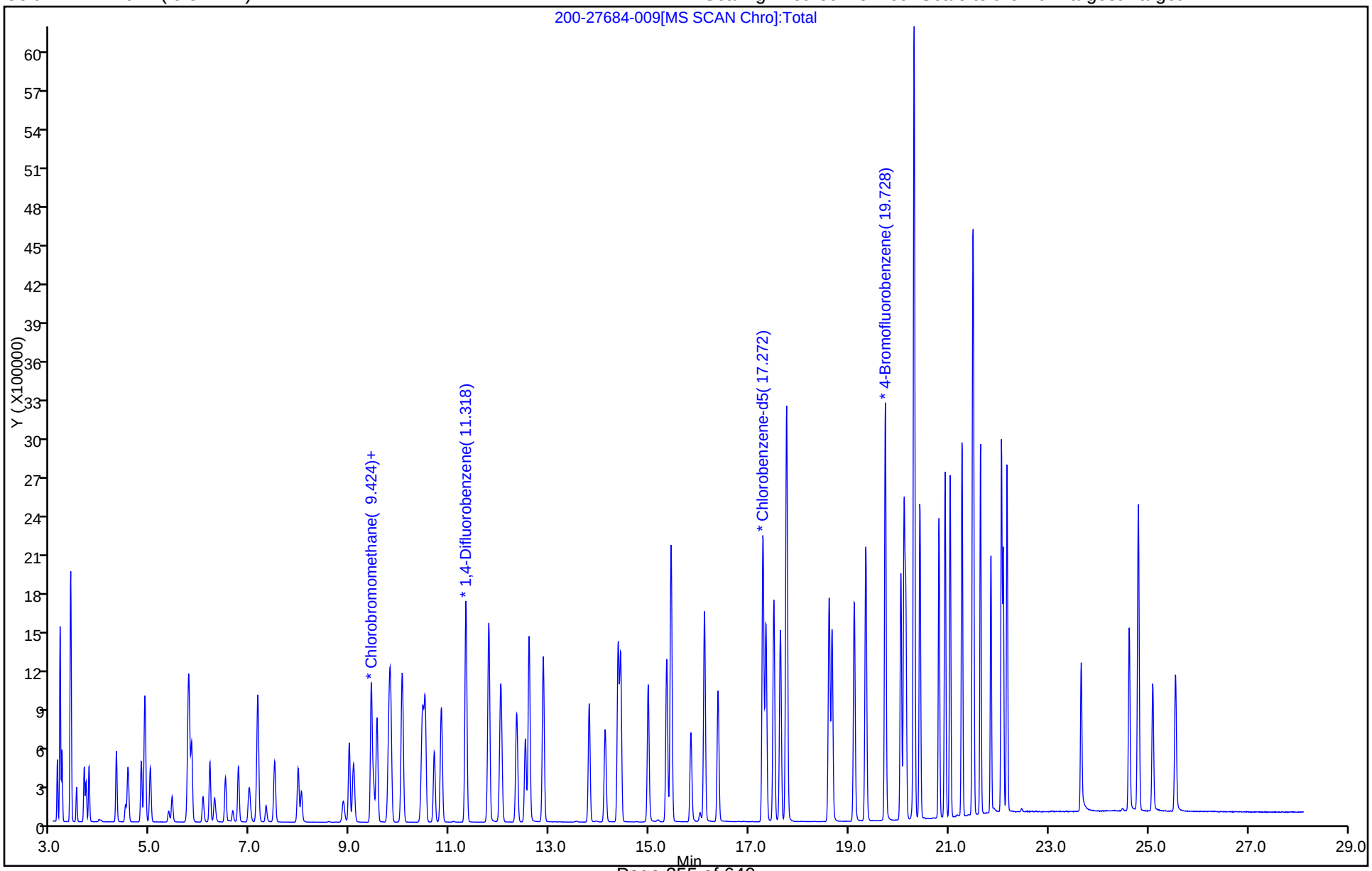
Report Date: 01-Nov-2017 10:59:29 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-009.D

Injection Date:	31-Oct-2017 23:14:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	icis			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-010.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Nov-2017 00:04:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-010
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:30 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:58:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.128	-0.006	96	288858	15.0	15.0	
2 Dichlorodifluoromethane	85	3.176	3.181	-0.005	99	1830261	15.0	14.7	
3 Chlorodifluoromethane	51	3.213	3.219	-0.006	96	788724	15.0	14.5	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.385	3.395	-0.010	86	1389422	15.0	14.2	
5 Chloromethane	50	3.508	3.513	-0.005	99	364150	15.0	14.3	
6 Butane	43	3.657	3.668	-0.011	96	505060	15.0	14.5	
7 Vinyl chloride	62	3.695	3.705	-0.010	98	434022	15.0	14.3	
8 Butadiene	54	3.754	3.764	-0.010	93	280526	15.0	14.6	
10 Bromomethane	94	4.305	4.310	-0.005	98	522883	15.0	14.2	
11 Chloroethane	64	4.487	4.492	-0.005	98	164211	15.0	14.3	
12 2-Methylbutane	43	4.535	4.540	-0.005	87	294399	15.0	13.5	
13 Vinyl bromide	106	4.802	4.813	-0.011	98	535197	15.0	14.3	
14 Trichlorofluoromethane	101	4.877	4.882	-0.005	99	1546141	15.0	14.1	
16 Pentane	43	4.984	4.989	-0.005	98	454800	15.0	14.3	
17 Ethanol	45	5.348	5.359	-0.011	96	167454	20.0	20.2	
18 Ethyl ether	59	5.418	5.428	-0.010	96	191103	15.0	14.0	
20 1,1,2-Trichloro-1,2,2-trif	101	5.755	5.760	-0.005	95	1029816	15.0	14.2	
19 Acrolein	56	5.765	5.770	-0.005	93	62970	15.0	14.2	
21 1,1-Dichloroethene	96	5.813	5.819	-0.006	97	448342	15.0	14.2	
22 Acetone	43	6.038	6.049	-0.011	99	430688	15.0	13.9	
23 Carbon disulfide	76	6.183	6.188	-0.006	99	1160404	15.0	14.7	
24 Isopropyl alcohol	45	6.273	6.279	-0.006	100	466941	15.0	15.5	
25 3-Chloro-1-propene	41	6.493	6.498	-0.005	95	375748	15.0	14.5	
26 Acetonitrile	41	6.637	6.642	-0.005	97	148662	15.0	13.6	
27 Methylene Chloride	49	6.750	6.755	-0.005	88	415479	15.0	14.5	
28 2-Methyl-2-propanol	59	6.964	6.974	-0.010	93	770545	15.0	16.1	
29 Methyl tert-butyl ether	73	7.129	7.135	-0.006	94	1030634	15.0	14.2	
31 trans-1,2-Dichloroethene	61	7.145	7.151	-0.006	93	568765	15.0	14.6	
32 Acrylonitrile	53	7.306	7.311	-0.005	93	163667	15.0	13.7	
33 Hexane	57	7.477	7.488	-0.011	89	456551	15.0	14.5	
34 1,1-Dichloroethane	63	7.953	7.953	0.000	99	767145	15.0	14.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.017	8.017	0.000	100	631451	15.0	13.7	
37 cis-1,2-Dichloroethene	96	8.975	8.980	-0.005	89	558815	15.0	14.3	
38 2-Butanone (MEK)	72	9.050	9.055	-0.005	98	159929	15.0	14.5	
39 Ethyl acetate	88	9.071	9.077	-0.006	99	23431	15.0	14.4	
* 40 Chlorobromomethane	128	9.419	9.424	-0.005	75	463699	10.0	10.0	
41 Tetrahydrofuran	42	9.457	9.467	-0.010	84	316752	15.0	14.5	
42 Chloroform	83	9.531	9.537	-0.006	96	1284278	15.0	14.5	
S 30 1,2-Dichloroethene, Total	61				0		30.0	28.8	
43 Cyclohexane	84	9.772	9.772	0.000	94	620141	15.0	15.1	
44 1,1,1-Trichloroethane	97	9.804	9.804	0.000	94	1491086	15.0	15.0	
45 Carbon tetrachloride	117	10.040	10.045	-0.005	97	1726824	15.0	16.0	
46 Isooctane	57	10.446	10.451	-0.005	99	2174799	15.0	15.1	
47 Benzene	78	10.500	10.500	0.000	95	1653342	15.0	14.5	
48 1,2-Dichloroethane	62	10.682	10.682	0.000	99	992711	15.0	15.0	
49 n-Heptane	43	10.826	10.826	0.000	90	813730	15.0	14.8	
* 50 1,4-Difluorobenzene	114	11.318	11.318	0.000	93	2264552	10.0	10.0	
52 n-Butanol	56	11.746	11.757	-0.011	89	278285	15.0	17.5	
53 Trichloroethene	95	11.773	11.778	-0.005	99	1044768	15.0	15.5	
54 1,2-Dichloropropane	63	12.335	12.340	-0.005	88	675758	15.0	14.3	
A 51 GRO	1	12.420	(4.530-20.310)		0	229445530	15.0	0	
55 Methyl methacrylate	69	12.506	12.511	-0.005	95	518606	15.0	15.7	
57 Dibromomethane	174	12.586	12.586	0.000	95	1038478	15.0	15.4	
56 1,4-Dioxane	88	12.581	12.591	-0.010	45	343947	15.0	16.3	
58 Dichlorobromomethane	83	12.870	12.870	0.000	98	1803900	15.0	15.7	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	92	1142127	15.0	15.4	
61 4-Methyl-2-pentanone (MIBK	43	14.105	14.111	-0.006	97	1181111	15.0	17.3	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	355725368	15.0	0	
65 Toluene	92	14.368	14.373	-0.005	94	1284820	15.0	14.4	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	5178712	NC	NC	
64 n-Octane	43	14.416	14.421	-0.005	89	1224331	15.0	14.8	
A 62 C8 Range	1	14.421	(14.371-14.471)		0	5117514	NC	NC	
66 trans-1,3-Dichloropropene	75	14.972	14.972	0.000	96	1152532	15.0	14.8	
67 1,1,2-Trichloroethane	83	15.341	15.341	0.000	97	732148	15.0	14.7	
68 Tetrachloroethene	166	15.432	15.432	0.000	96	1510998	15.0	15.6	
69 2-Hexanone	43	15.823	15.828	-0.005	95	1160292	15.0	18.1	
71 Chlorodibromomethane	129	16.101	16.101	0.000	97	1986064	15.0	16.6	
72 Ethylene Dibromide	107	16.374	16.374	0.000	99	1462271	15.0	15.6	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	85	1986909	10.0	10.0	
75 Chlorobenzene	112	17.331	17.337	-0.006	96	1852598	15.0	15.0	
76 Ethylbenzene	91	17.492	17.492	0.000	98	2684801	15.0	14.7	
77 n-Nonane	57	17.626	17.625	0.001	86	1091445	15.0	14.8	
78 m-Xylene & p-Xylene	106	17.749	17.748	0.001	0	2161316	30.0	29.6	
79 o-Xylene	106	18.599	18.599	0.000	99	1117707	15.0	15.0	
80 Styrene	104	18.658	18.658	0.000	98	1616636	15.0	16.3	
81 Bromoform	173	19.102	19.107	-0.005	97	1787881	15.0	16.8	
82 Isopropylbenzene	105	19.337	19.337	0.000	96	2997659	15.0	15.0	
S 73 Xylenes, Total	106				0		45.0	44.6	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	97	1400170	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.038	20.038	0.000	99	1687377	15.0	15.3	
85 N-Propylbenzene	91	20.102	20.102	0.000	99	3497327	15.0	15.5	
86 1,2,3-Trichloropropane	75	20.140	20.134	0.006	99	1278214	15.0	14.9	
87 n-Decane	57	20.300	20.300	0.000	94	1072035	15.0	15.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.306	20.306	0.000	94	2436743	15.0	15.1	
88 4-Ethyltoluene	105	20.306	20.306	0.000	89	2815949	15.0	16.2	
90 1,3,5-Trimethylbenzene	105	20.418	20.418	0.000	93	2472905	15.0	15.6	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	92	1271674	15.0	17.3	
92 tert-Butylbenzene	119	20.926	20.926	0.000	92	2341159	15.0	15.5	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	97	2471637	15.0	16.1	
94 sec-Butylbenzene	105	21.263	21.263	0.000	99	3435404	15.0	15.9	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	98	2947690	15.0	16.9	
96 1,3-Dichlorobenzene	146	21.493	21.493	0.000	96	1956108	15.0	16.5	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	96	1939645	15.0	16.5	
98 Benzyl chloride	91	21.846	21.846	0.000	99	2308339	15.0	18.0	
100 n-Butylbenzene	91	22.055	22.055	0.000	99	2617181	15.0	17.1	
99 Undecane	57	22.093	22.092	0.001	93	1280546	15.0	17.2	
101 1,2-Dichlorobenzene	146	22.167	22.167	0.000	97	1797585	15.0	16.2	
102 Dodecane	57	23.655	23.655	0.000	98	1141592	15.0	21.6	
103 1,2,4-Trichlorobenzene	180	24.618	24.617	0.001	94	1262003	15.0	19.2	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	97	1132197	15.0	16.6	
105 Naphthalene	128	25.088	25.088	0.000	99	2418540	15.0	20.1	
106 1,2,3-Trichlorobenzene	180	25.543	25.548	-0.005	95	1075074	15.0	19.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL5w_00069	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

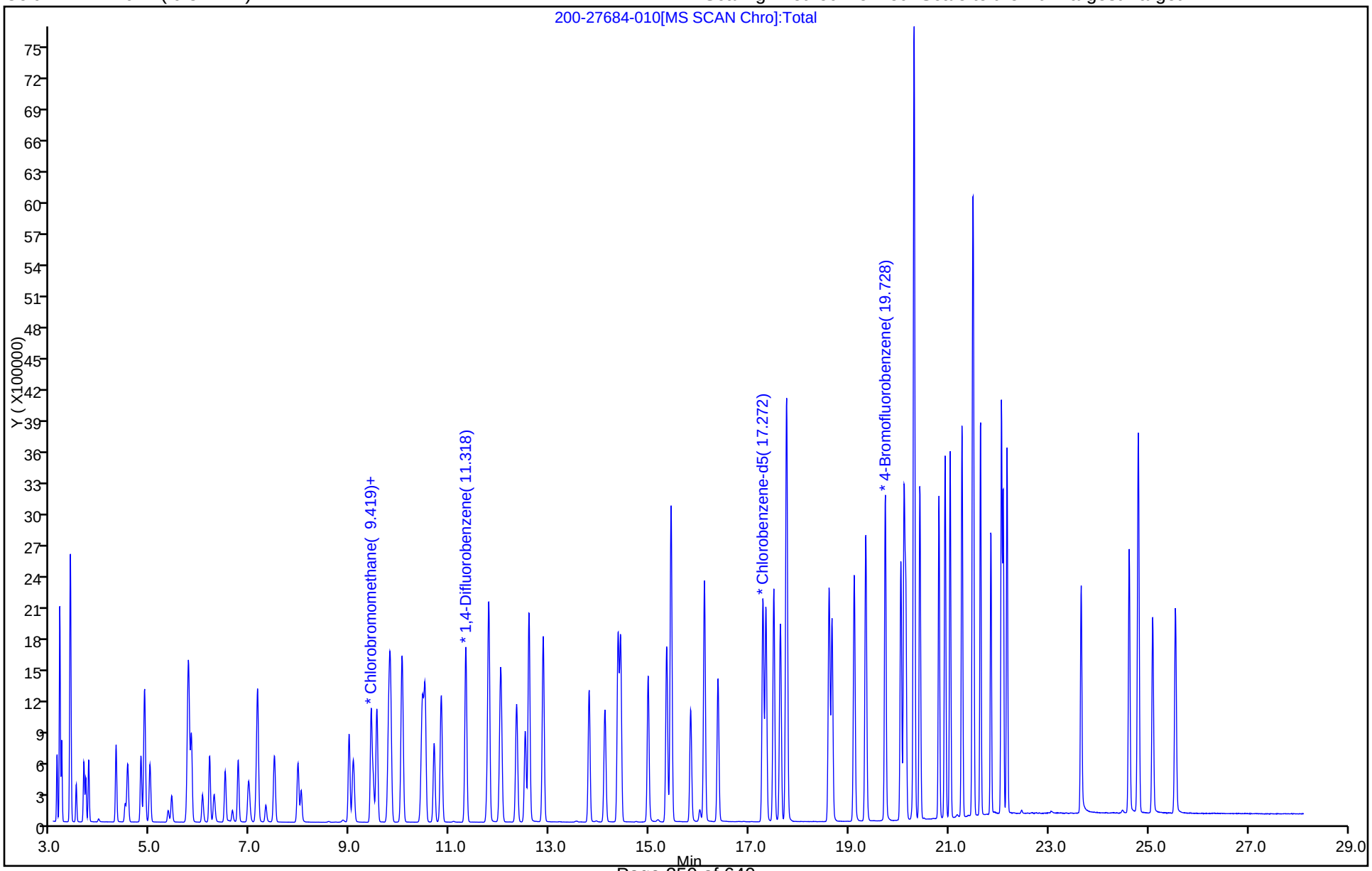
Report Date: 01-Nov-2017 10:59:31 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-010.D

Injection Date:	01-Nov-2017 00:04:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-011.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Nov-2017 00:55:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-011
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:33 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:59:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.128	0.000	96	371509	20.0	18.4	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	2370959	20.0	18.3	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	1024099	20.0	18.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.400	3.395	0.005	95	1793362	20.0	17.5	
5 Chloromethane	50	3.513	3.513	0.000	98	472830	20.0	17.7	
6 Butane	43	3.673	3.668	0.005	96	661874	20.0	18.1	
7 Vinyl chloride	62	3.705	3.705	0.000	98	574677	20.0	18.1	
8 Butadiene	54	3.770	3.764	0.006	93	372449	20.0	18.5	
10 Bromomethane	94	4.321	4.310	0.011	98	714159	20.0	18.6	
11 Chloroethane	64	4.503	4.492	0.011	99	229649	20.0	19.1	
12 2-Methylbutane	43	4.556	4.540	0.016	88	404276	20.0	17.7	
13 Vinyl bromide	106	4.818	4.813	0.005	98	739840	20.0	18.9	
14 Trichlorofluoromethane	101	4.893	4.882	0.011	98	2119054	20.0	18.5	
16 Pentane	43	5.000	4.989	0.011	98	619452	20.0	18.6	
17 Ethanol	45	5.375	5.359	0.016	96	318336	40.0	36.7	
18 Ethyl ether	59	5.439	5.428	0.011	94	275332	20.0	19.3	
20 1,1,2-Trichloro-1,2,2-trif	101	5.776	5.760	0.016	95	1369127	20.0	18.1	
19 Acrolein	56	5.781	5.770	0.011	94	90631	20.0	19.6	
21 1,1-Dichloroethene	96	5.829	5.819	0.010	97	605668	20.0	18.4	
22 Acetone	43	6.059	6.049	0.010	100	615974	20.0	19.0	
23 Carbon disulfide	76	6.198	6.188	0.010	99	1535681	20.0	18.6	
24 Isopropyl alcohol	45	6.295	6.279	0.016	100	575382	20.0	18.3	
25 3-Chloro-1-propene	41	6.509	6.498	0.011	95	503253	20.0	18.6	
26 Acetonitrile	41	6.653	6.642	0.011	98	222051	20.0	19.4	
27 Methylene Chloride	49	6.771	6.755	0.016	88	548041	20.0	18.3	
28 2-Methyl-2-propanol	59	6.985	6.974	0.011	94	907136	20.0	18.1	
29 Methyl tert-butyl ether	73	7.145	7.135	0.010	95	1436073	20.0	18.9	
31 trans-1,2-Dichloroethene	61	7.161	7.151	0.010	93	747680	20.0	18.3	
32 Acrylonitrile	53	7.327	7.311	0.016	93	246281	20.0	19.8	
33 Hexane	57	7.493	7.488	0.005	90	608697	20.0	18.5	
34 1,1-Dichloroethane	63	7.969	7.953	0.016	99	1027664	20.0	18.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.033	8.017	0.016	100	941133	20.0	19.5	
37 cis-1,2-Dichloroethene	96	8.991	8.980	0.011	89	750280	20.0	18.3	
38 2-Butanone (MEK)	72	9.066	9.055	0.011	99	222007	20.0	19.3	
39 Ethyl acetate	88	9.082	9.077	0.005	100	32685	20.0	19.2	
* 40 Chlorobromomethane	128	9.435	9.424	0.011	73	484728	10.0	10.0	
41 Tetrahydrofuran	42	9.472	9.467	0.005	84	451316	20.0	18.6	
42 Chloroform	83	9.547	9.537	0.010	96	1732083	20.0	18.7	
S 30 1,2-Dichloroethene, Total	61				0		40.0	36.6	
43 Cyclohexane	84	9.783	9.772	0.011	94	835488	20.0	18.3	
44 1,1,1-Trichloroethane	97	9.815	9.804	0.011	94	1998608	20.0	18.1	
45 Carbon tetrachloride	117	10.050	10.045	0.005	97	2333958	20.0	19.4	
46 Isooctane	57	10.457	10.451	0.006	98	2888728	20.0	18.0	
47 Benzene	78	10.510	10.500	0.010	94	2231047	20.0	17.6	
48 1,2-Dichloroethane	62	10.692	10.682	0.010	99	1347924	20.0	18.3	
49 n-Heptane	43	10.831	10.826	0.005	90	1075682	20.0	17.6	
* 50 1,4-Difluorobenzene	114	11.329	11.318	0.011	93	2519660	10.0	10.0	
52 n-Butanol	56	11.762	11.757	0.005	89	313587	20.0	17.7	
53 Trichloroethene	95	11.783	11.778	0.005	99	1391598	20.0	18.6	
54 1,2-Dichloropropane	63	12.345	12.340	0.005	87	962608	20.0	18.3	
A 51 GRO	1	12.420	(4.530-20.310)		0	320497574	20.0	0	
55 Methyl methacrylate	69	12.516	12.511	0.005	96	744958	20.0	20.3	
57 Dibromomethane	174	12.597	12.586	0.011	94	1436410	20.0	19.2	
56 1,4-Dioxane	88	12.591	12.591	0.000	57	414450	20.0	17.7	M
58 Dichlorobromomethane	83	12.875	12.870	0.005	98	2461314	20.0	19.2	
60 cis-1,3-Dichloropropene	75	13.795	13.790	0.005	92	1610002	20.0	19.5	
61 4-Methyl-2-pentanone (MIBK	43	14.116	14.111	0.005	96	1432118	20.0	18.9	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	489833896	20.0	0	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	7914003	NC	NC	
65 Toluene	92	14.378	14.373	0.005	95	1871988	20.0	18.6	
A 62 C8 Range	1	14.421	(14.371-14.471)		0	6395864	NC	NC	
64 n-Octane	43	14.426	14.421	0.005	90	1604188	20.0	17.4	
66 trans-1,3-Dichloropropene	75	14.977	14.972	0.005	96	1638576	20.0	18.9	
67 1,1,2-Trichloroethane	83	15.352	15.341	0.011	97	1034497	20.0	18.6	
68 Tetrachloroethene	166	15.437	15.432	0.005	97	2093255	20.0	19.3	
69 2-Hexanone	43	15.833	15.828	0.005	95	1348953	20.0	18.8	
71 Chlorodibromomethane	129	16.106	16.101	0.005	97	2800077	20.0	20.9	
72 Ethylene Dibromide	107	16.379	16.374	0.005	99	2092357	20.0	19.9	
* 74 Chlorobenzene-d5	117	17.278	17.272	0.006	85	2228508	10.0	10.0	
75 Chlorobenzene	112	17.336	17.337	-0.001	97	2674894	20.0	19.3	
76 Ethylbenzene	91	17.497	17.492	0.005	97	3937777	20.0	19.3	
77 n-Nonane	57	17.625	17.625	0.000	85	1537833	20.0	18.6	
78 m-Xylene & p-Xylene	106	17.754	17.748	0.006	0	3216699	40.0	39.3	
79 o-Xylene	106	18.604	18.599	0.005	99	1657968	20.0	19.8	
80 Styrene	104	18.663	18.658	0.005	96	2396763	20.0	21.5	
81 Bromoform	173	19.107	19.107	0.000	97	2642858	20.0	22.1	
82 Isopropylbenzene	105	19.337	19.337	0.000	96	4422458	20.0	19.7	
S 73 Xylenes, Total	106				0		60.0	59.1	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	97	1536376	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.043	20.038	0.005	99	2371229	20.0	19.2	
85 N-Propylbenzene	91	20.108	20.102	0.006	99	5039638	20.0	19.8	
86 1,2,3-Trichloropropane	75	20.140	20.134	0.006	97	1797737	20.0	18.7	
87 n-Decane	57	20.306	20.300	0.006	94	1412902	20.0	18.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.311	20.306	0.005	90	3925461	20.0	20.1	
89 2-Chlorotoluene	91	20.306	20.306	0.000	90	3350936	20.0	18.6	
90 1,3,5-Trimethylbenzene	105	20.423	20.418	0.005	94	3594212	20.0	20.3	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	92	1884878	20.0	22.8	
92 tert-Butylbenzene	119	20.931	20.926	0.005	93	3424346	20.0	20.2	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	97	3556498	20.0	20.7	
94 sec-Butylbenzene	105	21.268	21.263	0.005	98	4997382	20.0	20.6	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	97	4193861	20.0	21.5	
96 1,3-Dichlorobenzene	146	21.499	21.493	0.006	96	2831655	20.0	21.3	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	96	2828954	20.0	21.4	
98 Benzyl chloride	91	21.846	21.846	0.000	99	3202720	20.0	22.3	
100 n-Butylbenzene	91	22.055	22.055	0.000	99	3643641	20.0	21.2	
99 Undecane	57	22.092	22.092	0.000	93	1567050	20.0	18.8	
101 1,2-Dichlorobenzene	146	22.173	22.167	0.006	98	2635949	20.0	21.2	
102 Dodecane	57	23.654	23.655	-0.001	98	953156	20.0	16.1	
103 1,2,4-Trichlorobenzene	180	24.617	24.617	0.000	94	1483714	20.0	20.1	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	97	1542878	20.0	20.1	
105 Naphthalene	128	25.088	25.088	0.000	99	2657687	20.0	19.7	
106 1,2,3-Trichlorobenzene	180	25.543	25.548	-0.005	95	1138122	20.0	18.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL6w_00144	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

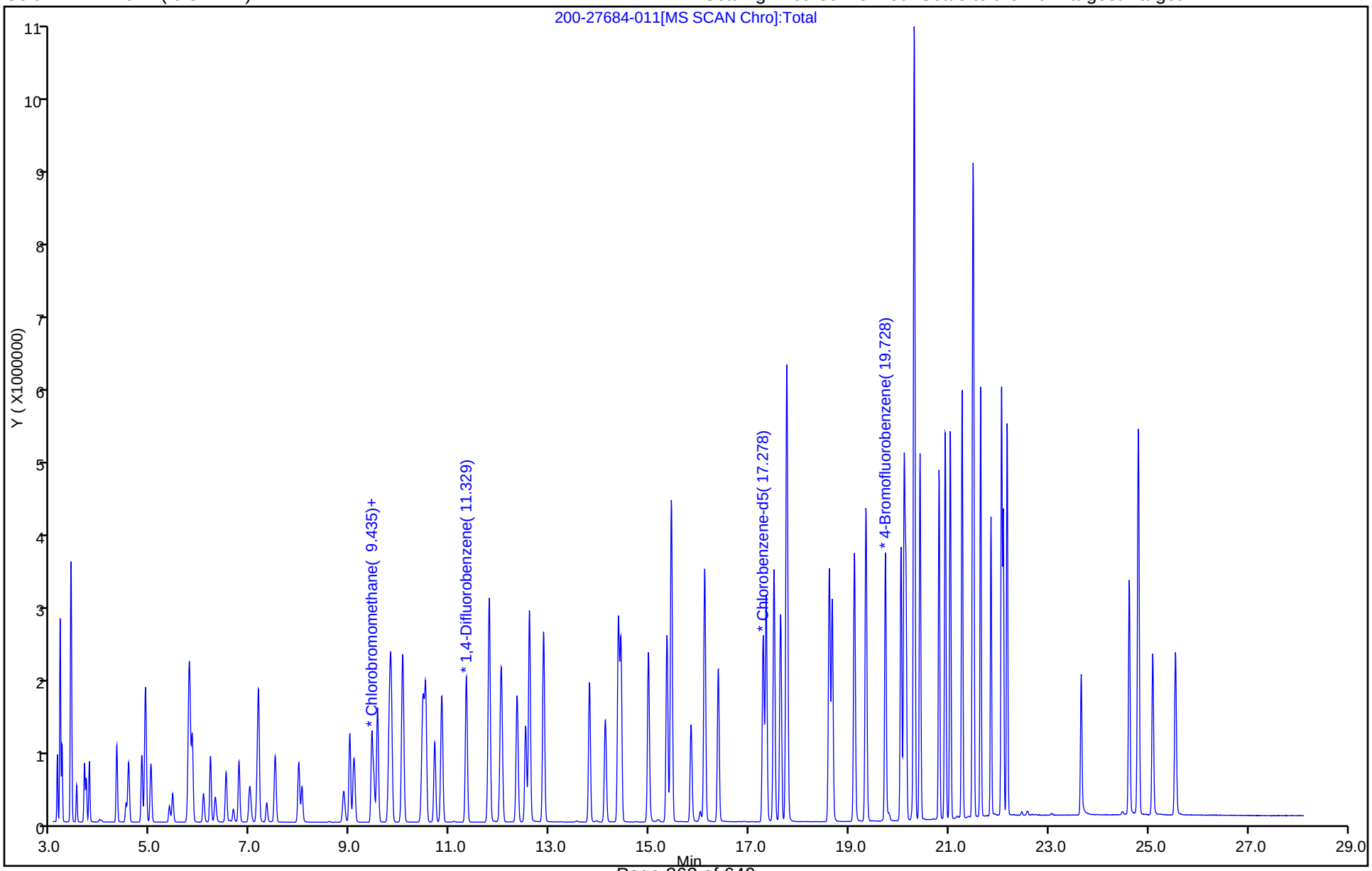
Report Date: 01-Nov-2017 10:59:34 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-011.D

Injection Date:	01-Nov-2017 00:55:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

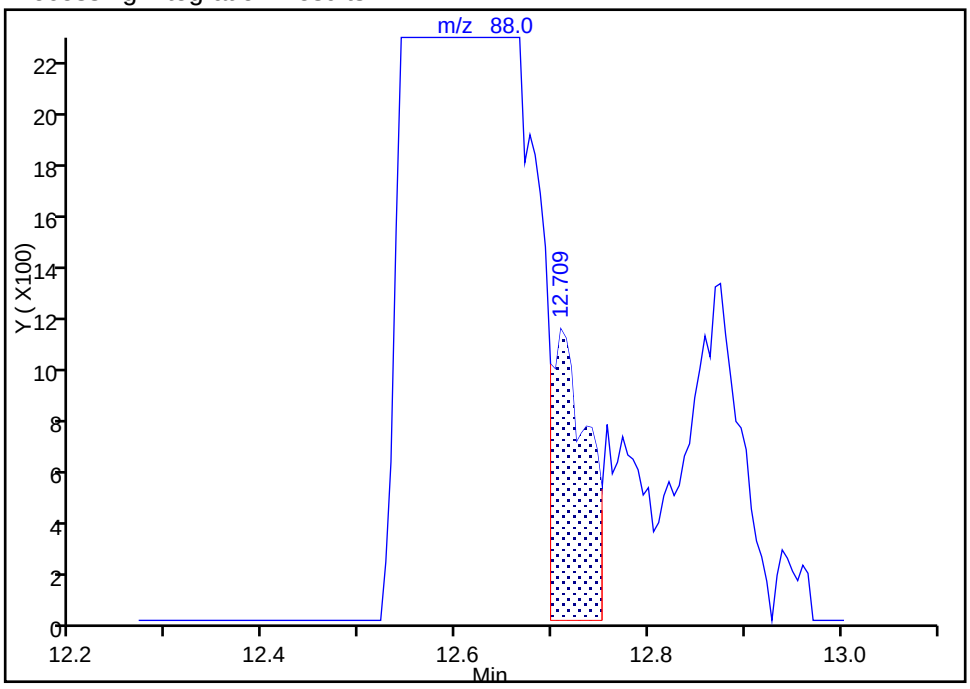
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-011.D				
Injection Date:	01-Nov-2017 00:55:30	Instrument ID:	CHG.i		
Lims ID:	ic				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

56 1,4-Dioxane, CAS: 123-91-1

Signal: 1

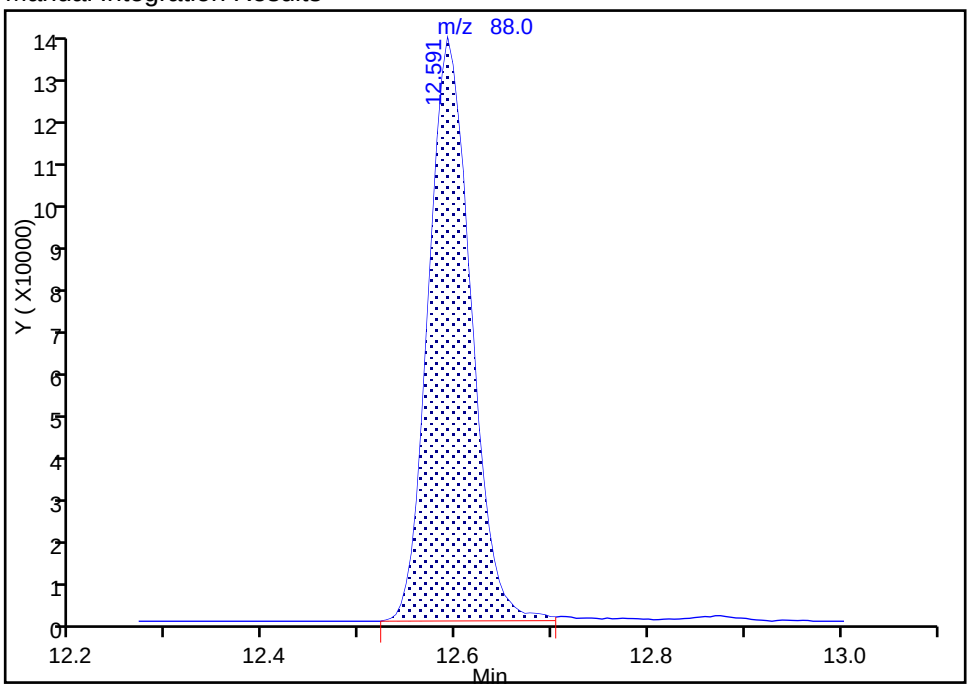
Processing Integration Results

RT: 12.71
Area: 2947
Amount: 0.152665
Amount Units: ppb v/v



Manual Integration Results

RT: 12.59
Area: 414450
Amount: 17.696752
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 10:03:05

Audit Action: Manually Integrated Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

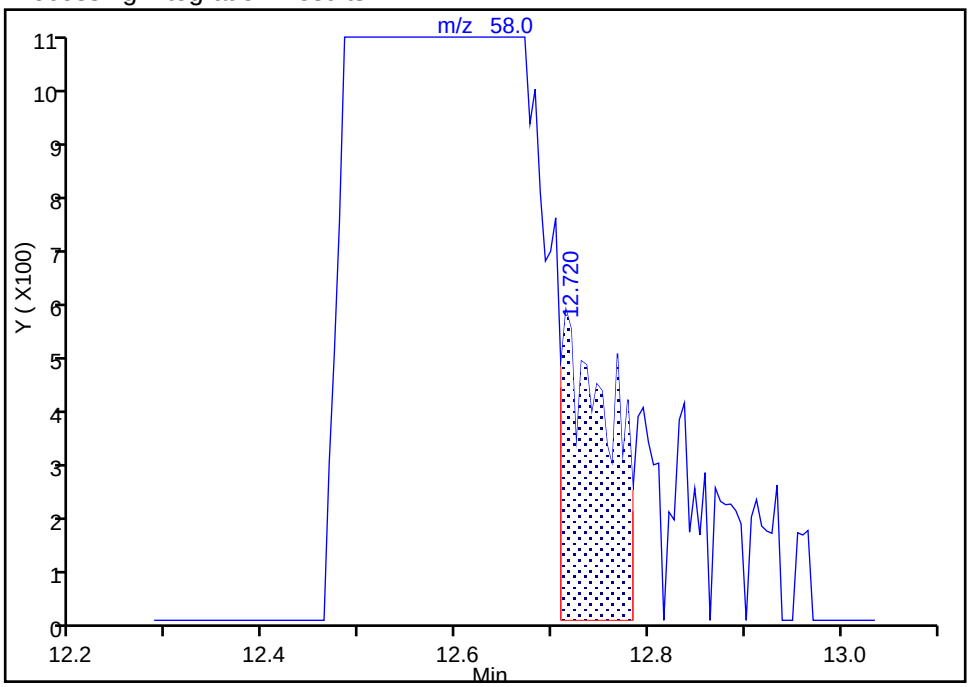
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-011.D				
Injection Date:	01-Nov-2017 00:55:30	Instrument ID:	CHG.i		
Lims ID:	ic				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

56 1,4-Dioxane, CAS: 123-91-1

Signal: 2

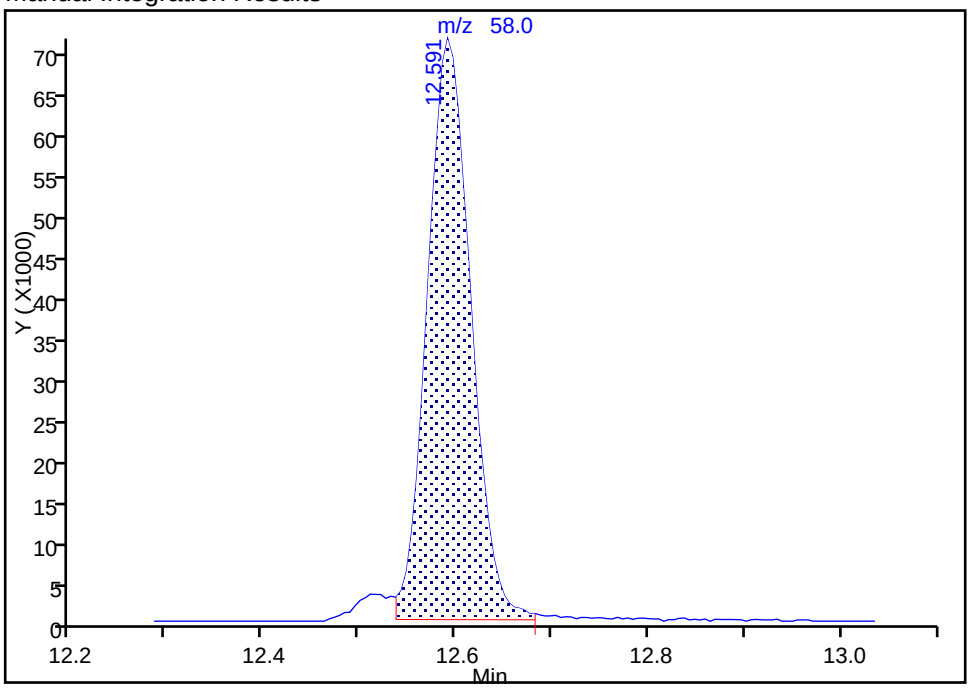
Processing Integration Results

RT: 12.72
Area: 1897
Amount: 0.152665
Amount Units: ppb v/v



Manual Integration Results

RT: 12.59
Area: 224824
Amount: 17.696752
Amount Units: ppb v/v



Reviewer: daiglep, 01-Nov-2017 10:03:11

Audit Action: Manually Integrated Audit Reason: Wrong peak

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Nov-2017 01:45:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-012
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:35 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 09:59:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.128	-0.006	96	705471	40.0	34.8	
2 Dichlorodifluoromethane	85	3.176	3.181	-0.005	98	4225320	40.0	32.4	
3 Chlorodifluoromethane	51	3.213	3.219	-0.006	96	1881224	40.0	32.9	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.395	-0.005	97	3185391	40.0	31.0	
5 Chloromethane	50	3.508	3.513	-0.005	99	893246	40.0	33.4	
6 Butane	43	3.663	3.668	-0.005	96	1212865	40.0	33.1	
7 Vinyl chloride	62	3.700	3.705	-0.005	98	1056854	40.0	33.1	
8 Butadiene	54	3.759	3.764	-0.005	93	686374	40.0	34.0	
10 Bromomethane	94	4.310	4.310	0.000	98	1313179	40.0	34.1	
11 Chloroethane	64	4.492	4.492	0.000	99	422211	40.0	35.0	
12 2-Methylbutane	43	4.540	4.540	0.000	88	738179	40.0	32.1	
13 Vinyl bromide	106	4.808	4.813	-0.005	98	1350622	40.0	34.4	
14 Trichlorofluoromethane	101	4.882	4.882	0.000	98	3737707	40.0	32.5	
16 Pentane	43	4.989	4.989	0.000	98	1153079	40.0	34.5	
17 Ethanol	45	5.359	5.359	0.000	96	671440	100.0	77.2	
18 Ethyl ether	59	5.423	5.428	-0.005	93	514423	40.0	35.9	
20 1,1,2-Trichloro-1,2,2-trif	101	5.760	5.760	0.000	95	2559330	40.0	33.7	
19 Acrolein	56	5.771	5.770	0.001	94	169307	40.0	36.4	
21 1,1-Dichloroethene	96	5.819	5.819	0.000	96	1162776	40.0	35.2	
22 Acetone	43	6.038	6.049	-0.011	99	1116798	40.0	34.4	
23 Carbon disulfide	76	6.188	6.188	0.000	99	2959783	40.0	35.8	
24 Isopropyl alcohol	45	6.279	6.279	0.000	100	1027361	40.0	32.6	
25 3-Chloro-1-propene	41	6.498	6.498	0.000	94	939266	40.0	34.6	
26 Acetonitrile	41	6.643	6.642	0.001	97	419619	40.0	36.5	
27 Methylene Chloride	49	6.755	6.755	0.000	87	1033626	40.0	34.3	
28 2-Methyl-2-propanol	59	6.969	6.974	-0.005	93	1670682	40.0	33.2	
29 Methyl tert-butyl ether	73	7.129	7.135	-0.006	94	2596407	40.0	34.1	
31 trans-1,2-Dichloroethene	61	7.151	7.151	0.000	93	1400096	40.0	34.2	
32 Acrylonitrile	53	7.317	7.311	0.006	93	479524	40.0	38.3	
33 Hexane	57	7.482	7.488	-0.006	90	1145288	40.0	34.8	
34 1,1-Dichloroethane	63	7.959	7.953	0.006	99	1924463	40.0	34.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.023	8.017	0.006	100	1733760	40.0	35.8	
37 cis-1,2-Dichloroethene	96	8.980	8.980	0.000	88	1426091	40.0	34.7	
38 2-Butanone (MEK)	72	9.055	9.055	0.000	99	392089	40.0	34.0	
39 Ethyl acetate	88	9.082	9.077	0.005	99	59457	40.0	34.8	
* 40 Chlorobromomethane	128	9.424	9.424	0.000	72	486545	10.0	10.0	
41 Tetrahydrofuran	42	9.462	9.467	-0.005	83	805247	40.0	32.8	
42 Chloroform	83	9.542	9.537	0.005	96	3224397	40.0	34.7	
S 30 1,2-Dichloroethene, Total	61				0		80.0	68.8	
43 Cyclohexane	84	9.772	9.772	0.000	93	1552006	40.0	33.6	
44 1,1,1-Trichloroethane	97	9.810	9.804	0.006	94	3724231	40.0	33.3	
45 Carbon tetrachloride	117	10.045	10.045	0.000	97	4369976	40.0	36.0	
46 Isooctane	57	10.452	10.451	0.001	98	5235847	40.0	32.3	
47 Benzene	78	10.505	10.500	0.005	94	4148159	40.0	32.4	
48 1,2-Dichloroethane	62	10.687	10.682	0.005	99	2526732	40.0	34.0	
49 n-Heptane	43	10.831	10.826	0.005	88	1900932	40.0	30.7	
* 50 1,4-Difluorobenzene	114	11.324	11.318	0.006	93	2546391	10.0	10.0	
52 n-Butanol	56	11.746	11.757	-0.011	88	569896	40.0	31.9	
53 Trichloroethene	95	11.784	11.778	0.006	97	2622950	40.0	34.7	
54 1,2-Dichloropropane	63	12.340	12.340	0.000	87	1810091	40.0	34.0	
A 51 GRO	1	12.420	(4.530-20.310)		0	555456912	40.0	0	
55 Methyl methacrylate	69	12.516	12.511	0.005	97	1329121	40.0	35.8	
57 Dibromomethane	174	12.591	12.586	0.005	92	2845366	40.0	37.6	
56 1,4-Dioxane	88	12.586	12.591	-0.005	85	708387	40.0	29.9	
58 Dichlorobromomethane	83	12.875	12.870	0.005	98	4659234	40.0	36.0	
60 cis-1,3-Dichloropropene	75	13.795	13.790	0.005	91	3085802	40.0	37.0	
61 4-Methyl-2-pentanone (MIBK	43	14.111	14.111	0.000	95	2451057	40.0	32.0	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	910463765	40.0	0	
65 Toluene	92	14.373	14.373	0.000	95	3810219	40.0	35.8	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	15831712	NC	NC	
64 n-Octane	43	14.426	14.421	0.005	86	2772822	40.0	29.8	
A 62 C8 Range	1	14.421	(14.371-14.471)		0	11380425	NC	NC	
66 trans-1,3-Dichloropropene	75	14.977	14.972	0.005	96	3261222	40.0	37.2	
67 1,1,2-Trichloroethane	83	15.346	15.341	0.005	95	2031011	40.0	34.4	
68 Tetrachloroethene	166	15.437	15.432	0.005	97	4151645	40.0	36.1	
69 2-Hexanone	43	15.828	15.828	0.000	96	2373613	40.0	31.2	
71 Chlorodibromomethane	129	16.106	16.101	0.005	97	5543482	40.0	39.0	
72 Ethylene Dibromide	107	16.379	16.374	0.005	99	4263093	40.0	38.2	
* 74 Chlorobenzene-d5	117	17.278	17.272	0.006	84	2361840	10.0	10.0	
75 Chlorobenzene	112	17.337	17.337	0.000	97	5530454	40.0	37.6	
76 Ethylbenzene	91	17.497	17.492	0.005	97	7442405	40.0	34.4	
77 n-Nonane	57	17.631	17.625	0.006	83	2857088	40.0	32.7	
78 m-Xylene & p-Xylene	106	17.754	17.748	0.006	0	5989678	80.0	69.1	
79 o-Xylene	106	18.604	18.599	0.005	99	3195930	40.0	36.0	
80 Styrene	104	18.663	18.658	0.005	96	4776981	40.0	40.5	
81 Bromoform	173	19.107	19.107	0.000	97	5378528	40.0	42.4	
82 Isopropylbenzene	105	19.343	19.337	0.006	95	8292058	40.0	34.8	
S 73 Xylenes, Total	106				0		120.0	105.1	
* 83 4-Bromofluorobenzene	95	19.728	19.728	0.000	97	1604452	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.044	20.038	0.006	99	4247235	40.0	32.4	
85 N-Propylbenzene	91	20.108	20.102	0.006	99	9092970	40.0	33.8	
86 1,2,3-Trichloropropane	75	20.140	20.134	0.006	97	3184706	40.0	31.3	
87 n-Decane	57	20.306	20.300	0.006	95	2238176	40.0	26.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.311	20.306	0.005	91	5570917	40.0	29.1	
88 4-Ethyltoluene	105	20.311	20.306	0.005	89	6530620	40.0	31.6	
90 1,3,5-Trimethylbenzene	105	20.423	20.418	0.005	95	6731346	40.0	35.8	
91 Alpha Methyl Styrene	118	20.809	20.803	0.006	93	3727213	40.0	42.6	
92 tert-Butylbenzene	119	20.932	20.926	0.006	94	6438367	40.0	35.9	
93 1,2,4-Trimethylbenzene	105	21.033	21.028	0.005	96	6612413	40.0	36.3	
94 sec-Butylbenzene	105	21.269	21.263	0.006	98	9108955	40.0	35.4	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	97	7241161	40.0	35.0	
96 1,3-Dichlorobenzene	146	21.499	21.493	0.006	95	5186095	40.0	36.9	
97 1,4-Dichlorobenzene	146	21.638	21.638	0.000	96	5589588	40.0	39.9	
98 Benzyl chloride	91	21.846	21.846	0.000	99	5904742	40.0	38.8	
100 n-Butylbenzene	91	22.060	22.055	0.005	98	6392567	40.0	35.1	
99 Undecane	57	22.092	22.092	0.000	91	2669229	40.0	30.2	
101 1,2-Dichlorobenzene	146	22.173	22.167	0.006	98	5180894	40.0	39.3	
102 Dodecane	57	23.655	23.655	0.000	97	1949303	40.0	31.0	
103 1,2,4-Trichlorobenzene	180	24.618	24.617	0.001	94	3152666	40.0	40.4	
104 Hexachlorobutadiene	225	24.805	24.799	0.006	95	2699376	40.0	33.2	
105 Naphthalene	128	25.088	25.088	0.000	99	5798879	40.0	40.5	
106 1,2,3-Trichlorobenzene	180	25.548	25.548	0.000	95	2519312	40.0	39.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL7w_00071	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

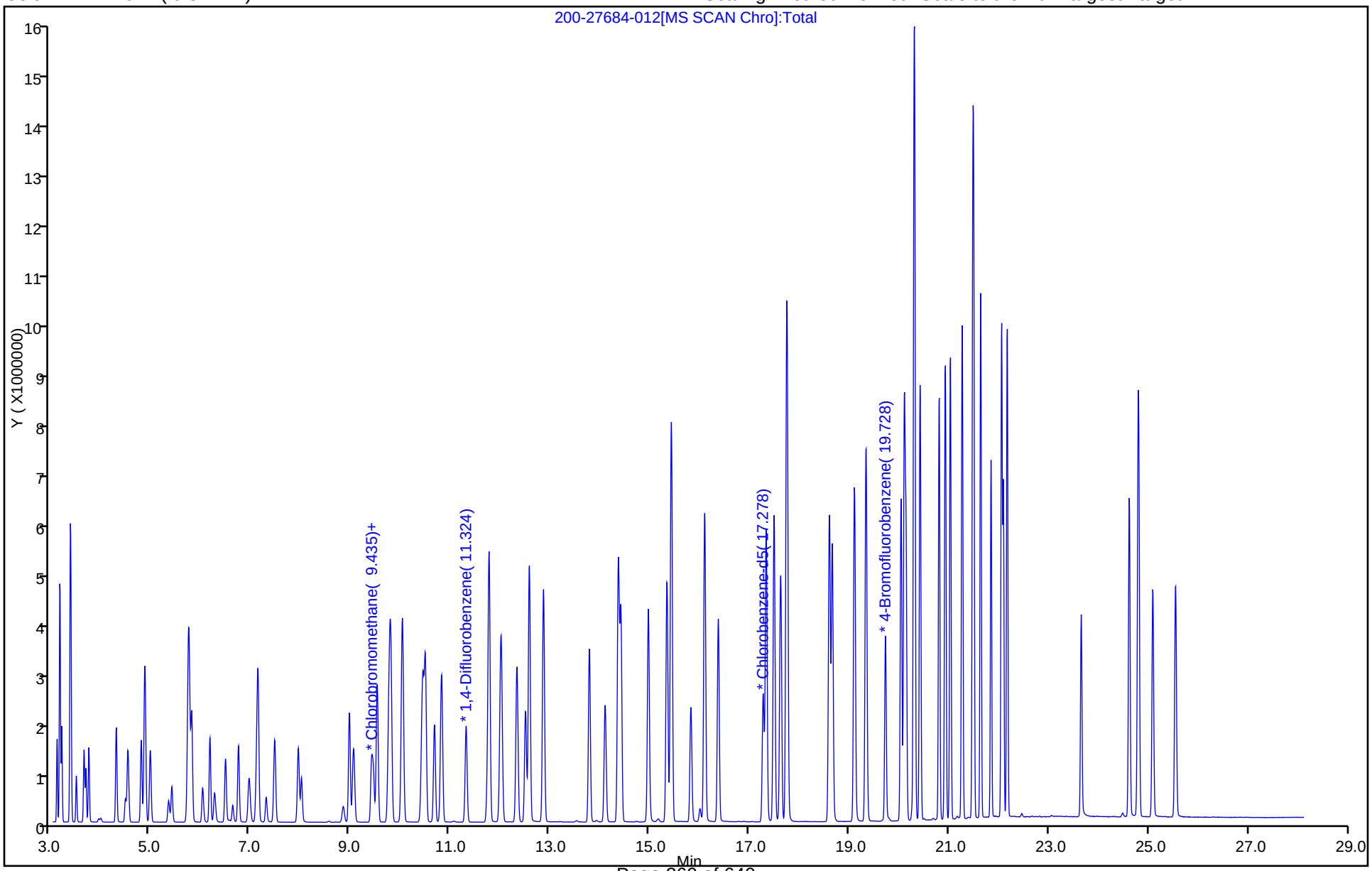
Report Date: 01-Nov-2017 10:59:36 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Injection Date:	01-Nov-2017 01:45:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-123127/4	27803-04.d
Level 2	IC 200-123127/5	27803-05.d
Level 3	IC 200-123127/8	27803-08.d
Level 4	IC 200-123127/9	27803-09.d
Level 5	ICIS 200-123127/10	27803-10.d
Level 6	IC 200-123127/11	27803-11.d
Level 7	IC 200-123127/12	27803-12.d
Level 8	IC 200-123127/13	27803-13.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 1.0637	+++++ 1.0159	+++++ 0.9114	1.2689	1.1633	Ave		1.0846				12.7		30.0			
Dichlorodifluoromethane	+++++ 3.7172	+++++ 3.6158	4.4654 3.3265	4.1533	3.9718	Ave		3.8750				10.5		30.0			
Freon 22	+++++ 2.0727	+++++ 1.9774	2.5686 1.7925	2.3627	2.2356	Ave		2.1683				12.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.7635	5.1168 3.6795	4.3947 3.3844	4.1941	3.9950	Ave		4.0754				13.9		30.0			
Chloromethane	+++++ 1.2041	+++++ 1.1430	1.5738 1.0238	1.4097	1.3193	Ave		1.2789				15.4		30.0			
n-Butane	+++++ 2.3134	+++++ 2.2154	2.9726 1.9758	2.7214	2.5317	Ave		2.4550				14.7		30.0			
Vinyl chloride	1.9468 1.5389	2.0905 1.4964	1.8032 1.3538	1.7325	1.6512	Ave		1.7017				14.3		30.0			
1,3-Butadiene	1.7492 1.1915	1.5835 1.1622	1.4077 1.0472	1.3738	1.2854	Ave		1.3501				17.1		30.0			
Bromomethane	+++++ 1.2893	1.7637 1.2975	1.4847 1.2143	1.4188	1.3563	Ave		1.4035				13.0		30.0			
Chloroethane	+++++ 0.8006	+++++ 0.8009	0.9664 0.7252	0.9074	0.8488	Ave		0.8416				10.2		30.0			
Isopentane	+++++ 1.7151	2.6054 1.6510	2.1177 1.4690	1.9759	1.8428	Ave		1.9110				19.5		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.3695	1.7975 1.3762	1.5347 1.3033	1.4881	1.4100	Ave		1.4685				11.2		30.0			
Trichlorofluoromethane	+++++ 3.5076	4.5384 3.5158	4.1562 3.2544	3.8341	3.6588	Ave		3.7808				11.6		30.0			
n-Pentane	+++++ 2.6759	+++++ 2.5944	3.2866 2.2887	3.0769	2.9041	Ave		2.8044				12.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4534	+++++ 0.6890	0.5946 0.5582	0.7730	0.5751	Ave		0.6072				18.3		30.0			
Ethyl ether	+++++ 1.0097	1.3453 1.1536	1.2502 0.9383	1.1572	1.0807	Ave		1.1336				12.2		30.0			
Acrolein	+++++ 0.4296	+++++ 0.5090	+++++ 0.4231	0.4822	0.4730	Ave		0.4634				7.8		30.0			
Freon TF	+++++ 2.6871	3.5622 2.8833	3.0872 2.5462	2.9211	2.7968	Ave		2.9263				11.3		30.0			
1,1-Dichloroethene	1.9733 1.3132	1.7102 1.3509	1.5159 1.2592	1.4415	1.3746	Ave		1.4924				16.1		30.0			
Acetone	+++++ 1.9478	+++++ 2.3220	+++++ 1.8078	2.5838	2.4073	Ave		2.2137				14.7		30.0			
Carbon disulfide	+++++ 3.6066	+++++ 3.6386	4.0004 3.3523	3.9768	3.7939	Ave		3.7281				6.6		30.0			
Isopropyl alcohol	+++++ 1.8811	+++++ 3.1037	+++++ 2.4009	3.1398	2.0721	Ave		2.5195				23.0		30.0			
3-Chloropropene	+++++ 1.7158	2.2604 1.8086	2.0756 1.4168	1.9738	2.0327	Ave		1.8976				14.6		30.0			
Acetonitrile	+++++ 0.8993	+++++ 1.0543	+++++ 0.8640	0.9604	0.9996	Ave		0.9555				8.0		30.0			
Methylene Chloride	+++++ 1.5323	+++++ 1.6028	2.0092 1.3443	1.7449	1.6414	Ave		1.6458				13.5		30.0			
tert-Butyl alcohol	+++++ 2.3582	+++++ 4.0324	+++++ 3.1471	3.7310	2.2308	Ave		3.0999				25.9		30.0			
Methyl tert-butyl ether	+++++ 3.9379	5.5143 4.9045	4.7851 3.9185	4.6426	4.3423	Ave		4.5779				12.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.9917	2.4019 2.0769	2.2037 1.8367	2.1609	2.0631	Ave		2.1050				8.4		30.0			
Acrylonitrile	+++++ 0.9342	+++++ 1.0678	0.8712 0.8933	1.0214	0.9296	Ave		0.9529				8.0		30.0			
n-Hexane	+++++ 2.3772	3.2571 2.6063	2.7842 2.1640	2.6719	2.5137	Ave		2.6249				13.1		30.0			
1,1-Dichloroethane	3.5064 2.6803	3.6487 2.9291	3.1334 2.4155	2.9889	2.8143	Ave		3.0146				13.6		30.0			
Vinyl acetate	+++++ 3.7143	+++++ 4.0611	+++++ 3.2699	4.1250	3.9674	Ave		3.8275				9.1		30.0			
cis-1,2-Dichloroethene	1.9773 1.4651	1.8087 1.6542	1.6476 1.4104	1.5880	1.5145	Ave		1.6332				11.4		30.0			
Methyl Ethyl Ketone	+++++ 0.6887	+++++ 0.9093	0.7822 0.7355	0.8369	0.7782	Ave		0.7884				9.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1136	+++++ 0.1424	+++++ 0.1173	0.1321	0.1220	Ave		0.1255				9.4		30.0			
Tetrahydrofuran	+++++ 0.3209	+++++ 0.4001	+++++ 0.3179	0.3946	0.3554	Ave		0.3578				10.9		30.0			
Chloroform	+++++ 2.8881	3.7304 3.1808	3.2886 2.6875	3.1804	3.0082	Ave		3.1377				10.6		30.0			
Cyclohexane	+++++ 0.3943	0.4952 0.4304	0.4447 0.3879	0.4100	0.4006	Ave		0.4233				8.9		30.0			
1,1,1-Trichloroethane	+++++ 0.5503	0.7030 0.6102	0.6064 0.5370	0.5775	0.5596	Ave		0.5920				9.5		30.0			
Carbon tetrachloride	0.7127 0.5543	0.6813 0.6104	0.5959 0.5461	0.5765	0.5651	Ave		0.6053				10.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.5790	1.9837 1.7368	1.7534 1.4530	1.6747	1.6214	Ave		1.6860				9.9		30.0			
Benzene	+++++ 0.9008	1.1785 0.9973	1.0351 0.8711	0.9439	0.9159	Ave		0.9775				10.7		30.0			
1,2-Dichloroethane	+++++ 0.3403	0.4135 0.3717	0.3764 0.3167	0.3643	0.3491	Ave		0.3617				8.5		30.0			
n-Heptane	+++++ 0.5925	0.7752 0.6369	0.6764 0.5213	0.6452	0.6217	Ave		0.6385				12.2		30.0			
n-Butanol	+++++ 0.1396	+++++ 0.2370	+++++ 0.1961	0.2003	0.1287	Ave		0.1804				25.1		30.0			
Trichloroethene	0.5389 0.3660	0.4617 0.4105	0.3979 0.3646	0.3749	0.3738	Ave		0.4110				14.8		30.0			
1,2-Dichloropropane	+++++ 0.3490	0.4557 0.3805	0.3980 0.3308	0.3723	0.3557	Ave		0.3774				10.8		30.0			
Methyl methacrylate	+++++ 0.3127	+++++ 0.3896	0.3249 0.3275	0.3426	0.3324	Ave		0.3383				8.0		30.0			
1,4-Dioxane	+++++ 0.1366	+++++ 0.2334	+++++ 0.1944	0.2035	0.1292	Ave		0.1794				25.0		30.0			
Dibromomethane	+++++ 0.3476	0.3831 0.3858	0.3307 0.3535	0.3382	0.3315	Ave		0.3529				6.5		30.0			
Bromodichloromethane	+++++ 0.6096	0.7506 0.6807	0.6560 0.5950	0.6439	0.6321	Ave		0.6526				7.9		30.0			
cis-1,3-Dichloropropene	+++++ 0.4798	0.5354 0.5378	0.4687 0.4748	0.4846	0.4839	Ave		0.4950				5.8		30.0			
Methyl isobutyl ketone	+++++ 0.6212	+++++ 0.8881	0.7870 0.6760	0.8325	0.6561	Ave		0.7435				14.5		30.0			
n-Octane	+++++ 0.8428	1.0956 0.8888	0.9837 0.7145	0.9327	0.8897	Ave		0.9068				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.7112	0.9307 0.8078	0.7809 0.6922	0.7324	0.7197	Ave		0.7679				10.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.4521	0.4672 0.5113	0.4040 0.4574	0.4563	0.4631	Ave		0.4588				6.8		30.0			
1,1,2-Trichloroethane	+++++ 0.3413	0.4508 0.3915	0.3836 0.3342	0.3647	0.3528	Ave		0.3741				10.6		30.0			
Tetrachloroethene	0.8065 0.5831	0.7597 0.6664	0.6562 0.5846	0.6042	0.5899	Ave		0.6563				13.0		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6054	+++++ 0.9380	0.6975 0.6897	0.8209	0.5712	Ave		0.7205				19.1		30.0			
Dibromochloromethane	+++++ 0.6315	0.7889 0.7623	0.6854 0.6502	0.6925	0.6892	Ave		0.7000				8.1		30.0			
1,2-Dibromoethane	+++++ 0.5849	0.6493 0.6758	0.5737 0.5932	0.5981	0.5924	Ave		0.6096				6.2		30.0			
Chlorobenzene	+++++ 0.9183	1.1748 1.0569	0.9701 0.9012	0.9492	0.9291	Ave		0.9856				9.9		30.0			
Ethylbenzene	+++++ 1.6079	2.0192 1.8378	1.7293 1.4953	1.6791	1.6352	Ave		1.7148				10.0		30.0			
n-Nonane	+++++ 0.8444	1.1205 0.9552	0.9623 0.7707	0.9108	0.8753	Ave		0.9199				12.0		30.0			
m,p-Xylene	+++++ 0.6273	0.7744 0.7309	0.6629 0.6051	0.6501	0.6370	Ave		0.6697				9.1		30.0			
Xylene, o-	+++++ 0.6158	0.7958 0.7162	0.6723 0.6029	0.6430	0.6225	Ave		0.6669				10.3		30.0			
Styrene	+++++ 0.9588	0.9931 1.1264	0.8765 0.9452	0.9663	0.9605	Ave		0.9753				7.8		30.0			
Bromoform	+++++ 0.5294	0.6895 0.7321	0.5986 0.5916	0.6361	0.6769	Ave		0.6363				10.8		30.0			
Cumene	+++++ 1.8319	2.3198 2.1099	1.9573 1.6323	1.9319	1.8825	Ave		1.9522				11.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.9078	1.1502 1.1091	0.9962 0.8849	0.9868	0.9467	Ave		0.9974				10.0		30.0			
n-Propylbenzene	+++++ 2.2417	2.6244 2.5804	2.3447 1.8885	2.3989	2.3294	Ave		2.3440				10.4		30.0			
1,2,3-Trichloropropane	+++++ 0.6984	+++++ 0.8408	0.7972 0.6742	0.7591	0.7257	Ave		0.7492				8.3		30.0			
n-Decane	+++++ 1.0789	+++++ 1.2709	1.1556 0.9786	1.1937	1.1493	Ave		1.1378				8.8		30.0			
4-Ethyltoluene	+++++ 1.8315	2.0437 2.1394	1.8391 1.6120	1.9254	1.8919	Ave		1.8976				8.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.5419	1.8399 1.7860	1.5403 1.4032	1.6063	1.5745	Ave		1.6131				9.4		30.0			
1,3,5-Trimethylbenzene	+++++ 1.5241	1.8124 1.8164	1.6704 1.3892	1.6297	1.5815	Ave		1.6320				9.4		30.0			
Alpha Methyl Styrene	+++++ 0.7543	0.6244 0.9165	0.6238 0.7507	0.7719	0.7680	Ave		0.7442				13.4		30.0			
tert-Butylbenzene	+++++ 1.4582	1.8563 1.7479	1.5815 1.3490	1.5714	1.5253	Ave		1.5842				10.8		30.0			
1,2,4-Trimethylbenzene	+++++ 1.5272	1.6996 1.8312	1.5278 1.3830	1.6449	1.5915	Ave		1.6007				8.9		30.0			
sec-Butylbenzene	+++++ 2.2469	2.7570 2.6193	2.3570 1.8668	2.4589	2.3784	Ave		2.3835				12.0		30.0			
4-Isopropyltoluene	+++++ 1.8441	2.0565 2.2382	1.8584 1.6288	2.0186	1.9653	Ave		1.9443				9.9		30.0			
1,3-Dichlorobenzene	+++++ 1.0071	0.8291 1.2067	0.7924 0.9811	1.0110	1.0110	Ave		0.9769				14.0		30.0			
1,4-Dichlorobenzene	+++++ 0.9811	0.7012 1.1775	0.7240 0.9674	0.9428	0.9616	Ave		0.9222				17.8		30.0			
Benzyl chloride	+++++ 1.1394	0.7730 1.4252	0.7411 1.1416	1.1638	1.1855	Ave		1.0814				22.5		30.0			
n-Butylbenzene	+++++ 1.6937	1.4187 2.0518	1.4153 1.4807	1.8255	1.7916	Ave		1.6682				14.5		30.0			
n-Undecane	+++++ 0.8966	+++++ 1.1457	+++++ 0.8363	1.0069	0.9657	Ave		0.9702				12.1		30.0			
1,2-Dichlorobenzene	+++++ 0.9317	0.8544 1.1416	0.8468 0.9198	0.9612	0.9428	Ave		0.9426				10.4		30.0			
n-Dodecane	+++++ 0.6700	+++++ 0.9131	+++++ 0.7037	0.7844	0.5838	Ave		0.7310				17.1		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4244	+++++ 0.6024	0.2658 0.5081	0.3750	0.3838	Ave		0.4266				27.3		30.0			
Hexachlorobutadiene	+++++ 0.5276	0.7072 0.7119	0.5743 0.5833	0.5773	0.5392	Ave		0.6030				12.5		30.0			
Naphthalene	+++++ 0.8643	+++++ 1.2720	0.5674 1.0456	0.7089	0.7715	Ave		0.8716				29.0		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3472	+++++ 0.5040	0.2622 0.4070	0.3374	0.2867	Ave		0.3574				24.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-123127/4	27803-04.d
Level 2	IC 200-123127/5	27803-05.d
Level 3	IC 200-123127/8	27803-08.d
Level 4	IC 200-123127/9	27803-09.d
Level 5	ICIS 200-123127/10	27803-10.d
Level 6	IC 200-123127/11	27803-11.d
Level 7	IC 200-123127/12	27803-12.d
Level 8	IC 200-123127/13	27803-13.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 357092	+++++ 490115	+++++ 991803	118856	235525	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1247878	+++++ 1744403	39496 3619859	389026	804174	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 695821	+++++ 953973	22719 1950591	221306	452636	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1263398	21045 1775132	38870 3682839	392847	808862	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 404208	+++++ 551431	13920 1114098	132044	267118	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 776602	+++++ 1068789	26292 2150043	254908	512587	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1468 516625	8598 721936	15949 1473181	162283	334310	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1319 399993	6513 560679	12451 1139579	128678	260251	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 432825	7254 625983	13132 1321365	132891	274616	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 268754	+++++ 386371	8548 789163	84998	171852	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 575760	10716 796485	18731 1598608	185077	373121	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 459748	7393 663920	13574 1418204	139383	285489	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1177498	18666 1696158	36761 3541389	359129	740799	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 898309	+++++ 1251640	29069 2490602	288210	587984	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 203395	+++++ 664903	52654 1518464	144903	174724	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 338965	5533 556529	11058 1021104	108392	218819	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 144224	+++++ 245553	+++++ 460385	45164	95776	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 902077	14651 1391020	27306 2770746	273616	566264	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	1488 440858	7034 651736	13408 1370268	135019	278311	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 653878	+++++ 1120237	+++++ 1967195	242021	487401	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1210733	+++++ 1755395	35383 3647998	372496	768140	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 631479	+++++ 1497361	+++++ 2612645	294093	419529	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 575981	9297 872517	18358 1541707	184877	411558	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 301900	+++++ 508632	+++++ 940230	89954	202386	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 514404	+++++ 773244	17771 1462875	163444	332338	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 791648	+++++ 1945389	+++++ 3424622	349473	451679	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1321944	22680 2366126	42323 4264135	434863	879178	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 668611	9879 1001973	19491 1998735	202404	417714	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 313601	+++++ 515135	7706 972046	95671	188217	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 798026	13396 1257350	24626 2354895	250266	508943	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2644 899785	15007 1413102	27714 2628566	279961	569811	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1246889	+++++ 1959237	+++++ 3558259	386374	803281	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	1491 491825	7439 798038	14573 1534842	148746	306642	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 231183	+++++ 438686	6918 800399	78388	157554	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 38124	+++++ 68710	+++++ 127607	12377	24700	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 567820	+++++ 1015455	+++++ 1756711	204950	389047	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 969528	15343 1534523	29087 2924581	297901	609077	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 697641	11096 1092481	21403 2143368	212949	438528	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 973646	15753 1548746	29185 2967746	299931	612553	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2894 980788	15266 1549373	28679 3017669	299419	618616	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2793817	44449 4408130	84386 8029304	869807	1774926	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1593764	26407 2531283	49815 4814078	490258	1002603	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 602116	9266 943528	18114 1750069	189220	382151	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1048330	17371 1616429	32554 2881032	335128	680618	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 247073	+++++ 601542	+++++ 1083615	104053	140880	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2188 647583	10345 1041812	19151 2014843	194736	409245	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 617545	10210 965812	19153 1827906	193368	389340	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 553189	+++++ 988747	15639 1809788	177960	363896	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 241679	+++++ 592290	+++++ 1074098	105717	141418	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 615087	8585 979097	15917 1953760	175675	362915	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1078558	16819 1727620	31574 3287839	334450	691930	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 848987	11997 1365120	22559 2623700	251720	529754	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl isobutyl ketone	DFBZ	Ave	+++++ 1099151	+++++ 2254072	37877 3735698	432392	718246	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1491219	24548 2255785	47345 3948653	484421	974013	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1156931	17871 1844033	33231 3545183	347042	725049	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 799953	10468 1297832	19443 2527874	236984	506941	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 555228	8656 893685	16323 1711702	172810	355471	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

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Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2775 948629	14586 1521277	27924 2994541	286284	594266	0.0351 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 984871	+++++ 2141170	29680 3532538	388969	575469	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1027284	15148 1740127	29165 3330099	328110	694358	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 951556	12467 1542523	24411 3038576	283383	596783	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1493776	22558 2412456	41279 4615680	449771	935980	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2615719	38771 4195176	73587 7659048	795595	1647314	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1373713	21515 2180400	40949 3947714	431565	881815	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2040936	29738 3336666	56414 6198899	616114	1283479	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1001765	15281 1634755	28606 3088247	304660	627127	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1559688	19068 2571227	37299 4841329	457881	967602	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 861157	13239 1671077	25473 3029964	301402	681933	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2980023	44542 4816154	83287 8360392	915417	1896517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1476746	22084 2531813	42391 4532250	467603	953692	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3646725	50390 5890080	99771 9672645	1136697	2346722	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1136081	+++++ 1919329	33924 3453076	359685	731094	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1755097	+++++ 2900965	49175 5012527	565594	1157852	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2979461	39240 4883630	78258 8256743	912316	1905970	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2508323	35327 4076800	65542 7187286	761109	1586169	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2479282	34800 4146275	71078 7115564	772190	1593286	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1227107	11989 2092094	26545 3845094	365759	773701	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2372119	35643 3989949	67297 6909708	744569	1536679	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

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RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40953-1 Analy Batch No.: 123127

SDG No.: 200-40953-1

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/08/2017 17:28 Calibration End Date: 11/09/2017 01:23 Calibration ID: 38408

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2484416	32633 4180050	65011 7083445	779398	1603336	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3655128	52937 5978937	100297 9561779	1165128	2396111	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2999888	39487 5109131	79079 8342529	956495	1979902	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1638346	15920 2754500	33717 5025038	479038	1018526	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1595983	13463 2687746	30808 4955074	446717	968796	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1853596	14843 3253202	31537 5847191	551442	1194278	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2755293	27240 4683461	60226 7584023	864966	1804894	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1458488	+++++ 2615248	+++++ 4283517	477087	972862	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1515648	16405 2605805	36034 4711395	455436	949828	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1089871	+++++ 2084322	+++++ 3604108	371684	588140	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 690355	+++++ 1375068	11310 2602373	177701	386665	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 858277	13579 1625055	24439 2987596	273542	543186	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1405930	+++++ 2903470	24142 5355448	335922	777285	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 564734	+++++ 1150372	11157 2084508	159884	288783	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-04.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Nov-2017 17:28:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-04
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:50:34 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:13:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.085	5.058	0.027	89	3271	0.0351	0.1403	
2 Dichlorodifluoromethane	85	5.181	5.176	0.005	95	3969	0.0351	0.0476	
3 Chlorodifluoromethane	51	5.267	5.250	0.017	1	880	0.0351	0.0189	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.588	5.577	0.011	91	2760	0.0351	0.0315	
5 Chloromethane	50	5.791	5.769	0.022	4	1682	0.0351	0.0612	
6 Butane	43	6.048	6.042	0.006	88	2020	0.0351	0.0383	
7 Vinyl chloride	62	6.117	6.096	0.021	5	1468	0.0351	0.0401	
8 Butadiene	54	6.203	6.192	0.011	8	1319	0.0351	0.0454	
10 Bromomethane	94	7.011	6.994	0.017	11	1378	0.0351	0.0457	
9 BFB									
11 Chloroethane	64	7.251	7.241	0.010	1	581	0.0351	0.0321	
12 2-Methylbutane	43	7.310	7.310	0.000	92	2432	0.0351	0.0592	
13 Vinyl bromide	106	7.658	7.647	0.011	97	1202	0.0351	0.0381	
14 Trichlorofluoromethane	101	7.754	7.738	0.016	93	3576	0.0351	0.0440	
16 Pentane	43	7.877	7.877	0.000	97	3115	0.0351	0.0517	
17 Ethanol	45	8.273	8.246	0.027	94	1898	0.0702	0.1454	
18 Ethyl ether	59	8.385	8.353	0.032	89	919	0.0351	0.0377	
19 Acrolein	56		8.733				ND	ND	
20 1,1,2-Trichloro-1,2,2-trif	101	8.760	8.744	0.016	94	2927	0.0351	0.0465	
21 1,1-Dichloroethene	96	8.824	8.813	0.011	91	1488	0.0351	0.0464	
22 Acetone	43	9.027	9.011	0.016	97	17269	0.0351	0.3629	
23 Carbon disulfide	76	9.209	9.204	0.005	100	3822	0.0351	0.0477	
24 Isopropyl alcohol	45	9.231	9.215	0.016	99	17197	0.0351	0.3175	
25 3-Chloro-1-propene	41	9.503	9.509	-0.006	14	919	0.0351	0.0225	
26 Acetonitrile	41	9.514	9.632	-0.118	72	1971	0.0351	0.0960	
27 Methylene Chloride	49	9.771	9.771	0.000	91	3657	0.0351	0.1034	
28 2-Methyl-2-propanol	59	9.921	9.894	0.027	93	3808	0.0351	0.0571	
29 Methyl tert-butyl ether	73	10.135	10.108	0.027	97	4370	0.0351	0.0444	
31 trans-1,2-Dichloroethene	61	10.183	10.161	0.022	52	542	0.0351	0.0120	
S 30 1,2-Dichloroethene, Total	61				0		0.0702	0.0544	
32 Acrylonitrile	53	10.301	10.301	0.000	45	516	0.0351	0.0252	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.499	10.493	0.006	92	2641	0.0351	0.0468	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	95	2644	0.0351	0.0408	
35 Vinyl acetate	43	10.996	10.985	0.011	99	3244	0.0351	0.0394	
37 cis-1,2-Dichloroethene	96	11.964	11.959	0.005	53	1491	0.0351	0.0425	M
38 2-Butanone (MEK)	72	11.980	11.980	0.000	96	658	0.0351	0.0388	
39 Ethyl acetate	88		11.986				ND	ND	
41 Tetrahydrofuran	42	12.408	12.382	0.026	54	2228	0.0351	0.0538	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	95	214972	10.0	10.0	
42 Chloroform	83	12.473	12.478	-0.005	84	3180	0.0351	0.0471	
43 Cyclohexane	84	12.729	12.740	-0.011	51	1615	0.0351	0.0330	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	91	3060	0.0351	0.0447	
45 Carbon tetrachloride	117	12.981	12.981	0.000	96	2894	0.0351	0.0413	
46 Isooctane	57	13.339	13.334	0.005	98	8829	0.0351	0.0452	
47 Benzene	78	13.393	13.393	0.000	95	6131	0.0351	0.0542	
48 1,2-Dichloroethane	62		13.543				ND	ND	
49 n-Heptane	43	13.644	13.650	-0.006	94	3566	0.0351	0.0482	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	94	1157589	10.0	10.0	
52 n-Butanol	56	14.356	14.350	0.006	93	1536	0.0351	0.0736	
53 Trichloroethene	95	14.511	14.516	-0.005	89	2188	0.0351	0.0460	
A 51 GRO	1	14.738	(7.300-22.176)		0	3533545	0.0351	0	
54 1,2-Dichloropropane	63	15.003	15.008	-0.005	88	1300	0.0351	0.0298	
55 Methyl methacrylate	69	15.110	15.094	0.016	81	1625	0.0351	0.0415	
56 1,4-Dioxane	88	15.169	15.174	-0.005	1	323	0.0351	0.0156	
57 Dibromomethane	174	15.244	15.238	0.006	40	991	0.0351	0.0243	
58 Dichlorobromomethane	83	15.474	15.468	0.006	92	3105	0.0351	0.0411	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	8	1227	0.0351	0.0214	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	3914384	0.0351	44.0	
61 4-Methyl-2-pentanone (MIBK	43	16.538	16.528	0.010	96	4155	0.0351	0.0483	
65 Toluene	92	16.843	16.838	0.005	92	3706	0.0351	0.0492	
64 n-Octane	43	16.838	16.838	0.000	84	4963	0.0351	0.0473	
66 trans-1,3-Dichloropropene	75	17.368	17.362	0.006	77	2058	0.0351	0.0388	
67 1,1,2-Trichloroethane	83		17.715				ND	ND	
68 Tetrachloroethene	166	17.828	17.833	-0.005	94	2775	0.0351	0.0431	
69 2-Hexanone	43	18.122	18.106	0.016	89	1764	0.0351	0.0250	
71 Chlorodibromomethane	129	18.448	18.443	0.005	95	2698	0.0351	0.0393	
72 Ethylene Dibromide	107	18.710	18.716	-0.006	90	2170	0.0351	0.0363	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	86	980954	10.0	10.0	
75 Chlorobenzene	112	19.620	19.614	0.006	83	4122	0.0351	0.0426	
76 Ethylbenzene	91	19.743	19.743	0.000	97	7535	0.0351	0.0448	
77 n-Nonane	57	19.818	19.823	-0.005	87	4434	0.0351	0.0491	
78 m-Xylene & p-Xylene	106	19.984	19.984	0.000	0	5475	0.0702	0.0833	
S 73 Xylenes, Total	106				0		0.1052	0.1246	
79 o-Xylene	106	20.743	20.754	-0.011	92	2700	0.0351	0.0413	
80 Styrene	104	20.797	20.797	0.000	95	3358	0.0351	0.0351	
81 Bromoform	173	21.187	21.187	0.000	93	2822	0.0351	0.0452	
82 Isopropylbenzene	105	21.353	21.358	-0.005	95	8634	0.0351	0.0451	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.958	-0.006	95	4512	0.0351	0.0461	
85 N-Propylbenzene	91	22.032	22.027	0.005	98	9227	0.0351	0.0401	
86 1,2,3-Trichloropropane	75	22.054	22.059	-0.005	93	2991	0.0351	0.0407	
87 n-Decane	57	22.166	22.166	0.000	90	5188	0.0351	0.0465	
88 4-Ethyltoluene	105	22.209	22.204	0.005	96	7031	0.0351	0.0378	
89 2-Chlorotoluene	91	22.230	22.225	0.005	96	6806	0.0351	0.0430	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	94	7026	0.0351	0.0439	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	83	1494	0.0351	0.0205	
92 tert-Butylbenzene	119	22.781	22.781	0.000	91	6684	0.0351	0.0430	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	96	6301	0.0351	0.0401	
94 sec-Butylbenzene	105	23.097	23.097	0.000	98	9992	0.0351	0.0427	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	96	7216	0.0351	0.0378	
96 1,3-Dichlorobenzene	146	23.343	23.343	0.000	95	2704	0.0351	0.0282	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	93	2696	0.0351	0.0298	
98 Benzyl chloride	91	23.686	23.686	0.000	95	2468	0.0351	0.0233	
100 n-Butylbenzene	91	23.894	23.894	0.000	94	4743	0.0351	0.0290	
99 Undecane	57	23.900	23.894	0.006	83	3774	0.0351	0.0397	
101 1,2-Dichlorobenzene	146	24.049	24.044	0.005	92	3055	0.0351	0.0330	
102 Dodecane	57	25.595	25.585	0.010	93	2363	0.0351	0.0330	
103 1,2,4-Trichlorobenzene	180	26.730	26.724	0.006	1	417	0.0351	0.0100	
104 Hexachlorobutadiene	225	26.922	26.917	0.005	93	2915	0.0351	0.0493	
105 Naphthalene	128	27.265	27.259	0.005	1	701	0.0351	0.008199	
106 1,2,3-Trichlorobenzene	180	27.778	27.767	0.011	1	575	0.0351	0.0164	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00180	Amount Added: 35.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

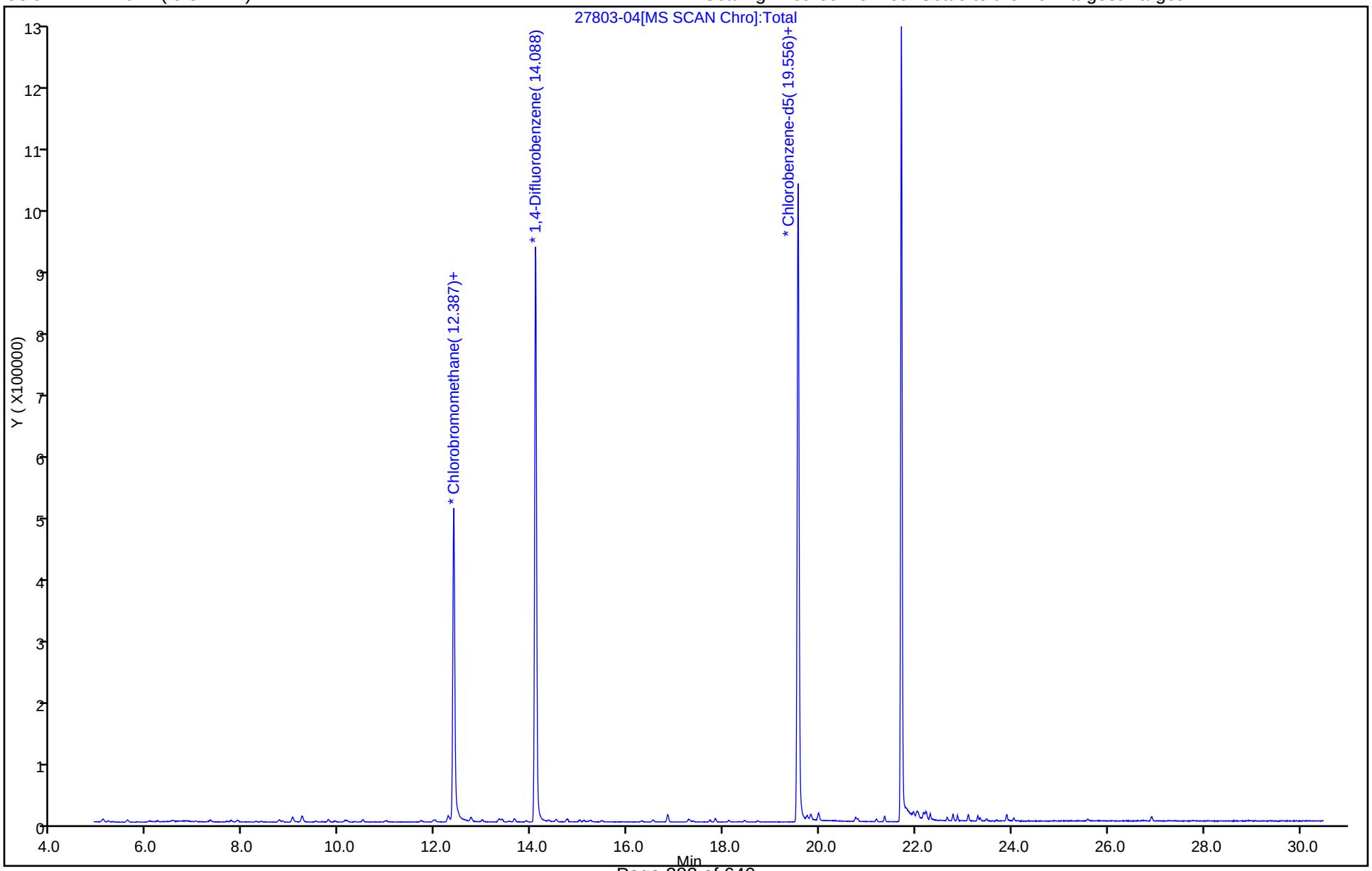
Report Date: 09-Nov-2017 12:50:35 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-04.d

Injection Date:	08-Nov-2017 17:28:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

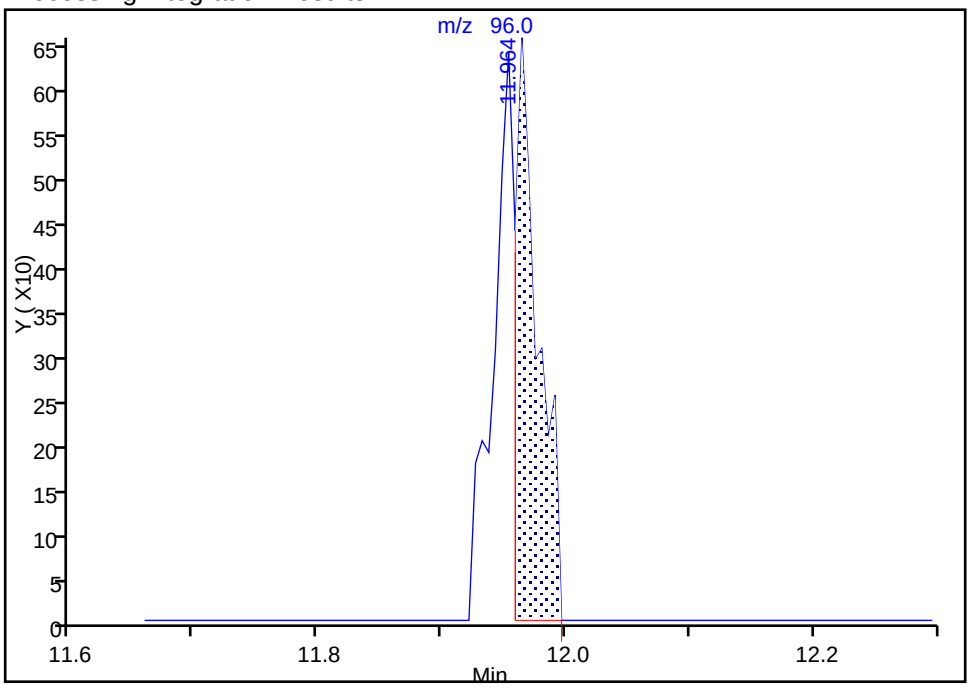
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-04.d
Injection Date: 08-Nov-2017 17:28:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

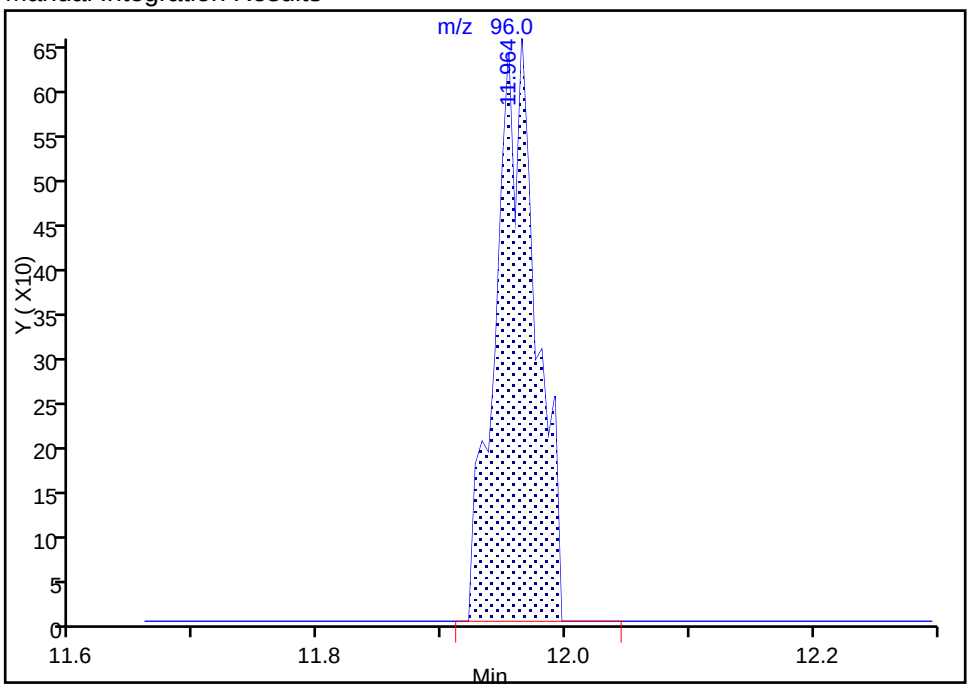
Processing Integration Results

RT: 11.96
Area: 848
Amount: 0.025765
Amount Units: ppb v/v



Manual Integration Results

RT: 11.96
Area: 1491
Amount: 0.042467
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:12:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

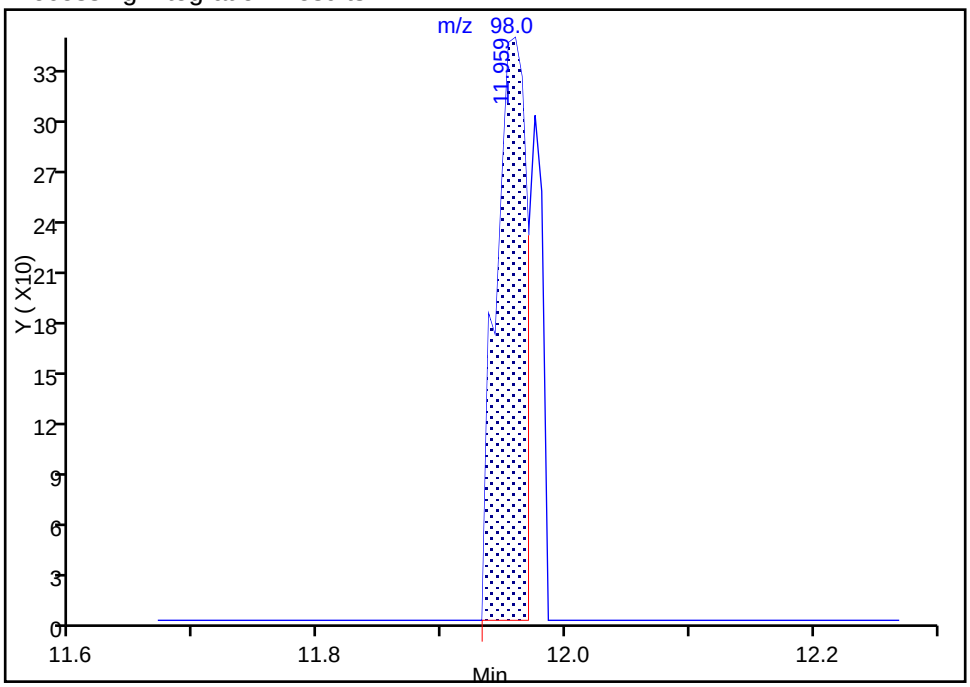
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-04.d
Injection Date: 08-Nov-2017 17:28:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

37 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 2

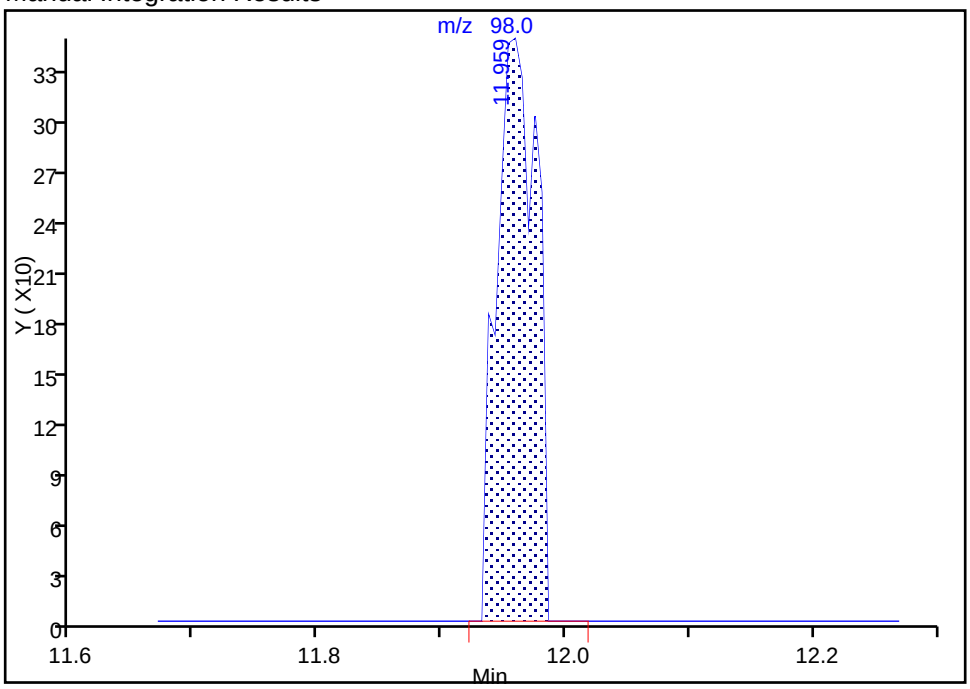
Processing Integration Results

RT: 11.96
Area: 593
Amount: 0.025765
Amount Units: ppb v/v



Manual Integration Results

RT: 11.96
Area: 770
Amount: 0.042467
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:12:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-05.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Nov-2017 18:20:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-05
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:50:37 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:15:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.069	5.058	0.011	97	8787	0.2004	0.3948	
2 Dichlorodifluoromethane	85	5.186	5.176	0.010	99	21164	0.2004	0.2662	
3 Chlorodifluoromethane	51	5.277	5.250	0.027	97	12544	0.2004	0.2819	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.588	5.577	0.011	90	21045	0.2004	0.2517	
5 Chloromethane	50	5.780	5.769	0.011	51	3304	0.2004	0.1259	
6 Butane	43	6.048	6.042	0.006	99	13816	0.2004	0.2743	
7 Vinyl chloride	62	6.112	6.096	0.016	97	8598	0.2004	0.2462	
8 Butadiene	54	6.203	6.192	0.011	94	6513	0.2004	0.2351	
9 BFB									
10 Bromomethane	94	7.000	6.994	0.006	99	7254	0.2004	0.2519	
11 Chloroethane	64	7.251	7.241	0.010	98	4334	0.2004	0.2510	
12 2-Methylbutane	43	7.321	7.310	0.011	97	10716	0.2004	0.2733	
13 Vinyl bromide	106	7.647	7.647	0.000	97	7393	0.2004	0.2454	
14 Trichlorofluoromethane	101	7.754	7.738	0.016	98	18666	0.2004	0.2406	
16 Pentane	43	7.877	7.877	0.000	97	15446	0.2004	0.2684	
17 Ethanol	45	8.262	8.246	0.016	96	7053	0.4009	0.5661	
18 Ethyl ether	59	8.375	8.353	0.022	94	5533	0.2004	0.2379	
19 Acrolein	56	8.739	8.733	0.006	36	2268	0.2004	0.2385	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.744	0.005	97	14651	0.2004	0.2440	
21 1,1-Dichloroethene	96	8.813	8.813	0.000	96	7034	0.2004	0.2297	
22 Acetone	43	9.022	9.011	0.011	98	28223	0.2004	0.6213	
23 Carbon disulfide	76	9.209	9.204	0.005	97	18562	0.2004	0.2426	
24 Isopropyl alcohol	45	9.225	9.215	0.010	100	32204	0.2004	0.6229	
25 3-Chloro-1-propene	41	9.504	9.509	-0.005	63	9297	0.2004	0.2388	M
26 Acetonitrile	41	9.643	9.632	0.011	97	3834	0.2004	0.1955	
27 Methylene Chloride	49	9.766	9.771	-0.005	95	10688	0.2004	0.3165	
28 2-Methyl-2-propanol	59	9.905	9.894	0.011	94	17683	0.2004	0.2780	
29 Methyl tert-butyl ether	73	10.119	10.108	0.011	97	22680	0.2004	0.2414	
31 trans-1,2-Dichloroethene	61	10.167	10.161	0.006	95	9879	0.2004	0.2287	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.4507	
32 Acrylonitrile	53	10.301	10.301	0.000	92	3998	0.2004	0.2045	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.488	10.493	-0.005	93	13396	0.2004	0.2487	
34 1,1-Dichloroethane	63	10.953	10.959	-0.006	99	15007	0.2004	0.2426	
35 Vinyl acetate	43	10.991	10.985	0.006	99	17343	0.2004	0.2208	
37 cis-1,2-Dichloroethene	96	11.954	11.959	-0.005	96	7439	0.2004	0.2220	
38 2-Butanone (MEK)	72	11.980	11.980	0.000	95	3787	0.2004	0.2341	
39 Ethyl acetate	88	12.007	11.986	0.021	94	396	0.2004	0.1538	
41 Tetrahydrofuran	42	12.392	12.382	0.010	87	10352	0.2004	0.2588	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	98	205195	10.0	10.0	
42 Chloroform	83	12.473	12.478	-0.005	93	15343	0.2004	0.2383	
43 Cyclohexane	84	12.740	12.740	0.000	97	11096	0.2004	0.2345	
44 1,1,1-Trichloroethane	97	12.751	12.756	-0.005	95	15753	0.2004	0.2380	
45 Carbon tetrachloride	117	12.981	12.981	0.000	99	15266	0.2004	0.2256	
46 Isooctane	57	13.334	13.334	0.000	99	44449	0.2004	0.2358	
47 Benzene	78	13.393	13.393	0.000	96	26407	0.2004	0.2417	
48 1,2-Dichloroethane	62	13.543	13.543	0.001	95	9266	0.2004	0.2292	
49 n-Heptane	43	13.650	13.650	0.000	96	17371	0.2004	0.2434	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1117891	10.0	10.0	
52 n-Butanol	56	14.356	14.350	0.006	87	7097	0.2004	0.3520	
53 Trichloroethene	95	14.516	14.516	0.000	97	10345	0.2004	0.2251	
A 51 GRO	1	14.738	(7.300-22.176)		0	6219029	0.2004	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	91	10210	0.2004	0.2420	
55 Methyl methacrylate	69	15.099	15.094	0.005	95	8540	0.2004	0.2258	
56 1,4-Dioxane	88	15.190	15.174	0.016	95	5224	0.2004	0.2605	
57 Dibromomethane	174	15.233	15.238	-0.005	96	8585	0.2004	0.2176	
58 Dichlorobromomethane	83	15.463	15.468	-0.005	99	16819	0.2004	0.2306	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	93	11997	0.2004	0.2168	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	7915347	0.2004	92.2	
61 4-Methyl-2-pentanone (MIBK	43	16.533	16.528	0.005	97	19613	0.2004	0.2360	
64 n-Octane	43	16.838	16.838	0.000	91	24548	0.2004	0.2422	
65 Toluene	92	16.849	16.838	0.011	88	17871	0.2004	0.2430	M
66 trans-1,3-Dichloropropene	75	17.357	17.362	-0.005	96	10468	0.2004	0.2041	
67 1,1,2-Trichloroethane	83	17.710	17.715	-0.005	97	8656	0.2004	0.2415	
68 Tetrachloroethene	166	17.828	17.833	-0.005	98	14586	0.2004	0.2320	
69 2-Hexanone	43	18.117	18.106	0.011	94	15461	0.2004	0.2240	
71 Chlorodibromomethane	129	18.443	18.443	0.000	99	15148	0.2004	0.2259	
72 Ethylene Dibromide	107	18.710	18.716	-0.006	99	12467	0.2004	0.2135	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	86	957937	10.0	10.0	
75 Chlorobenzene	112	19.609	19.614	-0.005	96	22558	0.2004	0.2389	
76 Ethylbenzene	91	19.743	19.743	0.000	98	38771	0.2004	0.2360	
77 n-Nonane	57	19.818	19.823	-0.005	92	21515	0.2004	0.2442	
78 m-Xylene & p-Xylene	106	19.978	19.984	-0.006	0	29738	0.4009	0.4636	
S 73 Xylenes, Total	106				0		0.6013	0.7028	
79 o-Xylene	106	20.749	20.754	-0.005	98	15281	0.2004	0.2392	
80 Styrene	104	20.802	20.797	0.005	98	19068	0.2004	0.2041	
81 Bromoform	173	21.187	21.187	0.000	96	13239	0.2004	0.2172	
82 Isopropylbenzene	105	21.358	21.358	0.000	96	44542	0.2004	0.2382	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.958	-0.006	98	22084	0.2004	0.2311	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	50390	0.2004	0.2244	
86 1,2,3-Trichloropropane	75	22.059	22.059	0.000	99	18476	0.2004	0.2574	
87 n-Decane	57	22.172	22.166	0.006	89	24073	0.2004	0.2209	
88 4-Ethyltoluene	105	22.209	22.204	0.005	98	39240	0.2004	0.2159	
89 2-Chlorotoluene	91	22.225	22.225	0.000	97	35327	0.2004	0.2286	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	93	34800	0.2004	0.2226	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	88	11989	0.2004	0.1682	
92 tert-Butylbenzene	119	22.782	22.781	0.001	93	35643	0.2004	0.2349	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	98	32633	0.2004	0.2128	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	52937	0.2004	0.2319	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	97	39487	0.2004	0.2120	
96 1,3-Dichlorobenzene	146	23.343	23.343	0.000	95	15920	0.2004	0.1701	
97 1,4-Dichlorobenzene	146	23.482	23.477	0.005	95	13463	0.2004	0.1524	
98 Benzyl chloride	91	23.686	23.686	0.000	98	14843	0.2004	0.1433	
99 Undecane	57	23.900	23.894	0.006	80	19379	0.2004	0.2085	
100 n-Butylbenzene	91	23.894	23.894	0.000	96	27240	0.2004	0.1705	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	96	16405	0.2004	0.1817	
102 Dodecane	57	25.585	25.585	0.000	96	12907	0.2004	0.1843	
103 1,2,4-Trichlorobenzene	180	26.730	26.724	0.006	92	3942	0.2004	0.0965	
104 Hexachlorobutadiene	225	26.911	26.917	-0.006	97	13579	0.2004	0.2351	
105 Naphthalene	128	27.270	27.259	0.011	98	5028	0.2004	0.0602	
106 1,2,3-Trichlorobenzene	180	27.778	27.767	0.011	92	4713	0.2004	0.1377	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00180	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

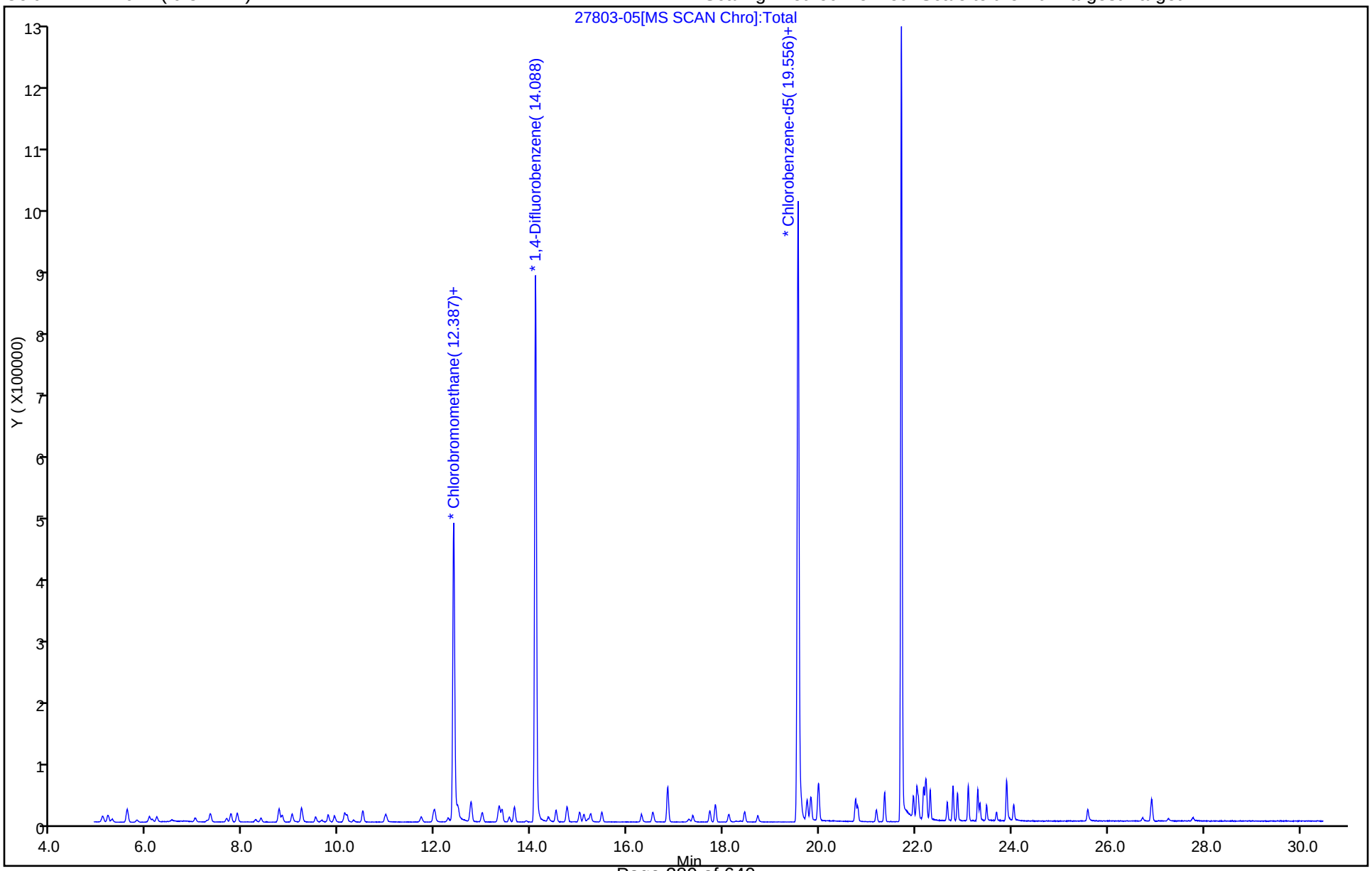
Report Date: 09-Nov-2017 12:50:38 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-05.d

Injection Date:	08-Nov-2017 18:20:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

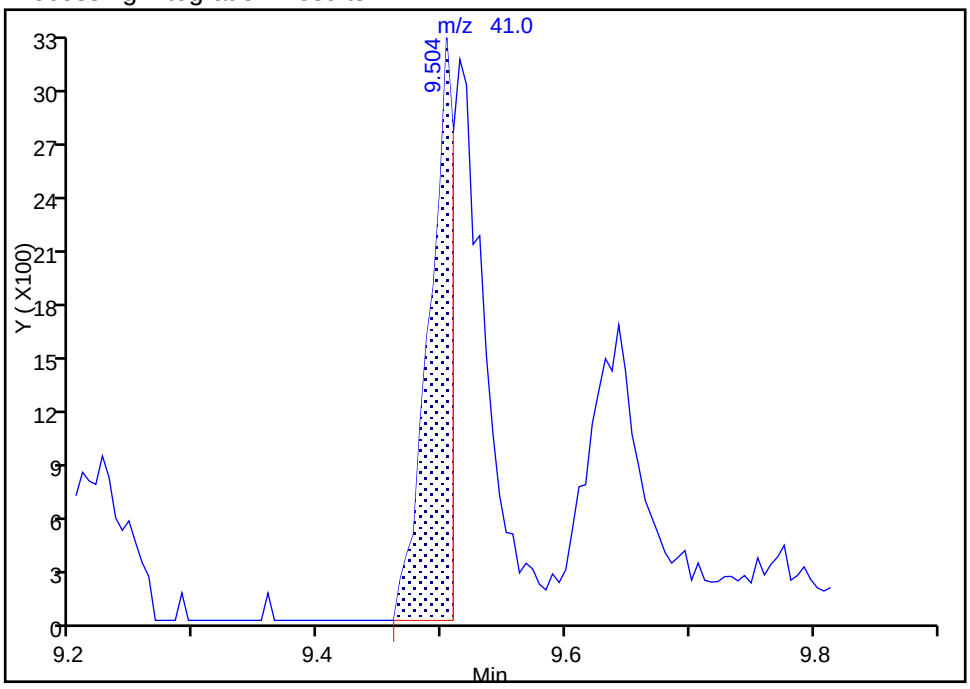
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-05.d
Injection Date: 08-Nov-2017 18:20:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

25 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

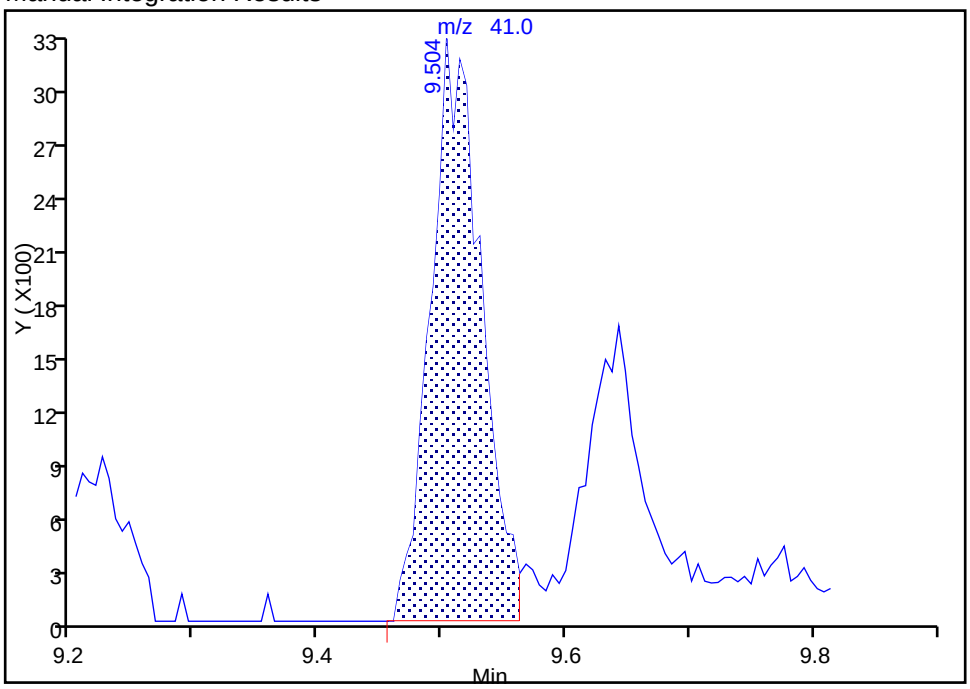
Processing Integration Results

RT: 9.50
Area: 4526
Amount: 0.132387
Amount Units: ppb v/v



Manual Integration Results

RT: 9.50
Area: 9297
Amount: 0.238760
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:14:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

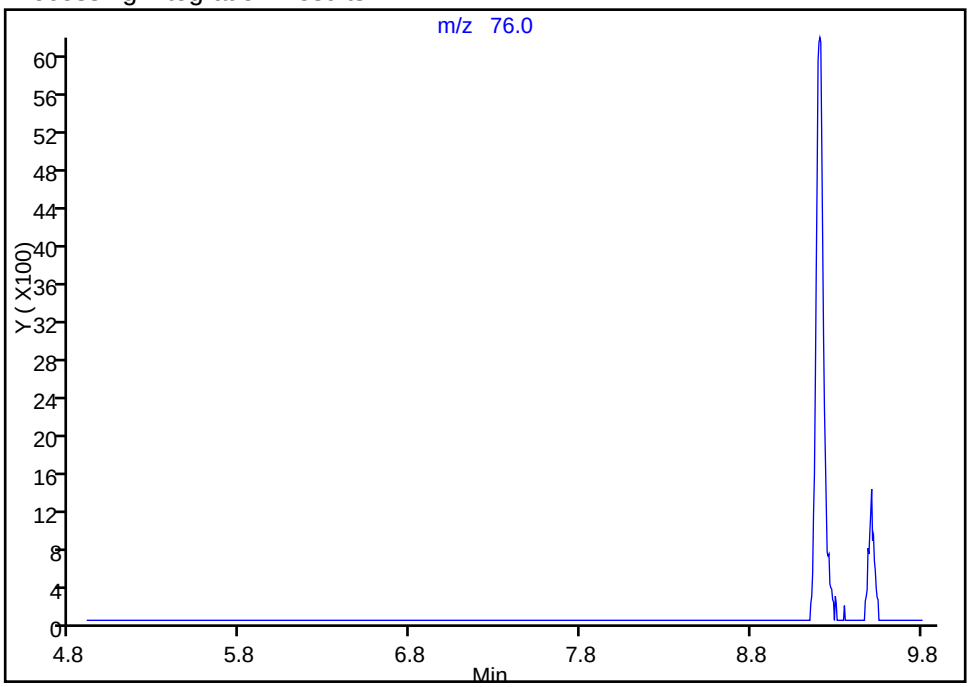
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-05.d				
Injection Date:	08-Nov-2017 18:20:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

25 3-Chloro-1-propene, CAS: 107-05-1

Signal: 2

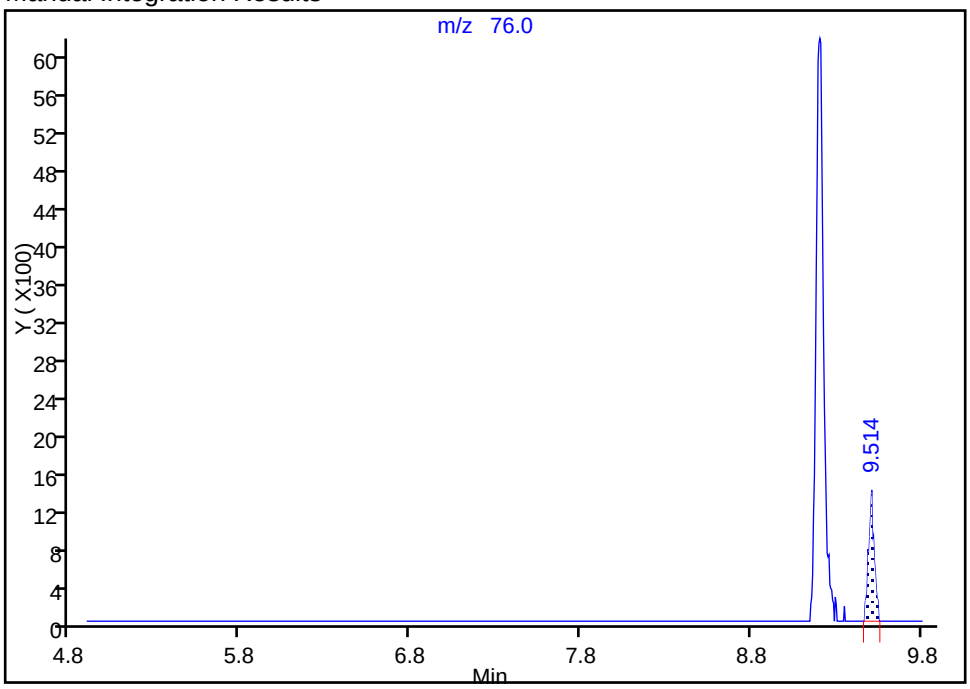
Processing Integration Results

RT: 9.51
Area: 0
Amount: 0.132387
Amount Units: ppb v/v



Manual Integration Results

RT: 9.51
Area: 3023
Amount: 0.238760
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:14:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

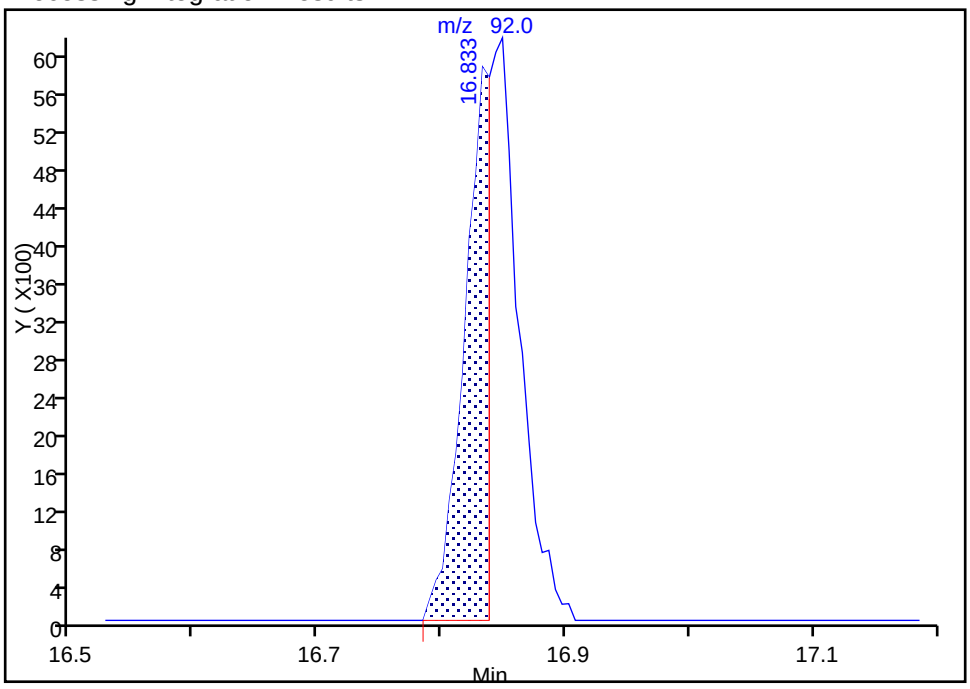
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-05.d				
Injection Date:	08-Nov-2017 18:20:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

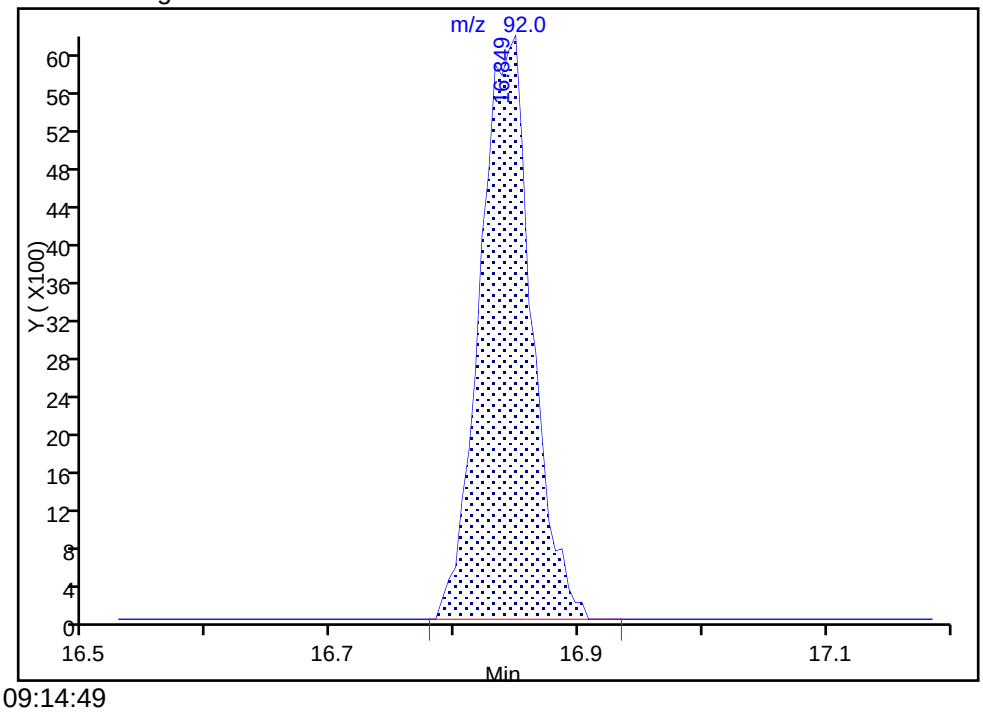
Processing Integration Results

RT: 16.83
Area: 8753
Amount: 0.130311
Amount Units: ppb v/v



Manual Integration Results

RT: 16.85
Area: 17871
Amount: 0.242959
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:14:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

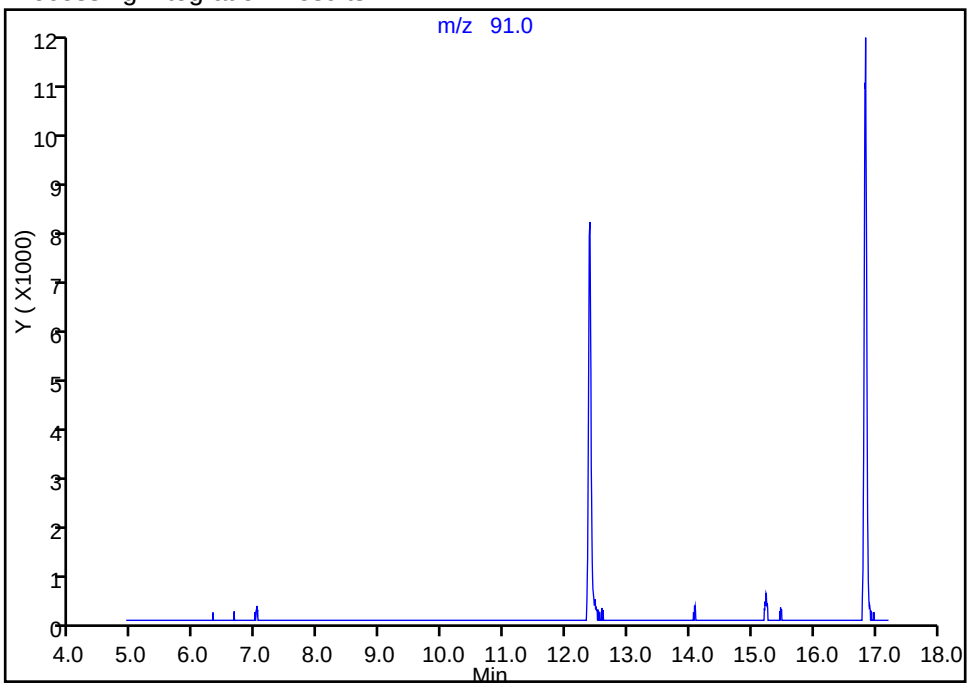
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-05.d
Injection Date: 08-Nov-2017 18:20:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

65 Toluene, CAS: 108-88-3

Signal: 2

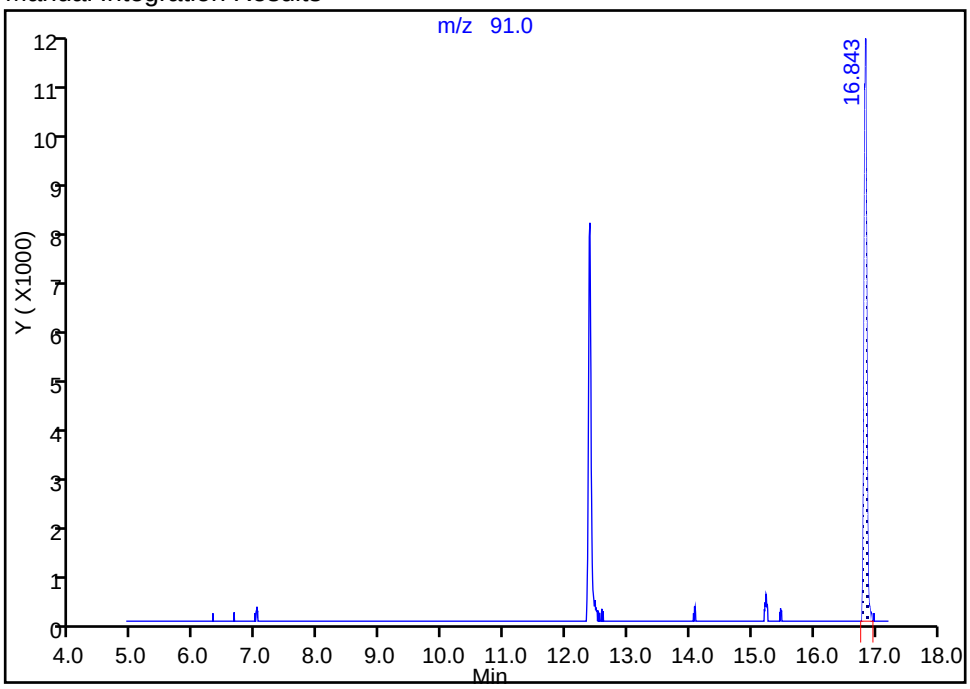
Processing Integration Results

RT: 16.84
Area: 0
Amount: 0.130311
Amount Units: ppb v/v



Manual Integration Results

RT: 16.84
Area: 31334
Amount: 0.242959
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:14:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Nov-2017 20:59:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-08
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:50:57 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:18:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.063	5.058	0.005	95	14072	0.5005	0.7341	
2 Dichlorodifluoromethane	85	5.176	5.176	0.000	99	39496	0.5005	0.5767	
3 Chlorodifluoromethane	51	5.261	5.250	0.011	56	22719	0.5005	0.5929	M
4 1,2-Dichloro-1,1,2,2-tetra	85	5.572	5.577	-0.005	90	38870	0.5005	0.5397	
5 Chloromethane	50	5.780	5.769	0.011	98	13920	0.5005	0.6158	
6 Butane	43	6.042	6.042	0.000	98	26292	0.5005	0.6060	
7 Vinyl chloride	62	6.101	6.096	0.005	97	15949	0.5005	0.5303	
8 Butadiene	54	6.192	6.192	0.000	96	12451	0.5005	0.5218	
10 Bromomethane	94	6.995	6.994	0.001	99	13132	0.5005	0.5294	
9 BFB									
11 Chloroethane	64	7.235	7.241	-0.006	96	8548	0.5005	0.5747	
12 2-Methylbutane	43	7.316	7.310	0.006	94	18731	0.5005	0.5546	
13 Vinyl bromide	106	7.653	7.647	0.006	96	13574	0.5005	0.5230	
14 Trichlorofluoromethane	101	7.743	7.738	0.005	98	36761	0.5005	0.5502	
16 Pentane	43	7.872	7.877	-0.005	97	29069	0.5005	0.5865	
17 Ethanol	45	8.252	8.246	0.006	99	52654	5.01	4.91	
18 Ethyl ether	59	8.364	8.353	0.011	97	11058	0.5005	0.5519	
19 Acrolein	56	8.744	8.733	0.011	37	4356	0.5005	0.5319	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.744	0.005	97	27306	0.5005	0.5280	
21 1,1-Dichloroethene	96	8.808	8.813	-0.005	97	13408	0.5005	0.5084	
22 Acetone	43	9.017	9.011	0.006	98	39173	0.5005	1.00	
23 Carbon disulfide	76	9.204	9.204	0.000	99	35383	0.5005	0.5370	
24 Isopropyl alcohol	45	9.220	9.215	0.005	100	40806	0.5005	0.9164	
25 3-Chloro-1-propene	41	9.504	9.509	-0.005	93	18358	0.5005	0.5474	
26 Acetonitrile	41	9.632	9.632	0.000	98	8816	0.5005	0.5220	
27 Methylene Chloride	49	9.766	9.771	-0.005	96	17771	0.5005	0.6109	
28 2-Methyl-2-propanol	59	9.899	9.894	0.005	94	33625	0.5005	0.6137	
29 Methyl tert-butyl ether	73	10.108	10.108	0.000	98	42323	0.5005	0.5231	
31 trans-1,2-Dichloroethene	61	10.156	10.161	-0.005	98	19491	0.5005	0.5239	
S 30 1,2-Dichloroethene, Total	61				0		1.00	1.03	
32 Acrylonitrile	53	10.295	10.301	-0.006	96	7706	0.5005	0.4576	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.488	10.493	-0.005	94	24626	0.5005	0.5308	
34 1,1-Dichloroethane	63	10.953	10.959	-0.006	99	27714	0.5005	0.5202	
35 Vinyl acetate	43	10.985	10.985	0.000	100	34407	0.5005	0.5086	
37 cis-1,2-Dichloroethene	96	11.964	11.959	0.005	93	14573	0.5005	0.5049	
38 2-Butanone (MEK)	72	11.980	11.980	0.000	95	6918	0.5005	0.4965	
39 Ethyl acetate	88	11.991	11.986	0.005	95	1038	0.5005	0.4681	
41 Tetrahydrofuran	42	12.398	12.382	0.016	36	19792	0.5005	0.5752	
* 40 Chlorobromomethane	128	12.382	12.387	-0.005	97	176736	10.0	10.0	
42 Chloroform	83	12.473	12.478	-0.005	97	29087	0.5005	0.5245	
43 Cyclohexane	84	12.735	12.740	-0.005	98	21403	0.5005	0.5258	
44 1,1,1-Trichloroethane	97	12.751	12.756	-0.005	96	29185	0.5005	0.5126	
45 Carbon tetrachloride	117	12.976	12.981	-0.005	98	28679	0.5005	0.4927	
46 Isooctane	57	13.334	13.334	0.000	99	84386	0.5005	0.5205	
47 Benzene	78	13.393	13.393	0.000	95	49815	0.5005	0.5299	
48 1,2-Dichloroethane	62	13.537	13.543	-0.005	96	18114	0.5005	0.5207	
49 n-Heptane	43	13.650	13.650	0.000	93	32554	0.5005	0.5302	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	961683	10.0	10.0	
52 n-Butanol	56	14.356	14.350	0.006	86	10877	0.5005	0.6271	
53 Trichloroethene	95	14.522	14.516	0.006	97	19151	0.5005	0.4845	
A 51 GRO	1	14.738	(7.300-22.176)		0	8791136	0.5005	0	
54 1,2-Dichloropropane	63	15.003	15.008	-0.005	92	19153	0.5005	0.5277	
55 Methyl methacrylate	69	15.094	15.094	0.000	95	15639	0.5005	0.4807	
56 1,4-Dioxane	88	15.180	15.174	0.006	92	8772	0.5005	0.5084	
57 Dibromomethane	174	15.238	15.238	0.000	95	15917	0.5005	0.4690	
58 Dichlorobromomethane	83	15.468	15.468	0.000	98	31574	0.5005	0.5031	
60 cis-1,3-Dichloropropene	75	16.298	16.292	0.006	93	22559	0.5005	0.4739	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	12029208	0.5005	162.9	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	97	37877	0.5005	0.5297	
65 Toluene	92	16.843	16.838	0.005	91	33231	0.5005	0.5090	
64 n-Octane	43	16.838	16.838	0.000	90	47345	0.5005	0.5429	
66 trans-1,3-Dichloropropene	75	17.368	17.362	0.006	98	19443	0.5005	0.4407	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	97	16323	0.5005	0.5131	
68 Tetrachloroethene	166	17.828	17.833	-0.005	97	27924	0.5005	0.5004	
69 2-Hexanone	43	18.106	18.106	0.000	93	29680	0.5005	0.4845	
71 Chlorodibromomethane	129	18.443	18.443	0.000	99	29165	0.5005	0.4900	
72 Ethylene Dibromide	107	18.716	18.716	0.000	100	24411	0.5005	0.4709	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	87	850272	10.0	10.0	
75 Chlorobenzene	112	19.614	19.614	0.000	94	41279	0.5005	0.4926	
76 Ethylbenzene	91	19.743	19.743	0.000	98	73587	0.5005	0.5047	
77 n-Nonane	57	19.823	19.823	0.000	94	40949	0.5005	0.5235	
78 m-Xylene & p-Xylene	106	19.978	19.984	-0.006	0	56414	1.00	0.99	
S 73 Xylenes, Total	106				0		1.50	1.50	
79 o-Xylene	106	20.754	20.754	0.000	98	28606	0.5005	0.5045	
80 Styrene	104	20.797	20.797	0.000	98	37299	0.5005	0.4498	
81 Bromoform	173	21.187	21.187	0.000	97	25473	0.5005	0.4708	
82 Isopropylbenzene	105	21.358	21.358	0.000	96	83287	0.5005	0.5018	
84 1,1,2,2-Tetrachloroethane	83	21.958	21.958	0.000	98	42391	0.5005	0.4999	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	99771	0.5005	0.5006	
86 1,2,3-Trichloropropane	75	22.059	22.059	0.000	97	33924	0.5005	0.5325	
87 n-Decane	57	22.166	22.166	0.000	88	49175	0.5005	0.5083	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	78258	0.5005	0.4850	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	65542	0.5005	0.4778	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	93	71078	0.5005	0.5122	
91 Alpha Methyl Styrene	118	22.664	22.658	0.006	90	26545	0.5005	0.4195	
92 tert-Butylbenzene	119	22.782	22.781	0.001	93	67297	0.5005	0.4996	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	97	65011	0.5005	0.4777	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	100297	0.5005	0.4949	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	79079	0.5005	0.4783	
96 1,3-Dichlorobenzene	146	23.338	23.343	-0.005	98	33717	0.5005	0.4059	
97 1,4-Dichlorobenzene	146	23.482	23.477	0.005	94	30808	0.5005	0.3929	
98 Benzyl chloride	91	23.686	23.686	0.000	99	31537	0.5005	0.3430	
100 n-Butylbenzene	91	23.894	23.894	0.000	97	60226	0.5005	0.4246	
99 Undecane	57	23.900	23.894	0.006	97	36952	0.5005	0.4479	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	97	36034	0.5005	0.4496	
102 Dodecane	57	25.585	25.585	0.000	96	25213	0.5005	0.4057	
103 1,2,4-Trichlorobenzene	180	26.730	26.724	0.006	93	11310	0.5005	0.3118	M
104 Hexachlorobutadiene	225	26.911	26.917	-0.006	97	24439	0.5005	0.4767	
105 Naphthalene	128	27.259	27.259	0.000	98	24142	0.5005	0.3258	M
106 1,2,3-Trichlorobenzene	180	27.773	27.767	0.006	93	11157	0.5005	0.3671	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL2w_00247	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

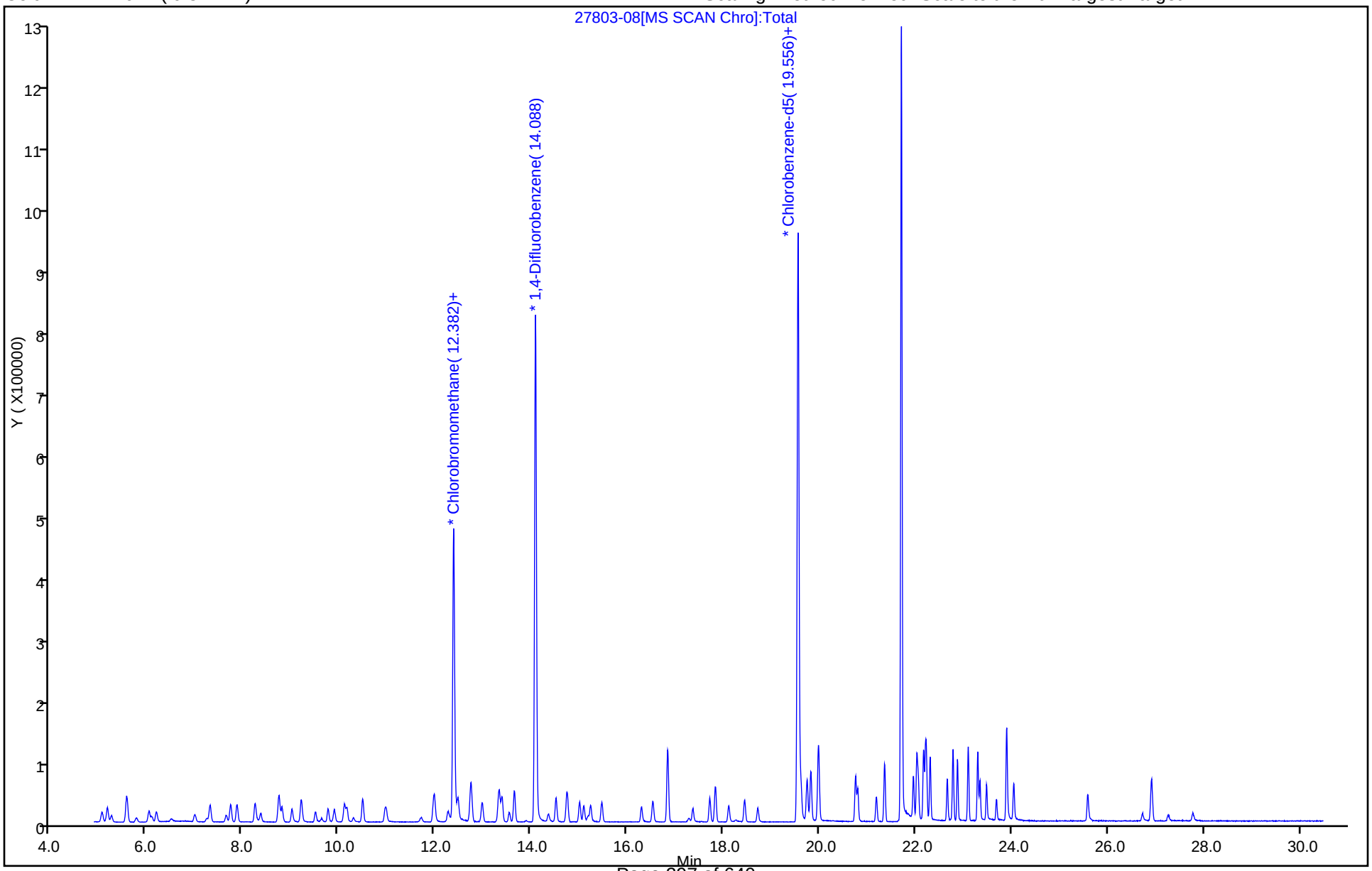
Report Date: 09-Nov-2017 12:50:58 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d

Injection Date:	08-Nov-2017 20:59:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

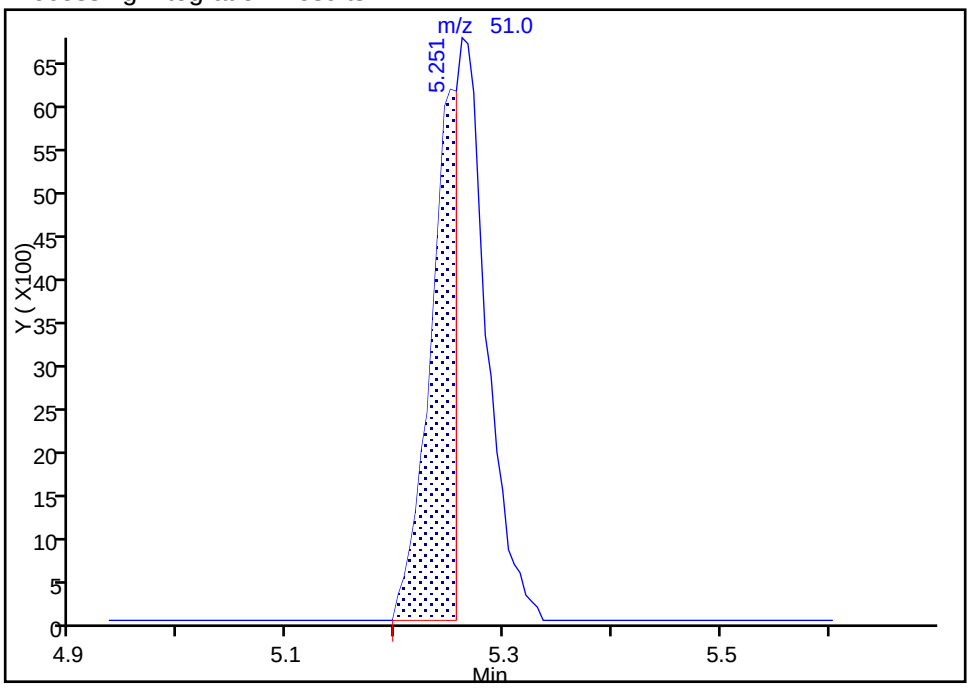
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d
Injection Date: 08-Nov-2017 20:59:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

3 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

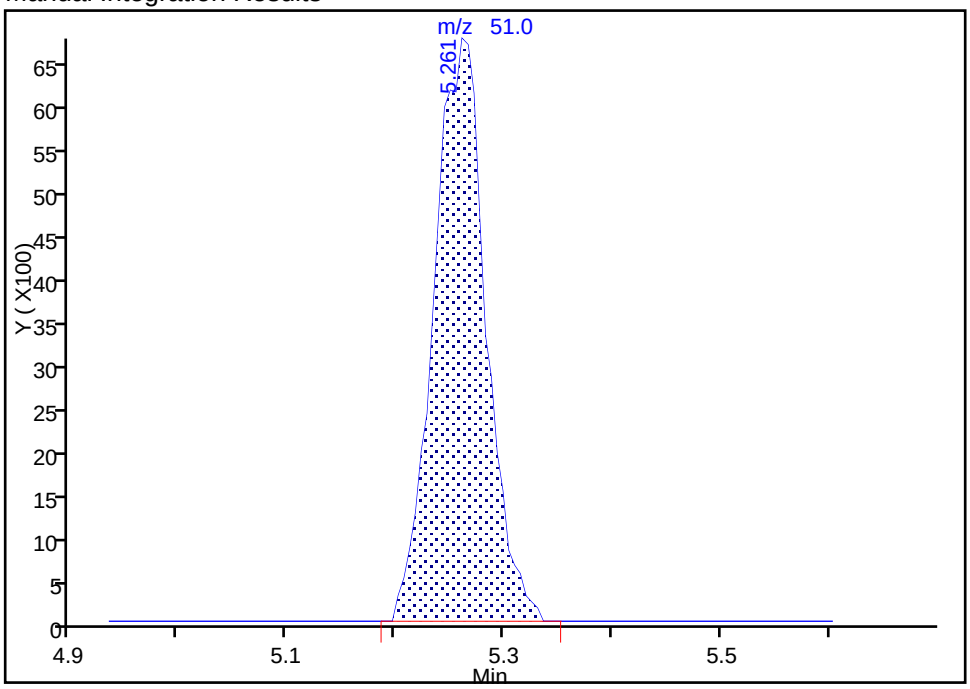
Processing Integration Results

RT: 5.25
Area: 10925
Amount: 0.317651
Amount Units: ppb v/v



Manual Integration Results

RT: 5.26
Area: 22719
Amount: 0.592863
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:38:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

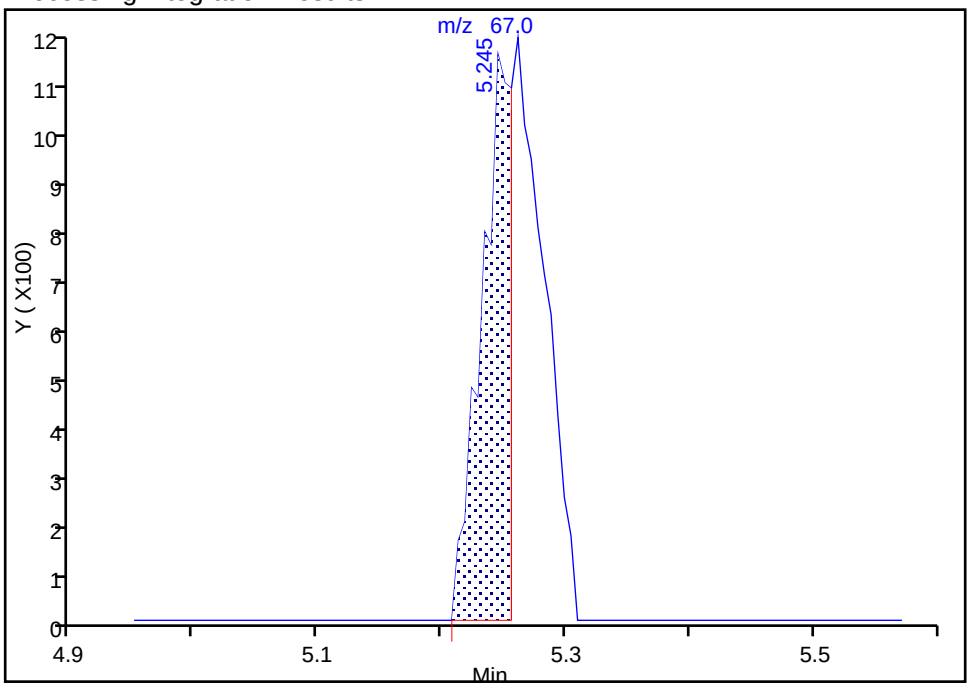
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d				
Injection Date:	08-Nov-2017 20:59:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Signal: 2

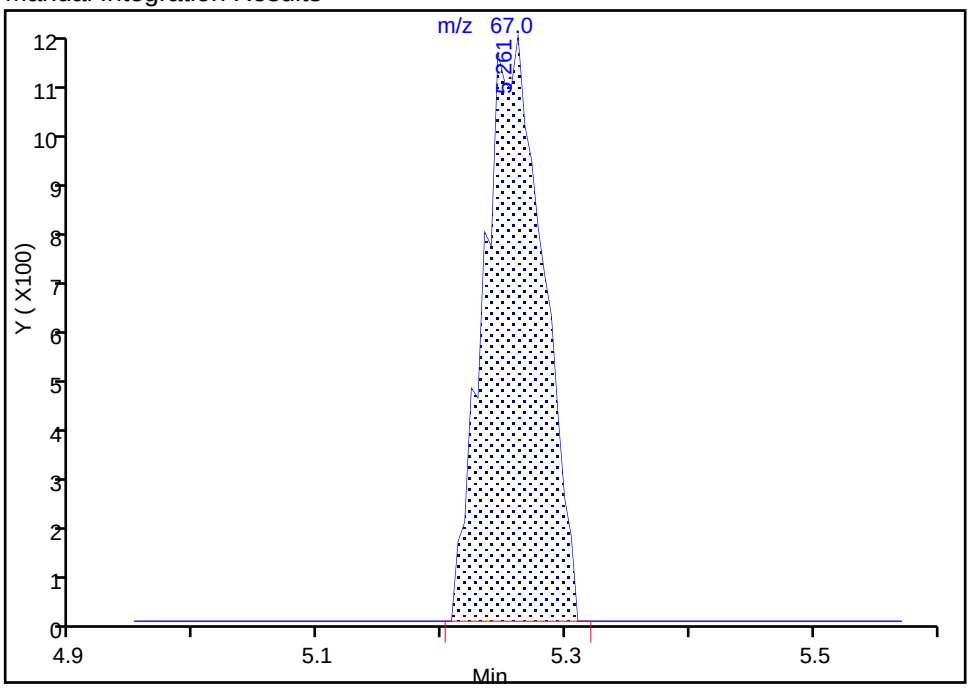
Processing Integration Results

RT: 5.25
Area: 1914
Amount: 0.317651
Amount Units: ppb v/v



Manual Integration Results

RT: 5.26
Area: 3809
Amount: 0.592863
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:38:14

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

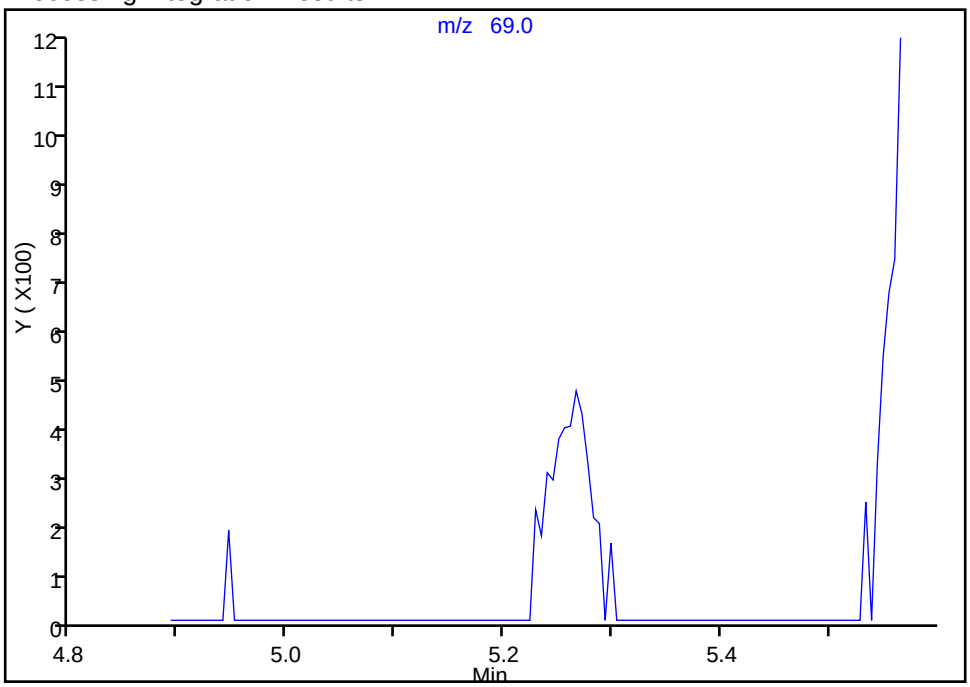
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d
Injection Date: 08-Nov-2017 20:59:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

3 Chlorodifluoromethane, CAS: 75-45-6

Signal: 3

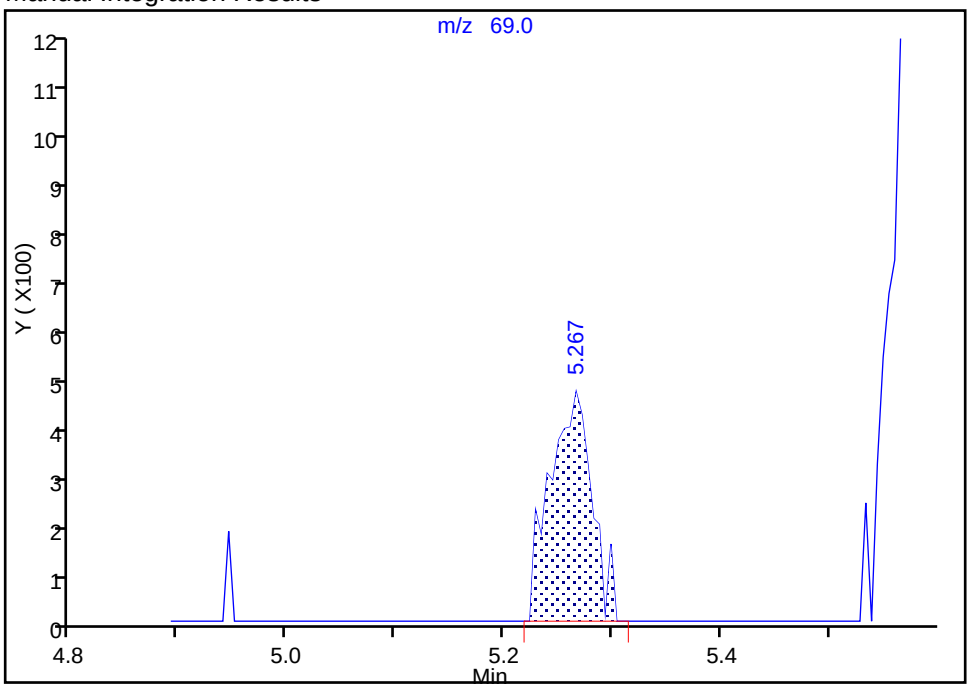
Processing Integration Results

RT: 5.25
Area: 0
Amount: 0.317651
Amount Units: ppb v/v



Manual Integration Results

RT: 5.27
Area: 1262
Amount: 0.592863
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:38:18
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

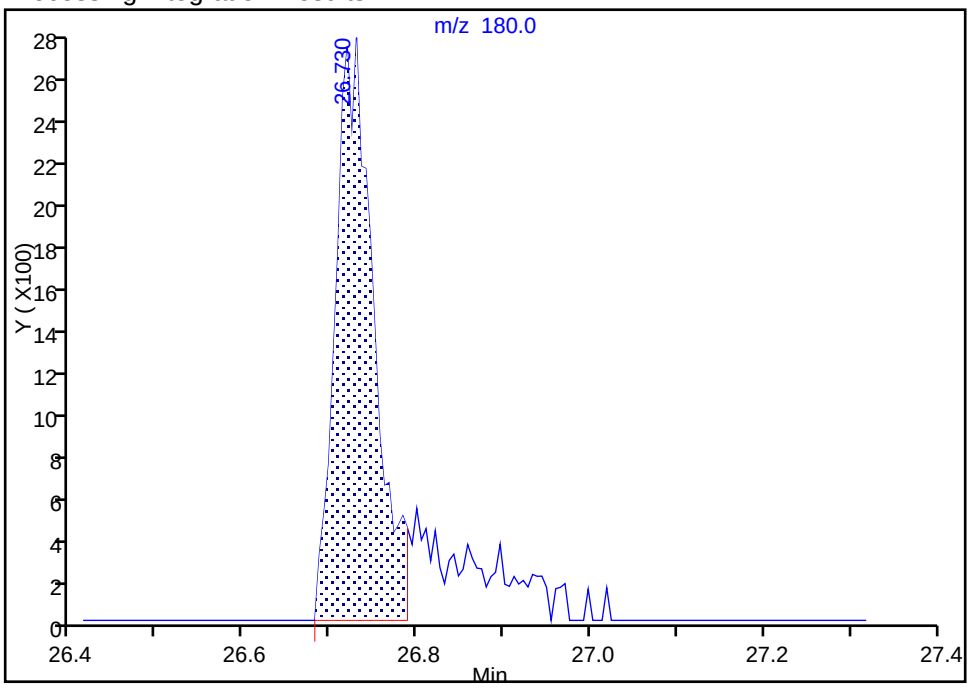
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d
Injection Date: 08-Nov-2017 20:59:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

103 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

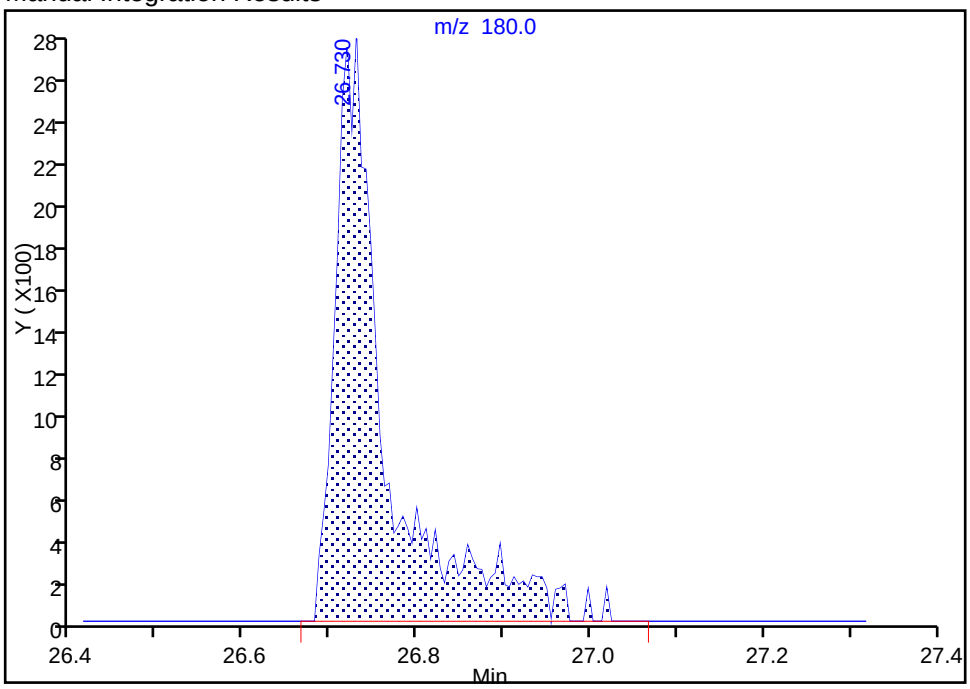
Processing Integration Results

RT: 26.73
Area: 8514
Amount: 0.240919
Amount Units: ppb v/v



Manual Integration Results

RT: 26.73
Area: 11310
Amount: 0.311820
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:39:47
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

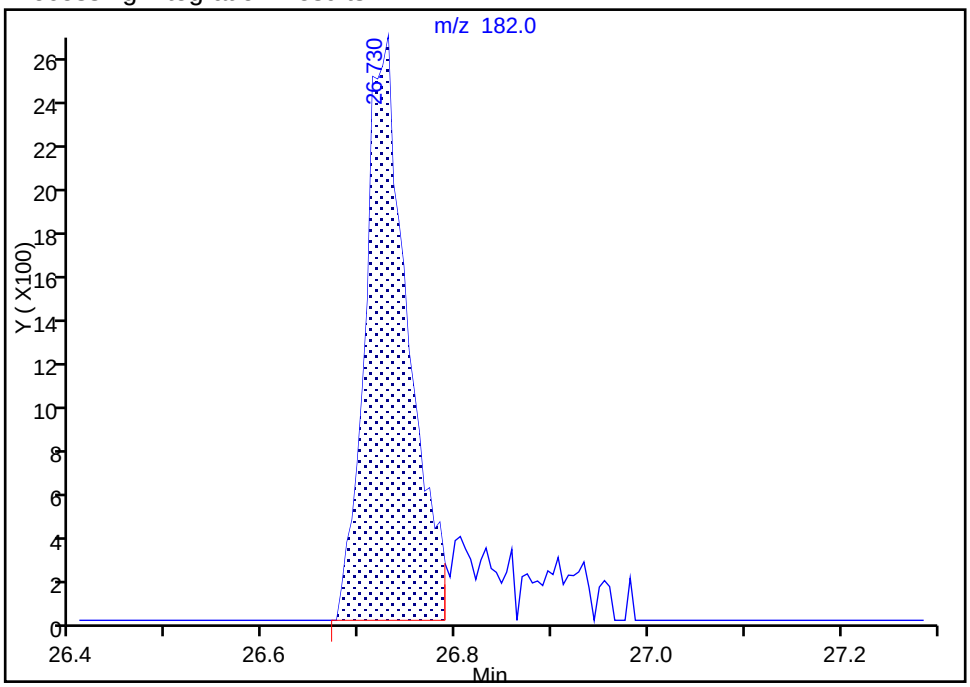
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d
Injection Date: 08-Nov-2017 20:59:30 Instrument ID: CHW.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

103 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 2

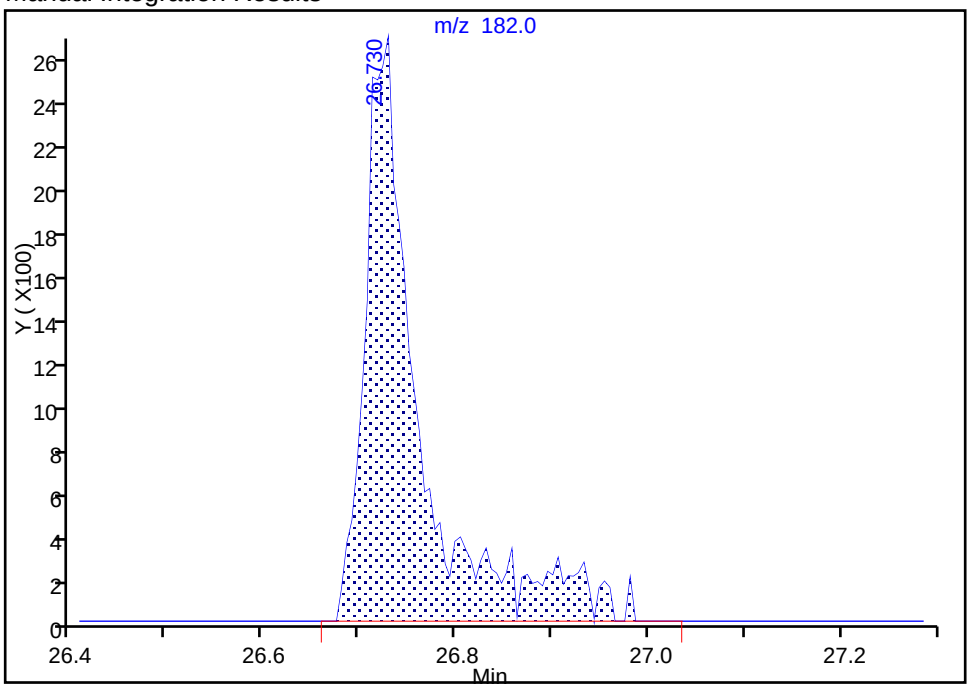
Processing Integration Results

RT: 26.73
Area: 8217
Amount: 0.240919
Amount Units: ppb v/v



Manual Integration Results

RT: 26.73
Area: 10509
Amount: 0.311820
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:39:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

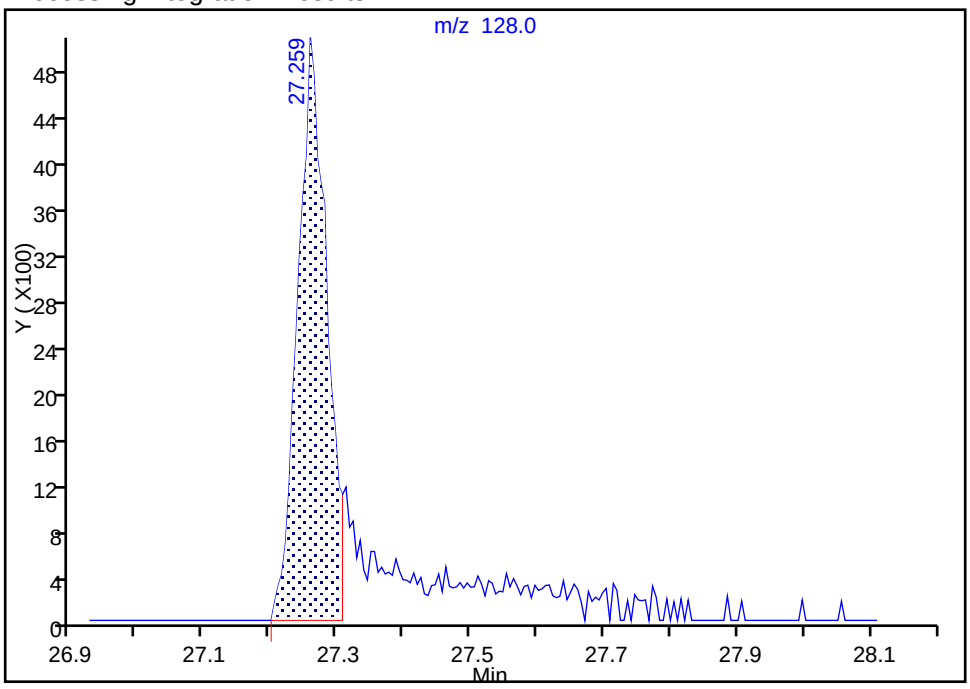
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d				
Injection Date:	08-Nov-2017 20:59:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

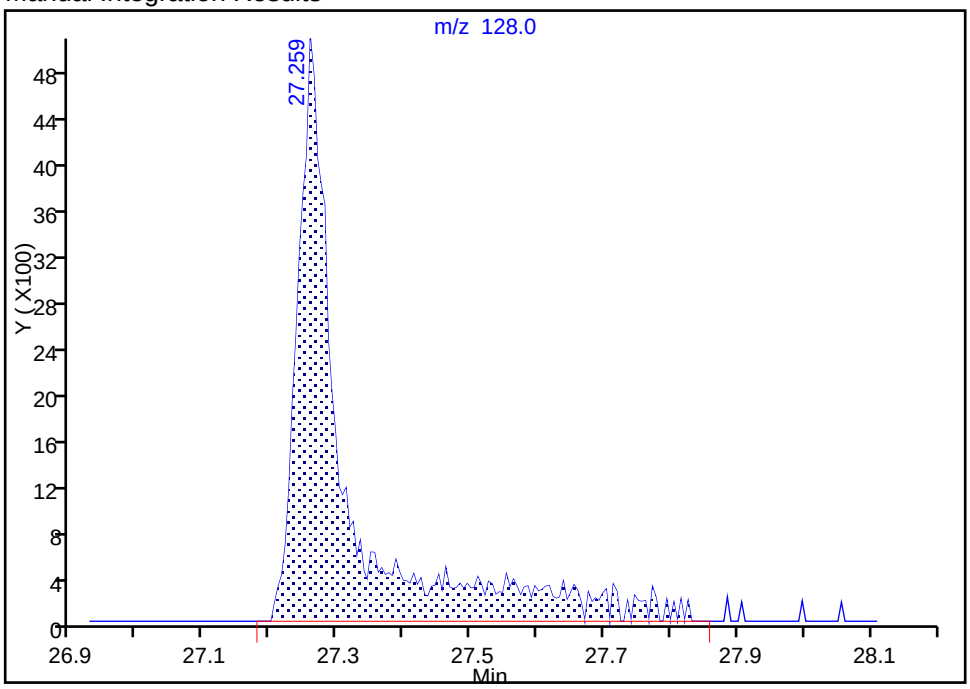
Processing Integration Results

RT: 27.26
Area: 15183
Amount: 0.213464
Amount Units: ppb v/v



Manual Integration Results

RT: 27.26
Area: 24142
Amount: 0.325758
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:39:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

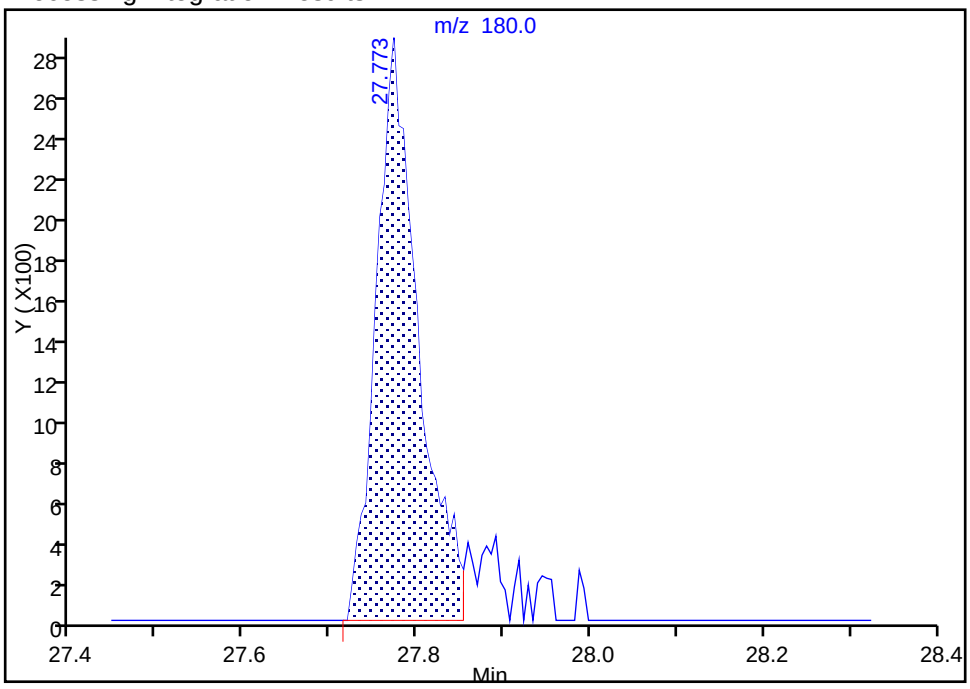
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d				
Injection Date:	08-Nov-2017 20:59:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

106 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

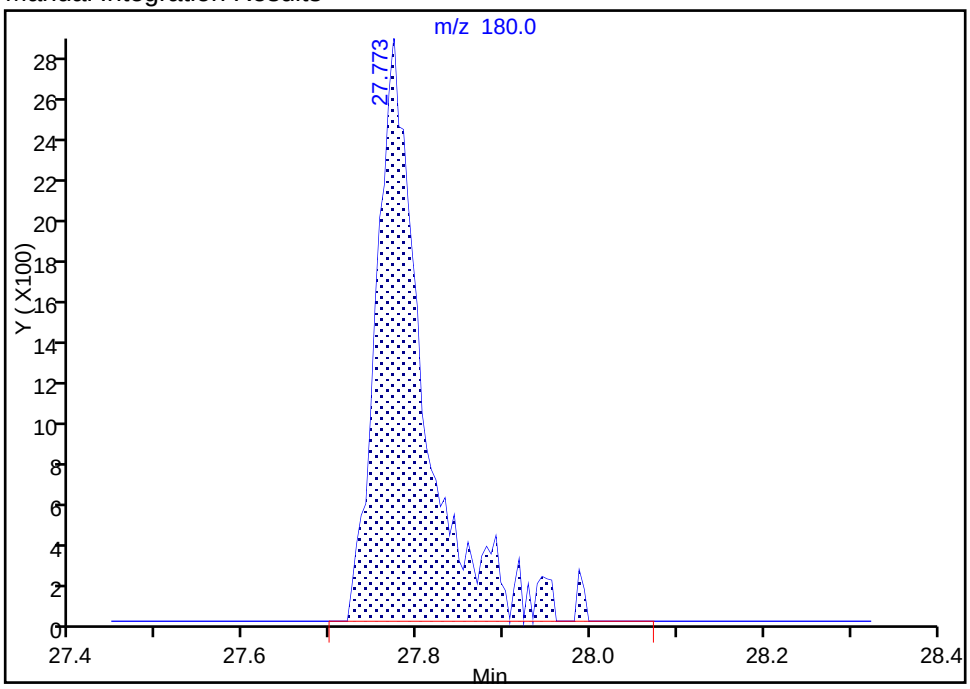
Processing Integration Results

RT: 27.77
Area: 9712
Amount: 0.324741
Amount Units: ppb v/v



Manual Integration Results

RT: 27.77
Area: 11157
Amount: 0.367150
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:40:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

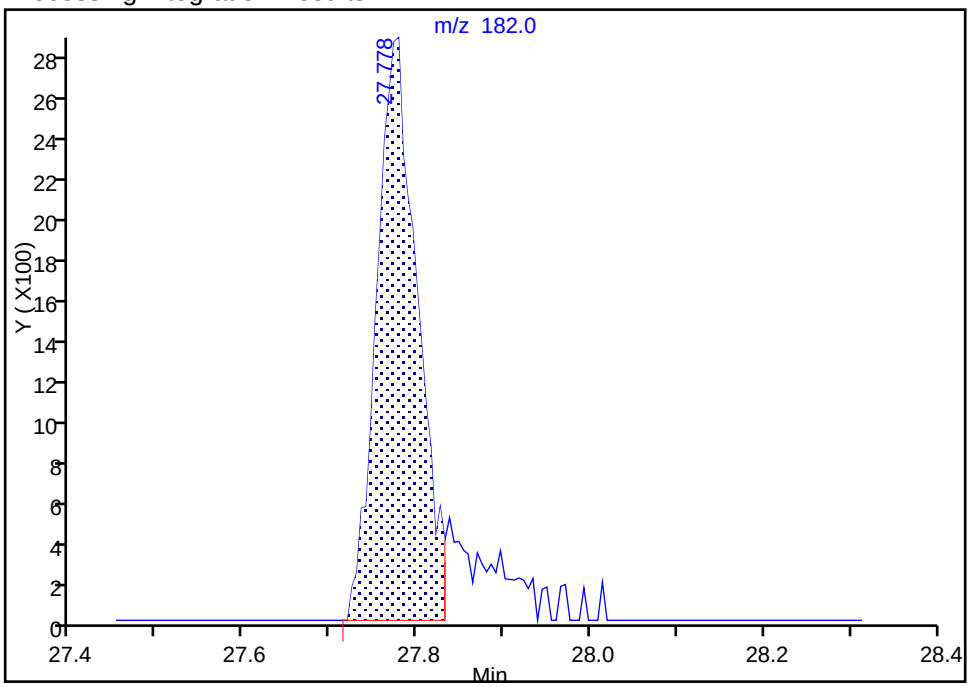
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-08.d				
Injection Date:	08-Nov-2017 20:59:30	Instrument ID:	CHW.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

106 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 2

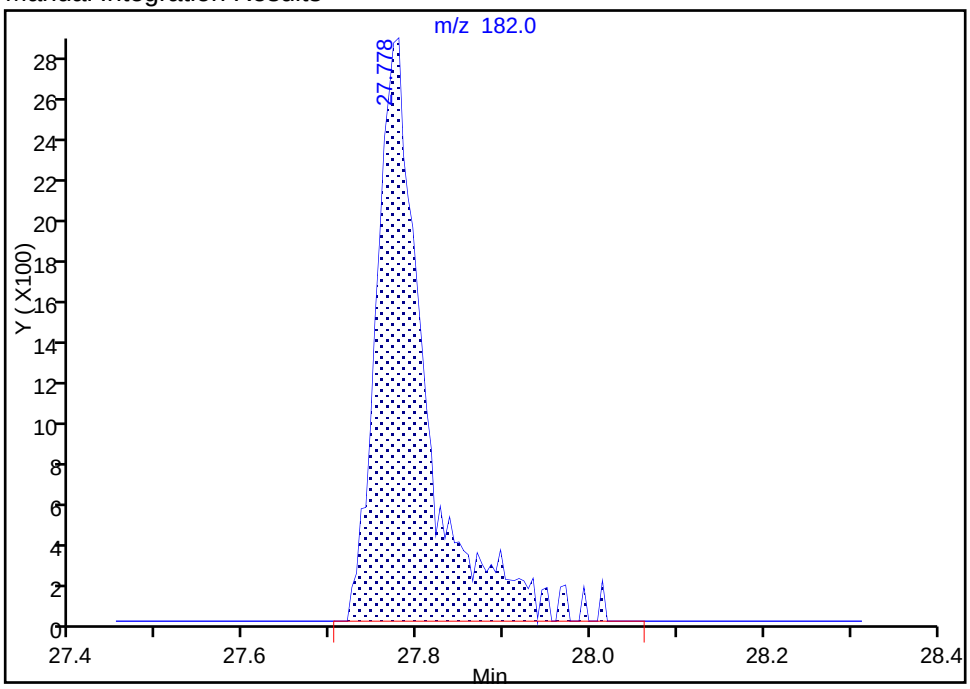
Processing Integration Results

RT: 27.78
Area: 9225
Amount: 0.324741
Amount Units: ppb v/v



Manual Integration Results

RT: 27.78
Area: 11198
Amount: 0.367150
Amount Units: ppb v/v



Reviewer: daiglep, 09-Nov-2017 09:40:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-09.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Nov-2017 21:52:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-09
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:50:59 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:18:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.058	5.058	0.000	98	118856	4.99	5.84	
2 Dichlorodifluoromethane	85	5.165	5.176	-0.011	100	389026	4.99	5.35	
3 Chlorodifluoromethane	51	5.251	5.250	0.001	97	221306	4.99	5.44	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.572	5.577	-0.005	91	392847	4.99	5.14	
5 Chloromethane	50	5.764	5.769	-0.005	99	132044	4.99	5.50	
6 Butane	43	6.037	6.042	-0.005	99	254908	4.99	5.53	
7 Vinyl chloride	62	6.096	6.096	0.000	98	162283	4.99	5.08	
8 Butadiene	54	6.187	6.192	-0.005	96	128678	4.99	5.08	
9 BFB									
10 Bromomethane	94	6.989	6.994	-0.005	99	132891	4.99	5.05	
11 Chloroethane	64	7.241	7.241	0.000	99	84998	4.99	5.38	
12 2-Methylbutane	43	7.310	7.310	0.000	93	185077	4.99	5.16	
13 Vinyl bromide	106	7.647	7.647	0.000	100	139383	4.99	5.06	
14 Trichlorofluoromethane	101	7.738	7.738	0.000	98	359129	4.99	5.06	
16 Pentane	43	7.872	7.877	-0.005	97	288210	4.99	5.48	
17 Ethanol	45	8.246	8.246	0.000	98	144903	10.0	12.7	
18 Ethyl ether	59	8.359	8.353	0.006	94	108392	4.99	5.10	
19 Acrolein	56	8.733	8.733	0.000	41	45164	4.99	5.20	
20 1,1,2-Trichloro-1,2,2-trif	101	8.744	8.744	0.000	98	273616	4.99	4.98	
21 1,1-Dichloroethene	96	8.808	8.813	-0.005	96	135019	4.99	4.82	
22 Acetone	43	9.006	9.011	-0.005	98	242021	4.99	5.83	
23 Carbon disulfide	76	9.204	9.204	0.000	100	372496	4.99	5.33	
24 Isopropyl alcohol	45	9.215	9.215	0.000	100	294093	4.99	6.22	
25 3-Chloro-1-propene	41	9.504	9.509	-0.005	93	184877	4.99	5.19	
26 Acetonitrile	41	9.627	9.632	-0.005	100	89954	4.99	5.02	
27 Methylene Chloride	49	9.766	9.771	-0.005	97	163444	4.99	5.29	
28 2-Methyl-2-propanol	59	9.894	9.894	0.000	94	349473	4.99	6.01	
29 Methyl tert-butyl ether	73	10.103	10.108	-0.005	98	434863	4.99	5.06	
31 trans-1,2-Dichloroethene	61	10.162	10.161	0.001	97	202404	4.99	5.13	
S 30 1,2-Dichloroethene, Total	61				0		9.99	9.98	
32 Acrylonitrile	53	10.301	10.301	0.000	95	95671	4.99	5.35	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.493	10.493	0.000	94	250266	4.99	5.08	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	279961	4.99	4.95	
35 Vinyl acetate	43	10.985	10.985	0.000	100	386374	4.99	5.38	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	96	148746	4.99	4.85	
38 2-Butanone (MEK)	72	11.980	11.980	0.000	96	78388	4.99	5.30	
39 Ethyl acetate	88	11.991	11.986	0.005	97	12377	4.99	5.26	
41 Tetrahydrofuran	42	12.382	12.382	0.000	87	204950	4.99	5.51	
* 40 Chlorobromomethane	128	12.382	12.387	-0.005	98	187614	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	97	297901	4.99	5.06	
43 Cyclohexane	84	12.740	12.740	0.000	97	212949	4.99	4.84	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	94	299931	4.99	4.87	
45 Carbon tetrachloride	117	12.981	12.981	0.000	99	299419	4.99	4.75	
46 Isooctane	57	13.329	13.334	-0.005	99	869807	4.99	4.96	
47 Benzene	78	13.393	13.393	0.000	96	490258	4.99	4.82	
48 1,2-Dichloroethane	62	13.543	13.543	0.001	96	189220	4.99	5.03	
49 n-Heptane	43	13.650	13.650	0.000	95	335128	4.99	5.05	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1040329	10.0	10.0	
52 n-Butanol	56	14.345	14.350	-0.005	90	104053	4.99	5.55	
53 Trichloroethene	95	14.511	14.516	-0.005	98	194736	4.99	4.55	
A 51 GRO	1	14.738	(7.300-22.176)		0	66212613	4.99	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	93	193368	4.99	4.92	
55 Methyl methacrylate	69	15.094	15.094	0.000	94	177960	4.99	5.06	
56 1,4-Dioxane	88	15.174	15.174	0.000	97	105717	4.99	5.66	
57 Dibromomethane	174	15.233	15.238	-0.005	96	175675	4.99	4.78	
58 Dichlorobromomethane	83	15.468	15.468	0.000	98	334450	4.99	4.93	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	93	251720	4.99	4.89	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	104902228	4.99	1313.2	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	97	432392	4.99	5.59	
64 n-Octane	43	16.838	16.838	0.000	89	484421	4.99	5.13	
65 Toluene	92	16.838	16.838	0.000	92	347042	4.99	4.76	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	97	236984	4.99	4.97	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	96	172810	4.99	4.87	
68 Tetrachloroethene	166	17.833	17.833	0.000	97	286284	4.99	4.60	
69 2-Hexanone	43	18.106	18.106	0.000	93	388969	4.99	5.69	
71 Chlorodibromomethane	129	18.443	18.443	0.000	99	328110	4.99	4.94	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	283383	4.99	4.90	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	86	949082	10.0	10.0	
75 Chlorobenzene	112	19.609	19.614	-0.005	94	449771	4.99	4.81	
76 Ethylbenzene	91	19.743	19.743	0.000	98	795595	4.99	4.89	
77 n-Nonane	57	19.823	19.823	0.000	94	431565	4.99	4.94	
78 m-Xylene & p-Xylene	106	19.978	19.984	-0.006	0	616114	9.99	9.69	
S 73 Xylenes, Total	106				0		15.0	14.5	
79 o-Xylene	106	20.754	20.754	0.000	99	304660	4.99	4.81	
80 Styrene	104	20.797	20.797	0.000	99	457881	4.99	4.95	
81 Bromoform	173	21.187	21.187	0.000	98	301402	4.99	4.99	
82 Isopropylbenzene	105	21.358	21.358	0.000	96	915417	4.99	4.94	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.958	-0.006	98	467603	4.99	4.94	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	1136697	4.99	5.11	
86 1,2,3-Trichloropropane	75	22.059	22.059	0.000	98	359685	4.99	5.06	
87 n-Decane	57	22.166	22.166	0.000	89	565594	4.99	5.24	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	912316	4.99	5.07	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	761109	4.99	4.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	93	772190	4.99	4.99	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	91	365759	4.99	5.18	
92 tert-Butylbenzene	119	22.782	22.781	0.001	94	744569	4.99	4.95	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	98	779398	4.99	5.13	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	1165128	4.99	5.15	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	956495	4.99	5.18	
96 1,3-Dichlorobenzene	146	23.343	23.343	0.000	97	479038	4.99	5.17	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	446717	4.99	5.10	
98 Benzyl chloride	91	23.686	23.686	0.000	99	551442	4.99	5.37	
99 Undecane	57	23.894	23.894	0.000	98	477087	4.99	5.18	
100 n-Butylbenzene	91	23.894	23.894	0.000	98	864966	4.99	5.46	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	97	455436	4.99	5.09	
102 Dodecane	57	25.585	25.585	0.000	97	371684	4.99	5.36	
103 1,2,4-Trichlorobenzene	180	26.724	26.724	0.000	94	177701	4.99	4.39	
104 Hexachlorobutadiene	225	26.911	26.917	-0.006	97	273542	4.99	4.78	
105 Naphthalene	128	27.259	27.259	0.000	99	335922	4.99	4.06	
106 1,2,3-Trichlorobenzene	180	27.778	27.767	0.011	96	159884	4.99	4.71	

Reagents:

ATTO15CAL3w_00190	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

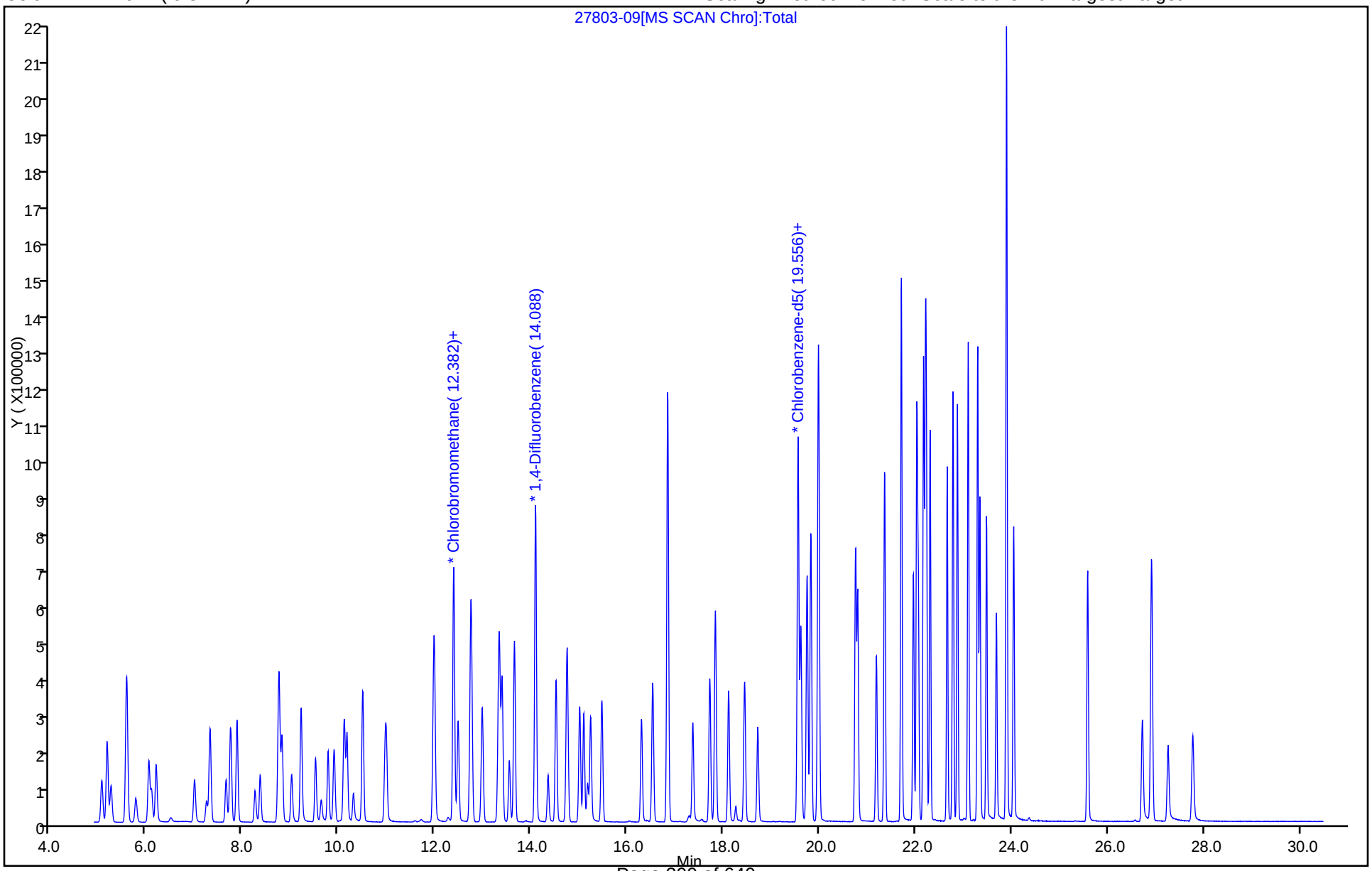
Report Date: 09-Nov-2017 12:51:00 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-09.d

Injection Date:	08-Nov-2017 21:52:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-10.d
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 08-Nov-2017 22:44:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-10
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:51:02 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:02:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.058	5.058	0.000	99	235525	10.0	10.7	
2 Dichlorodifluoromethane	85	5.176	5.176	0.000	99	804174	10.0	10.2	
3 Chlorodifluoromethane	51	5.250	5.250	0.000	97	452636	10.0	10.3	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.577	5.577	0.000	90	808862	10.0	9.80	
5 Chloromethane	50	5.769	5.769	0.000	99	267118	10.0	10.3	
6 Butane	43	6.042	6.042	0.000	98	512587	10.0	10.3	
7 Vinyl chloride	62	6.096	6.096	0.000	98	334310	10.0	9.70	
8 Butadiene	54	6.192	6.192	0.000	96	260251	10.0	9.52	
10 Bromomethane	94	6.994	6.994	0.000	99	274616	10.0	9.66	
9 BFB									
11 Chloroethane	64	7.241	7.241	0.000	99	171852	10.0	10.1	
12 2-Methylbutane	43	7.310	7.310	0.000	94	373121	10.0	9.64	
13 Vinyl bromide	106	7.647	7.647	0.000	99	285489	10.0	9.60	
14 Trichlorofluoromethane	101	7.738	7.738	0.000	98	740799	10.0	9.68	
16 Pentane	43	7.877	7.877	0.000	97	587984	10.0	10.4	
17 Ethanol	45	8.246	8.246	0.000	99	174724	15.0	14.2	
18 Ethyl ether	59	8.353	8.353	0.000	93	218819	10.0	9.53	
19 Acrolein	56	8.733	8.733	0.000	42	95776	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trif	101	8.744	8.744	0.000	97	566264	10.0	9.56	
21 1,1-Dichloroethene	96	8.813	8.813	0.000	97	278311	10.0	9.21	
22 Acetone	43	9.011	9.011	0.000	97	487401	10.0	10.9	
23 Carbon disulfide	76	9.204	9.204	0.000	99	768140	10.0	10.2	
24 Isopropyl alcohol	45	9.215	9.215	0.000	99	419529	10.0	8.22	
25 3-Chloro-1-propene	41	9.509	9.509	0.000	93	411558	10.0	10.7	
26 Acetonitrile	41	9.632	9.632	0.000	99	202386	10.0	10.5	
27 Methylene Chloride	49	9.771	9.771	0.000	97	332338	10.0	9.97	
28 2-Methyl-2-propanol	59	9.894	9.894	0.000	94	451679	10.0	7.20	
29 Methyl tert-butyl ether	73	10.108	10.108	0.000	98	879178	10.0	9.48	
31 trans-1,2-Dichloroethene	61	10.161	10.161	0.000	97	417714	10.0	9.80	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.1	
32 Acrylonitrile	53	10.301	10.301	0.000	95	188217	10.0	9.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.493	10.493	0.000	94	508943	10.0	9.57	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	569811	10.0	9.33	
35 Vinyl acetate	43	10.985	10.985	0.000	100	803281	10.0	10.4	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	96	306642	10.0	9.27	
38 2-Butanone (MEK)	72	11.980	11.980	0.000	95	157554	10.0	9.87	
39 Ethyl acetate	88	11.986	11.986	0.000	96	24700	10.0	9.72	
41 Tetrahydrofuran	42	12.382	12.382	0.000	95	389047	10.0	9.93	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	97	202509	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	95	609077	10.0	9.59	
43 Cyclohexane	84	12.740	12.740	0.000	97	438528	10.0	9.46	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	95	612553	10.0	9.45	
45 Carbon tetrachloride	117	12.981	12.981	0.000	98	618616	10.0	9.33	
46 Isooctane	57	13.334	13.334	0.000	99	1774926	10.0	9.61	
47 Benzene	78	13.393	13.393	0.000	96	1002603	10.0	9.37	
48 1,2-Dichloroethane	62	13.543	13.543	0.000	97	382151	10.0	9.65	
49 n-Heptane	43	13.650	13.650	0.000	95	680618	10.0	9.74	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	96	1094932	10.0	10.0	
52 n-Butanol	56	14.350	14.350	0.000	89	140880	10.0	7.13	
53 Trichloroethene	95	14.516	14.516	0.000	98	409245	10.0	9.09	
A 51 GRO	1	14.738	(7.300-22.176)		0	130689865	10.0	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	93	389340	10.0	9.42	
55 Methyl methacrylate	69	15.094	15.094	0.000	94	363896	10.0	9.82	
56 1,4-Dioxane	88	15.174	15.174	0.000	97	141418	10.0	7.20	
57 Dibromomethane	174	15.238	15.238	0.000	96	362915	10.0	9.39	
58 Dichlorobromomethane	83	15.468	15.468	0.000	98	691930	10.0	9.68	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	93	529754	10.0	9.77	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	209676116	10.0	2493.9	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	97	718246	10.0	8.82	
65 Toluene	92	16.838	16.838	0.000	92	725049	10.0	9.37	
64 n-Octane	43	16.838	16.838	0.000	94	974013	10.0	9.81	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	97	506941	10.0	10.1	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	97	355471	10.0	9.43	
68 Tetrachloroethene	166	17.833	17.833	0.000	98	594266	10.0	8.99	
69 2-Hexanone	43	18.106	18.106	0.000	93	575469	10.0	7.93	
71 Chlorodibromomethane	129	18.443	18.443	0.000	98	694358	10.0	9.84	
72 Ethylene Dibromide	107	18.716	18.716	0.000	97	596783	10.0	9.72	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	85	1007633	10.0	10.0	
75 Chlorobenzene	112	19.614	19.614	0.000	94	935980	10.0	9.42	
76 Ethylbenzene	91	19.743	19.743	0.000	98	1647314	10.0	9.53	
77 n-Nonane	57	19.823	19.823	0.000	94	881815	10.0	9.51	
78 m-Xylene & p-Xylene	106	19.984	19.984	0.000	0	1283479	20.0	19.0	
S 73 Xylenes, Total	106				0		30.0	28.4	
79 o-Xylene	106	20.754	20.754	0.000	98	627127	10.0	9.33	
80 Styrene	104	20.797	20.797	0.000	98	967602	10.0	9.85	
81 Bromoform	173	21.187	21.187	0.000	98	681933	10.0	10.6	
82 Isopropylbenzene	105	21.358	21.358	0.000	96	1896517	10.0	9.64	
84 1,1,2,2-Tetrachloroethane	83	21.958	21.958	0.000	98	953692	10.0	9.49	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	2346722	10.0	9.94	
86 1,2,3-Trichloropropane	75	22.059	22.059	0.000	99	731094	10.0	9.68	
87 n-Decane	57	22.166	22.166	0.000	89	1157852	10.0	10.1	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	1905970	10.0	9.97	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	1586169	10.0	9.76	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	93	1593286	10.0	9.69	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	89	773701	10.0	10.3	
92 tert-Butylbenzene	119	22.781	22.781	0.000	94	1536679	10.0	9.63	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	97	1603336	10.0	9.94	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	2396111	10.0	9.98	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	1979902	10.0	10.1	
96 1,3-Dichlorobenzene	146	23.343	23.343	0.000	97	1018526	10.0	10.3	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	968796	10.0	10.4	
98 Benzyl chloride	91	23.686	23.686	0.000	99	1194278	10.0	11.0	
100 n-Butylbenzene	91	23.894	23.894	0.000	98	1804894	10.0	10.7	
99 Undecane	57	23.894	23.894	0.000	96	972862	10.0	9.95	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	98	949828	10.0	10.0	
102 Dodecane	57	25.585	25.585	0.000	97	588140	10.0	7.98	
103 1,2,4-Trichlorobenzene	180	26.724	26.724	0.000	94	386665	10.0	9.00	
104 Hexachlorobutadiene	225	26.917	26.917	0.000	97	543186	10.0	8.94	
105 Naphthalene	128	27.259	27.259	0.000	100	777285	10.0	8.85	
106 1,2,3-Trichlorobenzene	180	27.767	27.767	0.000	96	288783	10.0	8.02	

Reagents:

ATTO15CAL4w_00650	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

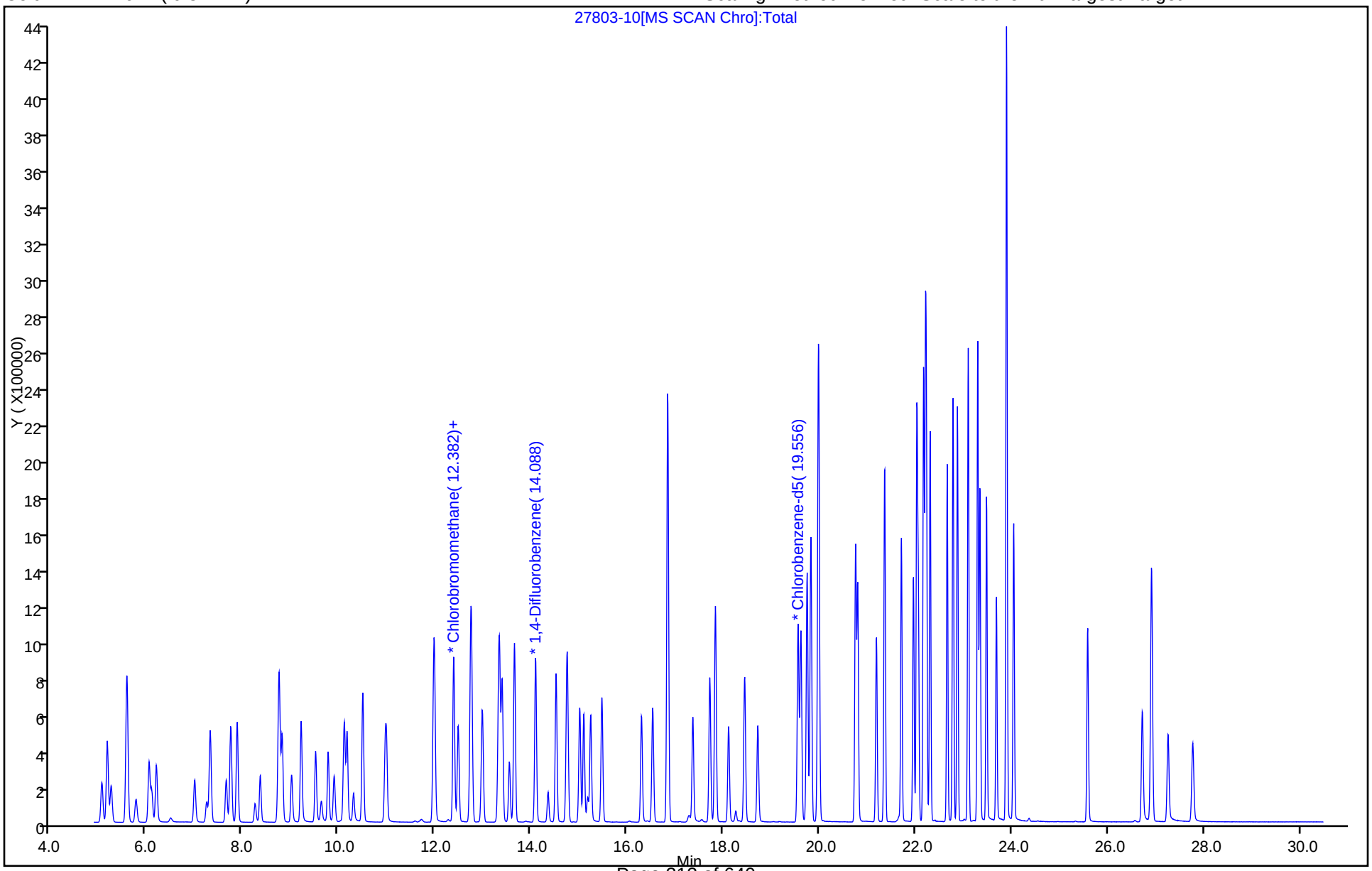
Report Date: 09-Nov-2017 12:51:03 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-10.d

Injection Date:	08-Nov-2017 22:44:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	icis			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-11.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Nov-2017 23:37:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-11
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:51:05 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:21:00

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1	Propene	41	5.058	5.058	0.000	99	357092	15.0	14.7	
2	Dichlorodifluoromethane	85	5.170	5.176	-0.006	99	1247878	15.0	14.4	
3	Chlorodifluoromethane	51	5.251	5.250	0.001	97	695821	15.0	14.3	
4	1,2-Dichloro-1,1,2,2-tetra	85	5.577	5.577	0.000	97	1263398	15.0	13.9	
5	Chloromethane	50	5.769	5.769	0.000	99	404208	15.0	14.1	
6	Butane	43	6.042	6.042	0.000	99	776602	15.0	14.1	
7	Vinyl chloride	62	6.090	6.096	-0.006	98	516625	15.0	13.6	
8	Butadiene	54	6.197	6.192	0.005	96	399993	15.0	13.2	
9	BFB									
10	Bromomethane	94	6.989	6.994	-0.005	99	432825	15.0	13.8	
11	Chloroethane	64	7.241	7.241	0.000	99	268754	15.0	14.3	
12	2-Methylbutane	43	7.316	7.310	0.006	93	575760	15.0	13.5	
13	Vinyl bromide	106	7.647	7.647	0.000	99	459748	15.0	14.0	
14	Trichlorofluoromethane	101	7.744	7.738	0.006	98	1177498	15.0	13.9	
16	Pentane	43	7.877	7.877	0.000	97	898309	15.0	14.3	
17	Ethanol	45	8.252	8.246	0.006	99	203395	20.0	15.0	
18	Ethyl ether	59	8.353	8.353	0.000	94	338965	15.0	13.4	
19	Acrolein	56	8.739	8.733	0.006	95	144224	15.0	13.9	
20	1,1,2-Trichloro-1,2,2-trif	101	8.749	8.744	0.005	98	902077	15.0	13.8	
21	1,1-Dichloroethene	96	8.813	8.813	0.000	97	440858	15.0	13.2	
22	Acetone	43	9.011	9.011	0.000	97	653878	15.0	13.2	
23	Carbon disulfide	76	9.204	9.204	0.000	99	1210733	15.0	14.5	
24	Isopropyl alcohol	45	9.215	9.215	0.000	99	631479	15.0	11.2	
25	3-Chloro-1-propene	41	9.509	9.509	0.000	93	575981	15.0	13.6	
26	Acetonitrile	41	9.632	9.632	0.000	100	301900	15.0	14.1	
27	Methylene Chloride	49	9.771	9.771	0.000	95	514404	15.0	14.0	
28	2-Methyl-2-propanol	59	9.894	9.894	0.000	93	791648	15.0	11.4	
29	Methyl tert-butyl ether	73	10.103	10.108	-0.005	97	1321944	15.0	12.9	
31	trans-1,2-Dichloroethene	61	10.167	10.161	0.006	98	668611	15.0	14.2	
S 30	1,2-Dichloroethene, Total	61				0		30.0	27.7	
32	Acrylonitrile	53	10.301	10.301	0.000	95	313601	15.0	14.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.493	10.493	0.000	94	798026	15.0	13.6	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	899785	15.0	13.3	
35 Vinyl acetate	43	10.985	10.985	0.000	100	1246889	15.0	14.6	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	97	491825	15.0	13.5	
38 2-Butanone (MEK)	72	11.980	11.980	0.000	96	231183	15.0	13.1	
39 Ethyl acetate	88	11.991	11.986	0.005	97	38124	15.0	13.6	
41 Tetrahydrofuran	42	12.382	12.382	0.000	96	567820	15.0	13.5	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	90	223748	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	96	969528	15.0	13.8	
43 Cyclohexane	84	12.740	12.740	0.000	98	697641	15.0	14.0	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	94	973646	15.0	13.9	
45 Carbon tetrachloride	117	12.981	12.981	0.000	99	980788	15.0	13.7	
46 Isooctane	57	13.334	13.334	0.000	99	2793817	15.0	14.1	
47 Benzene	78	13.393	13.393	0.000	96	1593764	15.0	13.8	
48 1,2-Dichloroethane	62	13.543	13.543	0.001	97	602116	15.0	14.1	
49 n-Heptane	43	13.650	13.650	0.000	94	1048330	15.0	13.9	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1179265	10.0	10.0	
52 n-Butanol	56	14.345	14.350	-0.005	88	247073	15.0	11.6	
53 Trichloroethene	95	14.516	14.516	0.000	99	647583	15.0	13.4	
A 51 GRO	1	14.738	(7.300-22.176)		0	201264326	15.0	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	93	617545	15.0	13.9	
55 Methyl methacrylate	69	15.094	15.094	0.000	95	553189	15.0	13.9	
56 1,4-Dioxane	88	15.169	15.174	-0.005	95	241679	15.0	11.4	
57 Dibromomethane	174	15.238	15.238	0.000	96	615087	15.0	14.8	
58 Dichlorobromomethane	83	15.468	15.468	0.000	98	1078558	15.0	14.0	
60 cis-1,3-Dichloropropene	75	16.298	16.292	0.006	92	848987	15.0	14.5	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	325214099	15.0	3591.5	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	97	1099151	15.0	12.5	
64 n-Octane	43	16.838	16.838	0.000	86	1491219	15.0	13.9	
65 Toluene	92	16.838	16.838	0.000	92	1156931	15.0	13.9	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	97	799953	15.0	14.8	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	96	555228	15.0	13.7	
68 Tetrachloroethene	166	17.833	17.833	0.000	98	948629	15.0	13.3	
69 2-Hexanone	43	18.106	18.106	0.000	94	984871	15.0	12.6	
71 Chlorodibromomethane	129	18.443	18.443	0.000	98	1027284	15.0	13.5	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	951556	15.0	14.4	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	86	1084250	10.0	10.0	
75 Chlorobenzene	112	19.614	19.614	0.000	94	1493776	15.0	14.0	
76 Ethylbenzene	91	19.743	19.743	0.000	98	2615719	15.0	14.1	
77 n-Nonane	57	19.818	19.823	-0.005	92	1373713	15.0	13.8	
78 m-Xylene & p-Xylene	106	19.978	19.984	-0.006	0	2040936	30.0	28.1	
S 73 Xylenes, Total	106				0		45.0	42.0	
79 o-Xylene	106	20.749	20.754	-0.005	98	1001765	15.0	13.9	
80 Styrene	104	20.797	20.797	0.000	98	1559688	15.0	14.7	
81 Bromoform	173	21.187	21.187	0.000	98	861157	15.0	12.5	
82 Isopropylbenzene	105	21.359	21.358	0.000	95	2980023	15.0	14.1	
84 1,1,2,2-Tetrachloroethane	83	21.958	21.958	0.000	97	1476746	15.0	13.7	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	3646725	15.0	14.3	
86 1,2,3-Trichloropropane	75	22.054	22.059	-0.005	99	1136081	15.0	14.0	
87 n-Decane	57	22.166	22.166	0.000	89	1755097	15.0	14.2	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	2979461	15.0	14.5	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	2508323	15.0	14.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	93	2479282	15.0	14.0	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	90	1227107	15.0	15.2	
92 tert-Butylbenzene	119	22.782	22.781	0.001	94	2372119	15.0	13.8	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	97	2484416	15.0	14.3	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	3655128	15.0	14.1	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	2999888	15.0	14.2	
96 1,3-Dichlorobenzene	146	23.343	23.343	0.000	96	1638346	15.0	15.5	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	1595983	15.0	16.0	
98 Benzyl chloride	91	23.686	23.686	0.000	99	1853596	15.0	15.8	
99 Undecane	57	23.894	23.894	0.000	95	1458488	15.0	13.9	
100 n-Butylbenzene	91	23.894	23.894	0.000	98	2755293	15.0	15.2	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	98	1515648	15.0	14.8	
102 Dodecane	57	25.585	25.585	0.000	97	1089871	15.0	13.8	
103 1,2,4-Trichlorobenzene	180	26.724	26.724	0.000	93	690355	15.0	14.9	
104 Hexachlorobutadiene	225	26.917	26.917	0.000	97	858277	15.0	13.1	
105 Naphthalene	128	27.254	27.259	-0.005	100	1405930	15.0	14.9	
106 1,2,3-Trichlorobenzene	180	27.773	27.767	0.006	96	564734	15.0	14.6	

Reagents:

ATTO15CAL5w_00070	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

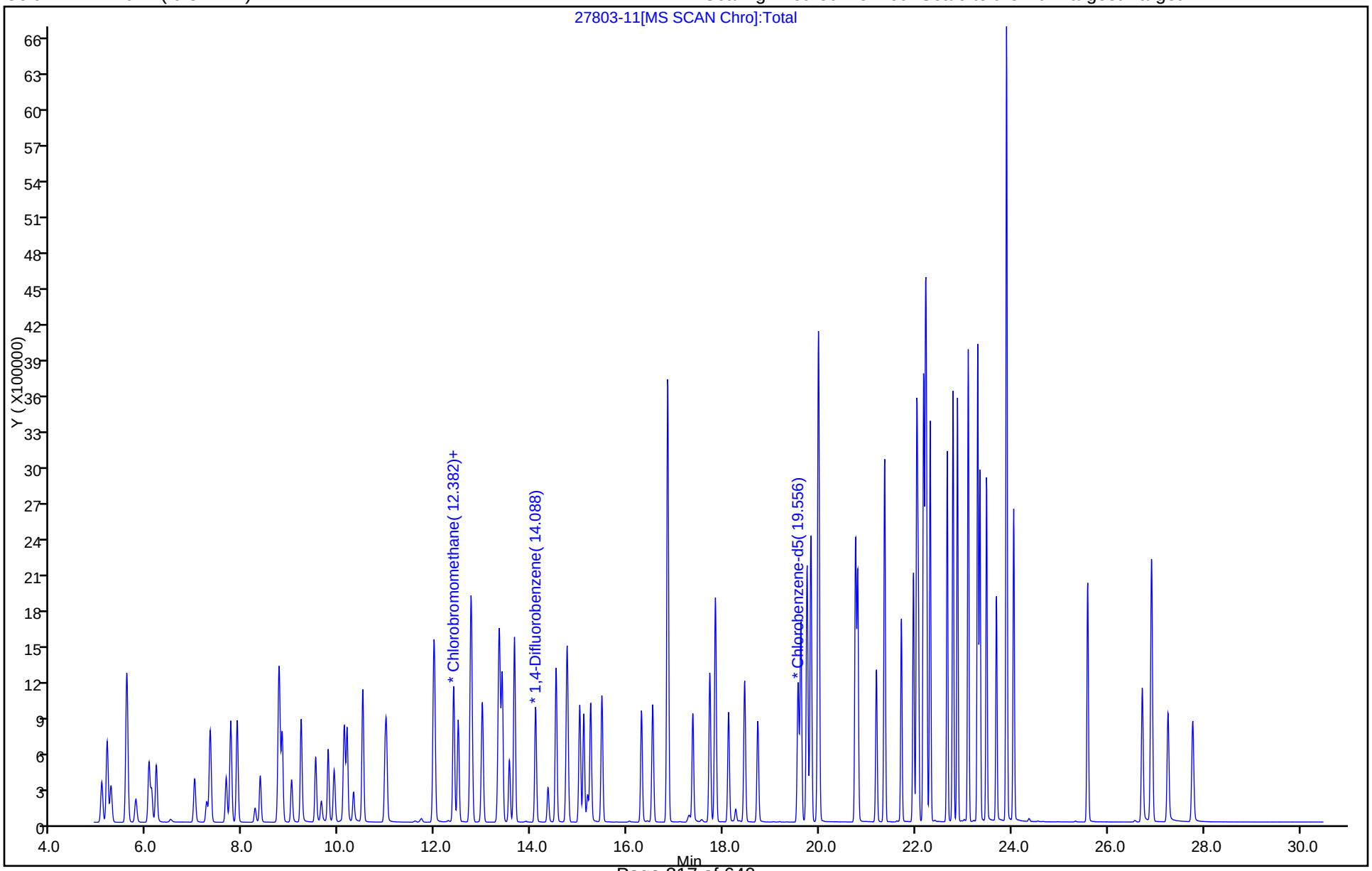
Report Date: 09-Nov-2017 12:51:06 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-11.d

Injection Date:	08-Nov-2017 23:37:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-12.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Nov-2017 00:30:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-12
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:51:07 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:21:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.069	5.058	0.011	98	490115	20.0	18.7	
2 Dichlorodifluoromethane	85	5.181	5.176	0.005	99	1744403	20.0	18.7	
3 Chlorodifluoromethane	51	5.256	5.250	0.006	97	953973	20.0	18.2	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.582	5.577	0.005	94	1775132	20.0	18.1	
5 Chloromethane	50	5.775	5.769	0.006	99	551431	20.0	17.9	
6 Butane	43	6.048	6.042	0.006	98	1068789	20.0	18.0	
7 Vinyl chloride	62	6.101	6.096	0.005	98	721936	20.0	17.6	
8 Butadiene	54	6.203	6.192	0.011	96	560679	20.0	17.2	
10 Bromomethane	94	6.995	6.994	0.001	99	625983	20.0	18.5	
9 BFB									
11 Chloroethane	64	7.246	7.241	0.005	99	386371	20.0	19.0	
12 2-Methylbutane	43	7.321	7.310	0.011	94	796485	20.0	17.3	
13 Vinyl bromide	106	7.653	7.647	0.006	99	663920	20.0	18.7	
14 Trichlorofluoromethane	101	7.743	7.738	0.005	98	1696158	20.0	18.6	
16 Pentane	43	7.877	7.877	0.000	97	1251640	20.0	18.5	
17 Ethanol	45	8.252	8.246	0.006	99	664903	40.0	45.4	
18 Ethyl ether	59	8.359	8.353	0.006	94	556529	20.0	20.3	
19 Acrolein	56	8.739	8.733	0.006	94	245553	20.0	22.0	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.744	0.005	98	1391020	20.0	19.7	
21 1,1-Dichloroethene	96	8.813	8.813	0.000	97	651736	20.0	18.1	
22 Acetone	43	9.011	9.011	0.000	97	1120237	20.0	21.0	
23 Carbon disulfide	76	9.204	9.204	0.000	99	1755395	20.0	19.5	
24 Isopropyl alcohol	45	9.220	9.215	0.005	99	1497361	20.0	24.6	
25 3-Chloro-1-propene	41	9.514	9.509	0.005	93	872517	20.0	19.1	
26 Acetonitrile	41	9.632	9.632	0.000	99	508632	20.0	22.1	
27 Methylene Chloride	49	9.771	9.771	0.000	95	773244	20.0	19.5	
28 2-Methyl-2-propanol	59	9.899	9.894	0.005	93	1945389	20.0	26.0	
29 Methyl tert-butyl ether	73	10.103	10.108	-0.005	97	2366126	20.0	21.4	
31 trans-1,2-Dichloroethene	61	10.167	10.161	0.006	99	1001973	20.0	19.7	
S 30 1,2-Dichloroethene, Total	61				0		40.0	40.0	
32 Acrylonitrile	53	10.301	10.301	0.000	95	515135	20.0	22.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.493	10.493	0.000	93	1257350	20.0	19.9	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	1413102	20.0	19.4	
35 Vinyl acetate	43	10.985	10.985	0.000	100	1959237	20.0	21.2	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	97	798038	20.0	20.3	
38 2-Butanone (MEK)	72	11.980	11.980	0.000	96	438686	20.0	23.1	
39 Ethyl acetate	88	11.991	11.986	0.005	97	68710	20.0	22.7	
41 Tetrahydrofuran	42	12.382	12.382	0.000	97	1015455	20.0	22.4	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	92	241265	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	96	1534523	20.0	20.3	
43 Cyclohexane	84	12.740	12.740	0.000	98	1092481	20.0	20.3	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	94	1548746	20.0	20.6	
45 Carbon tetrachloride	117	12.981	12.981	0.000	98	1549373	20.0	20.2	
46 Isooctane	57	13.334	13.334	0.000	100	4408130	20.0	20.6	
47 Benzene	78	13.393	13.393	0.000	95	2531283	20.0	20.4	
48 1,2-Dichloroethane	62	13.543	13.543	0.001	97	943528	20.0	20.6	
49 n-Heptane	43	13.650	13.650	0.000	93	1616429	20.0	19.9	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	94	1269305	10.0	10.0	
52 n-Butanol	56	14.350	14.350	0.000	87	601542	20.0	26.3	
53 Trichloroethene	95	14.516	14.516	0.000	98	1041812	20.0	20.0	
A 51 GRO	1	14.738	(7.300-22.176)		0	325925963	20.0	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	94	965812	20.0	20.2	
55 Methyl methacrylate	69	15.094	15.094	0.000	96	988747	20.0	23.0	
56 1,4-Dioxane	88	15.169	15.174	-0.005	95	592290	20.0	26.0	
57 Dibromomethane	174	15.238	15.238	0.000	96	979097	20.0	21.9	
58 Dichlorobromomethane	83	15.468	15.468	0.000	97	1727620	20.0	20.9	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	91	1365120	20.0	21.7	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	535538241	20.0	5494.7	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	96	2254072	20.0	23.9	
65 Toluene	92	16.838	16.838	0.000	95	1844033	20.0	21.0	
64 n-Octane	43	16.838	16.838	0.000	92	2255785	20.0	19.6	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	96	1297832	20.0	22.3	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	96	893685	20.0	20.9	
68 Tetrachloroethene	166	17.833	17.833	0.000	98	1521277	20.0	20.3	
69 2-Hexanone	43	18.106	18.106	0.000	94	2141170	20.0	26.0	
71 Chlorodibromomethane	129	18.443	18.443	0.000	98	1740127	20.0	21.8	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	1542523	20.0	22.2	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	88	1141553	10.0	10.0	
75 Chlorobenzene	112	19.609	19.614	-0.005	94	2412456	20.0	21.4	
76 Ethylbenzene	91	19.743	19.743	0.000	98	4195176	20.0	21.4	
77 n-Nonane	57	19.818	19.823	-0.005	91	2180400	20.0	20.8	
78 m-Xylene & p-Xylene	106	19.978	19.984	-0.006	0	3336666	40.0	43.6	
S 73 Xylenes, Total	106				0		60.0	65.1	
79 o-Xylene	106	20.754	20.754	0.000	99	1634755	20.0	21.5	
80 Styrene	104	20.797	20.797	0.000	98	2571227	20.0	23.1	
81 Bromoform	173	21.187	21.187	0.000	99	1671077	20.0	23.0	
82 Isopropylbenzene	105	21.358	21.358	0.000	96	4816154	20.0	21.6	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.958	-0.006	97	2531813	20.0	22.2	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	5890080	20.0	22.0	
86 1,2,3-Trichloropropane	75	22.054	22.059	-0.005	98	1919329	20.0	22.4	
87 n-Decane	57	22.166	22.166	0.000	90	2900965	20.0	22.3	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	4883630	20.0	22.5	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	4076800	20.0	22.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.305	22.305	0.000	94	4146275	20.0	22.3	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	90	2092094	20.0	24.6	
92 tert-Butylbenzene	119	22.782	22.781	0.001	94	3989949	20.0	22.1	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	97	4180050	20.0	22.9	
94 sec-Butylbenzene	105	23.097	23.097	0.000	98	5978937	20.0	22.0	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	97	5109131	20.0	23.0	
96 1,3-Dichlorobenzene	146	23.338	23.343	-0.005	97	2754500	20.0	24.7	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	2687746	20.0	25.5	
98 Benzyl chloride	91	23.686	23.686	0.000	99	3253202	20.0	26.4	
100 n-Butylbenzene	91	23.894	23.894	0.000	99	4683461	20.0	24.6	
99 Undecane	57	23.894	23.894	0.000	94	2615248	20.0	23.6	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	97	2605805	20.0	24.2	
102 Dodecane	57	25.579	25.585	-0.006	97	2084322	20.0	25.0	
103 1,2,4-Trichlorobenzene	180	26.719	26.724	-0.005	94	1375068	20.0	28.2	
104 Hexachlorobutadiene	225	26.911	26.917	-0.006	96	1625055	20.0	23.6	
105 Naphthalene	128	27.254	27.259	-0.005	100	2903470	20.0	29.2	
106 1,2,3-Trichlorobenzene	180	27.767	27.767	0.000	96	1150372	20.0	28.2	

Reagents:

ATTO15CAL6w_00145	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

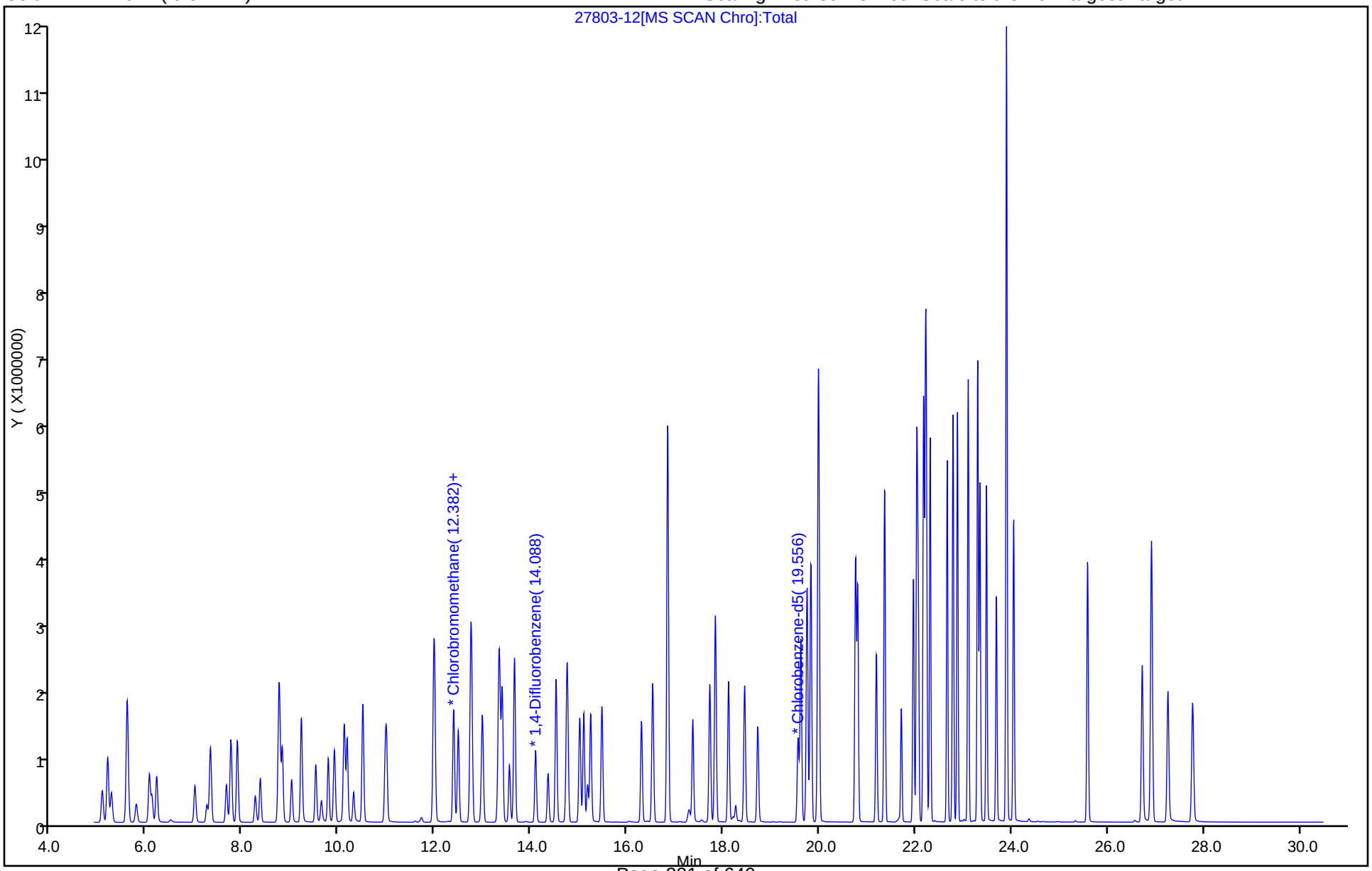
Report Date: 09-Nov-2017 12:51:08 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-12.d

Injection Date:	09-Nov-2017 00:30:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 09-Nov-2017 01:23:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-13
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:51:09 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:22:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.069	5.058	0.011	98	991803	40.0	33.6	
2 Dichlorodifluoromethane	85	5.181	5.176	0.005	99	3619859	40.0	34.3	
3 Chlorodifluoromethane	51	5.256	5.250	0.006	97	1950591	40.0	33.1	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.593	5.577	0.016	96	3682839	40.0	33.2	
5 Chloromethane	50	5.780	5.769	0.011	89	1114098	40.0	32.0	
6 Butane	43	6.053	6.042	0.011	98	2150043	40.0	32.2	
7 Vinyl chloride	62	6.101	6.096	0.005	98	1473181	40.0	31.8	
8 Butadiene	54	6.208	6.192	0.016	95	1139579	40.0	31.0	
9 BFB									
10 Bromomethane	94	7.000	6.994	0.006	99	1321365	40.0	34.6	
11 Chloroethane	64	7.251	7.241	0.010	99	789163	40.0	34.5	
12 2-Methylbutane	43	7.326	7.310	0.016	93	1598608	40.0	30.7	
13 Vinyl bromide	106	7.658	7.647	0.011	99	1418204	40.0	35.5	
14 Trichlorofluoromethane	101	7.749	7.738	0.011	98	3541389	40.0	34.4	
16 Pentane	43	7.883	7.877	0.006	97	2490602	40.0	32.6	
17 Ethanol	45	8.257	8.246	0.011	98	1518464	100.0	91.9	
18 Ethyl ether	59	8.364	8.353	0.011	95	1021104	40.0	33.1	
19 Acrolein	56	8.744	8.733	0.011	96	460385	40.0	36.5	
20 1,1,2-Trichloro-1,2,2-trif	101	8.755	8.744	0.011	99	2770746	40.0	34.8	
21 1,1-Dichloroethene	96	8.819	8.813	0.006	98	1370268	40.0	33.7	
22 Acetone	43	9.012	9.011	0.001	96	1967195	40.0	32.7	
23 Carbon disulfide	76	9.209	9.204	0.005	99	3647998	40.0	36.0	
24 Isopropyl alcohol	45	9.226	9.215	0.011	99	2612645	40.0	38.1	
25 3-Chloro-1-propene	41	9.514	9.509	0.005	93	1541707	40.0	29.9	
26 Acetonitrile	41	9.632	9.632	0.000	100	940230	40.0	36.2	
27 Methylene Chloride	49	9.777	9.771	0.006	93	1462875	40.0	32.7	
28 2-Methyl-2-propanol	59	9.905	9.894	0.011	93	3424622	40.0	40.6	
29 Methyl tert-butyl ether	73	10.108	10.108	0.000	97	4264135	40.0	34.2	
31 trans-1,2-Dichloroethene	61	10.167	10.161	0.006	99	1998735	40.0	34.9	
S 30 1,2-Dichloroethene, Total	61				0		80.0	69.4	
32 Acrylonitrile	53	10.306	10.301	0.005	96	972046	40.0	37.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.493	10.493	0.000	91	2354895	40.0	33.0	
34 1,1-Dichloroethane	63	10.964	10.959	0.005	99	2628566	40.0	32.0	
35 Vinyl acetate	43	10.991	10.985	0.006	100	3558259	40.0	34.2	
37 cis-1,2-Dichloroethene	96	11.965	11.959	0.006	96	1534842	40.0	34.5	
38 2-Butanone (MEK)	72	11.981	11.980	0.001	97	800399	40.0	37.3	
39 Ethyl acetate	88	11.997	11.986	0.011	97	127607	40.0	37.4	
41 Tetrahydrofuran	42	12.382	12.382	0.000	94	1756711	40.0	35.5	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	89	272102	10.0	10.0	
42 Chloroform	83	12.483	12.478	0.005	95	2924581	40.0	34.3	
43 Cyclohexane	84	12.740	12.740	0.000	98	2143368	40.0	36.6	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	94	2967746	40.0	36.3	
45 Carbon tetrachloride	117	12.981	12.981	0.000	98	3017669	40.0	36.1	
46 Isooctane	57	13.334	13.334	0.000	99	8029304	40.0	34.5	
47 Benzene	78	13.398	13.393	0.005	95	4814078	40.0	35.6	
48 1,2-Dichloroethane	62	13.548	13.543	0.006	97	1750069	40.0	35.0	
49 n-Heptane	43	13.650	13.650	0.000	91	2881032	40.0	32.7	
* 50 1,4-Difluorobenzene	114	14.094	14.088	0.006	94	1381818	10.0	10.0	
52 n-Butanol	56	14.351	14.350	0.001	88	1083615	40.0	43.5	
53 Trichloroethene	95	14.516	14.516	0.000	98	2014843	40.0	35.5	
A 51 GRO	1	14.738	(7.300-22.176)		0	598657874	40.0	0	
54 1,2-Dichloropropane	63	15.009	15.008	0.001	95	1827906	40.0	35.0	
55 Methyl methacrylate	69	15.094	15.094	0.000	98	1809788	40.0	38.7	
56 1,4-Dioxane	88	15.174	15.174	0.000	94	1074098	40.0	43.3	
57 Dibromomethane	174	15.239	15.238	0.001	95	1953760	40.0	40.1	
58 Dichlorobromomethane	83	15.474	15.468	0.006	98	3287839	40.0	36.5	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	91	2623700	40.0	38.4	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	975153909	40.0	9190.6	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	95	3735698	40.0	36.4	
64 n-Octane	43	16.843	16.838	0.005	90	3948653	40.0	31.5	
65 Toluene	92	16.843	16.838	0.005	95	3545183	40.0	36.0	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	95	2527874	40.0	39.9	
67 1,1,2-Trichloroethane	83	17.721	17.715	0.006	95	1711702	40.0	35.7	
68 Tetrachloroethene	166	17.833	17.833	0.000	98	2994541	40.0	35.6	
69 2-Hexanone	43	18.106	18.106	0.000	95	3532538	40.0	38.3	
71 Chlorodibromomethane	129	18.443	18.443	0.000	98	3330099	40.0	37.1	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	3038576	40.0	38.9	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	85	1280742	10.0	10.0	
75 Chlorobenzene	112	19.615	19.614	0.001	95	4615680	40.0	36.6	
76 Ethylbenzene	91	19.743	19.743	0.000	97	7659048	40.0	34.9	
77 n-Nonane	57	19.823	19.823	0.000	89	3947714	40.0	33.5	
78 m-Xylene & p-Xylene	106	19.984	19.984	0.000	0	6198899	80.0	72.3	
S 73 Xylenes, Total	106				0		120.0	108.4	
79 o-Xylene	106	20.754	20.754	0.000	100	3088247	40.0	36.2	
80 Styrene	104	20.797	20.797	0.000	97	4841329	40.0	38.8	
81 Bromoform	173	21.187	21.187	0.000	99	3029964	40.0	37.2	
82 Isopropylbenzene	105	21.359	21.358	0.001	96	8360392	40.0	33.4	
84 1,1,2,2-Tetrachloroethane	83	21.958	21.958	0.000	98	4532250	40.0	35.5	
85 N-Propylbenzene	91	22.027	22.027	0.000	98	9672645	40.0	32.2	
86 1,2,3-Trichloropropane	75	22.059	22.059	0.000	98	3453076	40.0	36.0	
87 n-Decane	57	22.166	22.166	0.000	91	5012527	40.0	34.4	
88 4-Ethyltoluene	105	22.204	22.204	0.000	96	8256743	40.0	34.0	
89 2-Chlorotoluene	91	22.225	22.225	0.000	97	7187286	40.0	34.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.306	22.305	0.001	95	7115564	40.0	34.0	
91 Alpha Methyl Styrene	118	22.659	22.658	0.001	90	3845094	40.0	40.3	
92 tert-Butylbenzene	119	22.782	22.781	0.001	95	6909708	40.0	34.1	
93 1,2,4-Trimethylbenzene	105	22.873	22.872	0.001	96	7083445	40.0	34.6	
94 sec-Butylbenzene	105	23.097	23.097	0.000	96	9561779	40.0	31.3	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	95	8342529	40.0	33.5	
96 1,3-Dichlorobenzene	146	23.338	23.343	-0.005	97	5025038	40.0	40.2	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	95	4955074	40.0	42.0	
98 Benzyl chloride	91	23.686	23.686	0.000	99	5847191	40.0	42.2	
99 Undecane	57	23.900	23.894	0.006	92	4283517	40.0	34.5	
100 n-Butylbenzene	91	23.894	23.894	0.000	98	7584023	40.0	35.5	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	98	4711395	40.0	39.0	
102 Dodecane	57	25.585	25.585	0.000	98	3604108	40.0	38.5	
103 1,2,4-Trichlorobenzene	180	26.719	26.724	-0.005	93	2602373	40.0	47.6	
104 Hexachlorobutadiene	225	26.917	26.917	0.000	96	2987596	40.0	38.7	
105 Naphthalene	128	27.254	27.259	-0.005	99	5355448	40.0	48.0	
106 1,2,3-Trichlorobenzene	180	27.768	27.767	0.001	95	2084508	40.0	45.5	

Reagents:

ATTO15CAL7w_00072	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

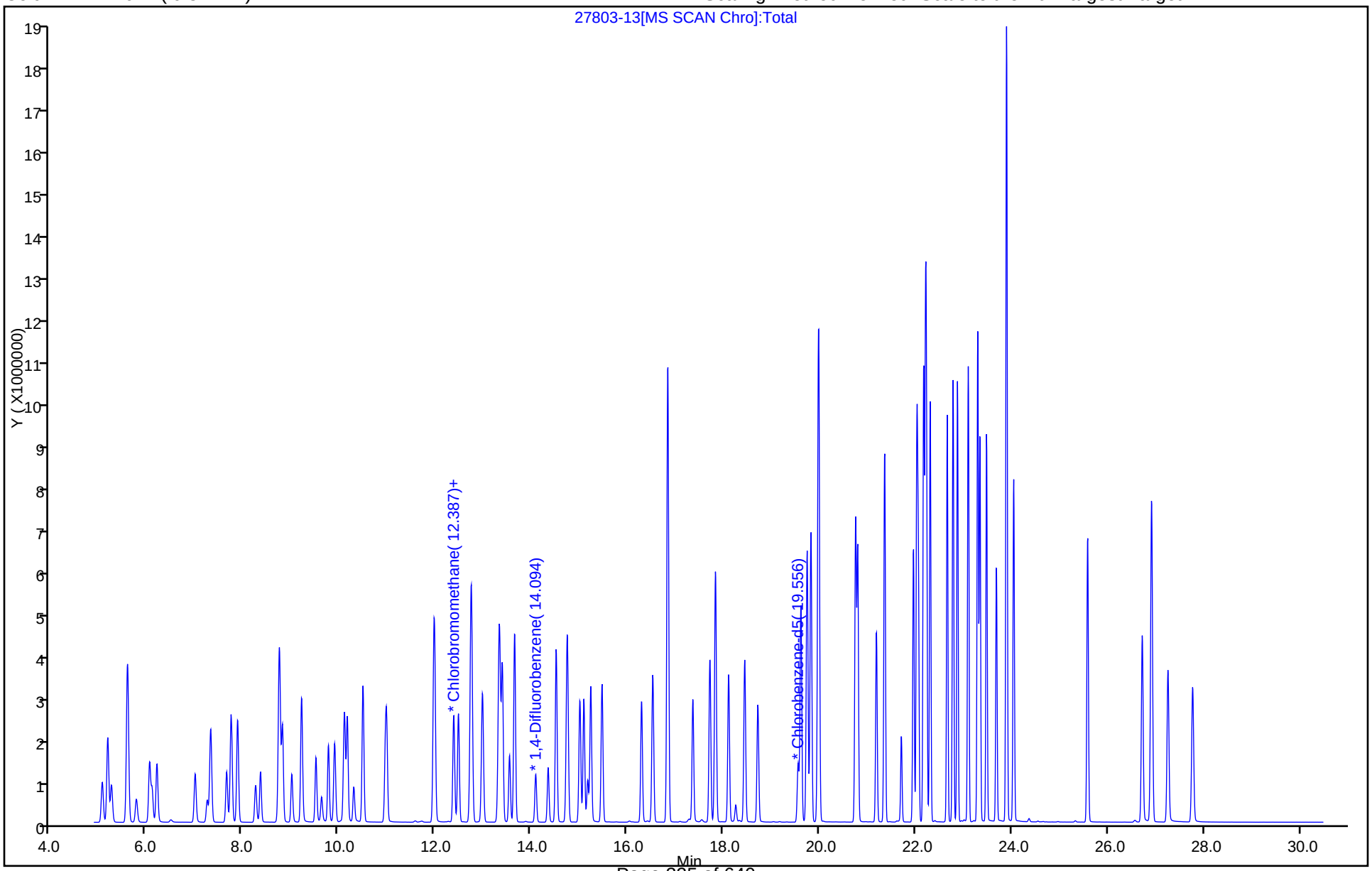
Report Date: 09-Nov-2017 12:51:10 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Injection Date:	09-Nov-2017 01:23:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	13
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: ICV 200-122801/16 Calibration Date: 11/01/2017 05:07

Instrument ID: CHG.i Calib Start Date: 10/31/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/01/2017 01:45

Lab File ID: 200-27684-016.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.4167	0.3890		9.34	10.0	-6.6	30.0
Dichlorodifluoromethane	Ave	2.678	2.594		9.69	10.0	-3.1	30.0
Freon 22	Ave	1.174	1.107		9.43	10.0	-5.7	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.114	2.232		10.6	10.0	5.6	30.0
Chloromethane	Ave	0.5501	0.4952		9.00	10.0	-10.0	30.0
n-Butane	Ave	0.7533	0.7070		9.38	10.0	-6.1	30.0
Vinyl chloride	Ave	0.6557	0.6085		9.28	10.0	-7.2	30.0
1,3-Butadiene	Ave	0.4151	0.3816		9.19	10.0	-8.1	30.0
Bromomethane	Ave	0.7920	0.7557		9.54	10.0	-4.6	30.0
Chloroethane	Ave	0.2477	0.2336		9.43	10.0	-5.7	30.0
Isopentane	Ave	0.4720	0.4608		9.76	10.0	-2.4	30.0
Bromoethene(Vinyl Bromide)	Ave	0.8075	0.7734		9.58	10.0	-4.2	30.0
Trichlorofluoromethane	Ave	2.366	2.230		9.42	10.0	-5.8	30.0
n-Pentane	Ave	0.6865	0.6990		10.2	10.0	1.8	30.0
Ethanol	Ave	0.1787	0.1390		11.7	15.0	-22.2	30.0
Ethyl ether	Ave	0.2948	0.3282		11.1	10.0	11.3	30.0
Freon TF	Ave	1.559	1.525		9.78	10.0	-2.2	30.0
Acrolein	Ave	0.0955	0.1299		13.6	10.0	35.9*	30.0
1,1-Dichloroethene	Ave	0.6798	0.6411		9.43	10.0	-5.7	30.0
Acetone	Ave	0.6677	0.6372		9.54	10.0	-4.6	30.0
Carbon disulfide	Ave	1.700	1.903		11.2	10.0	11.9	30.0
Isopropyl alcohol	Ave	0.6479	0.4676		7.22	10.0	-27.8	30.0
3-Chloropropene	Ave	0.5580	0.4923		8.82	10.0	-11.8	30.0
Acetonitrile	Ave	0.2362	0.2228		9.43	10.0	-5.7	30.0
Methylene Chloride	Ave	0.6185	0.5943		9.61	10.0	-3.9	30.0
tert-Butyl alcohol	Ave	1.033	0.8301		8.03	10.0	-19.7	30.0
Methyl tert-butyl ether	Ave	1.566	1.580		10.1	10.0	0.9	30.0
trans-1,2-Dichloroethene	Ave	0.8422	0.8618		10.2	10.0	2.3	30.0
Acrylonitrile	Ave	0.2570	0.2696		10.5	10.0	4.9	30.0
n-Hexane	Ave	0.6771	0.7041		10.4	10.0	4.0	30.0
1,1-Dichloroethane	Ave	1.137	1.123		9.87	10.0	-1.2	30.0
Vinyl acetate	Ave	0.9943	1.060		10.7	10.0	6.6	30.0
cis-1,2-Dichloroethene	Ave	0.8454	0.7924		9.37	10.0	-6.3	30.0
Methyl Ethyl Ketone	Ave	0.2374	0.2349		9.89	10.0	-1.1	30.0
Ethyl acetate	Ave	0.0352	0.0393		11.2	10.0	11.8	30.0
Tetrahydrofuran	Ave	0.0963	0.0938		9.74	10.0	-2.6	30.0
Chloroform	Ave	1.910	1.881		9.84	10.0	-1.6	30.0
Cyclohexane	Ave	0.1812	0.1809		9.98	10.0	-0.2	30.0
1,1,1-Trichloroethane	Ave	0.4389	0.4269		9.72	10.0	-2.7	30.0
Carbon tetrachloride	Ave	0.4771	0.4938		10.3	10.0	3.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: ICV 200-122801/16 Calibration Date: 11/01/2017 05:07

Instrument ID: CHG.i Calib Start Date: 10/31/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/01/2017 01:45

Lab File ID: 200-27684-016.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.6359	0.6158		9.68	10.0	-3.2	30.0
Benzene	Ave	0.5031	0.4656		9.25	10.0	-7.5	30.0
1,2-Dichloroethane	Ave	0.2918	0.2763		9.47	10.0	-5.3	30.0
n-Heptane	Ave	0.2430	0.2299		9.46	10.0	-5.4	30.0
n-Butanol	Ave	0.0702	0.0607		8.65	10.0	-13.4	30.0
Trichloroethene	Ave	0.2968	0.3010		10.1	10.0	1.4	30.0
1,2-Dichloropropane	Ave	0.2090	0.1997		9.55	10.0	-4.5	30.0
Methyl methacrylate	Ave	0.1459	0.1590		10.9	10.0	9.0	30.0
Dibromomethane	Ave	0.2974	0.2932		9.86	10.0	-1.4	30.0
1,4-Dioxane	Ave	0.0929	0.0676		7.27	10.0	-27.2	30.0
Bromodichloromethane	Ave	0.5080	0.5080		10.0	10.0	0.0	30.0
cis-1,3-Dichloropropene	Ave	0.3279	0.3320		10.1	10.0	1.2	30.0
Methyl isobutyl ketone	Ave	0.3009	0.2981		9.91	10.0	-0.9	30.0
Toluene	Ave	0.4506	0.4470		9.92	10.0	-0.8	30.0
n-Octane	Ave	0.3659	0.3511		9.59	10.0	-4.0	30.0
trans-1,3-Dichloropropene	Ave	0.3447	0.3458		10.0	10.0	0.3	30.0
1,1,2-Trichloroethane	Ave	0.2499	0.2471		9.89	10.0	-1.1	30.0
Tetrachloroethene	Ave	0.4864	0.4857		9.98	10.0	-0.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.3224	0.3162		9.81	10.0	-1.9	30.0
Dibromochloromethane	Ave	0.6011	0.6040		10.0	10.0	0.5	30.0
1,2-Dibromoethane	Ave	0.4726	0.4907		10.4	10.0	3.8	30.0
Chlorobenzene	Ave	0.6235	0.6266		10.0	10.0	0.5	30.0
Ethylbenzene	Ave	0.9164	0.9312		10.2	10.0	1.6	30.0
n-Nonane	Ave	0.3701	0.3687		9.96	10.0	-0.4	30.0
m,p-Xylene	Ave	0.3671	0.3740		20.4	20.0	1.9	30.0
Xylene, o-	Ave	0.3762	0.3803		10.1	10.0	1.1	30.0
Styrene	Ave	0.4995	0.5471		11.0	10.0	9.5	30.0
Bromoform	Ave	0.5369	0.5813		10.8	10.0	8.3	30.0
Cumene	Ave	1.008	1.019		10.1	10.0	1.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5550	0.5703		10.3	10.0	2.8	30.0
n-Propylbenzene	Ave	1.139	1.177		10.3	10.0	3.3	30.0
1,2,3-Trichloropropane	Ave	0.4308	0.4191		9.73	10.0	-2.7	30.0
n-Decane	Ave	0.3521	0.3700		10.5	10.0	5.1	30.0
2-Chlorotoluene	Ave	0.8102	0.8254		10.2	10.0	1.9	30.0
4-Ethyltoluene	Ave	0.8759	0.9690		11.1	10.0	10.6	30.0
1,3,5-Trimethylbenzene	Ave	0.7960	0.8198		10.3	10.0	3.0	30.0
Alpha Methyl Styrene	Ave	0.3703	0.4234		11.4	10.0	14.3	30.0
tert-Butylbenzene	Ave	0.7598	0.7753		10.2	10.0	2.0	30.0
1,2,4-Trimethylbenzene	Ave	0.7715	0.8081		10.5	10.0	4.7	30.0
sec-Butylbenzene	Ave	1.089	1.135		10.4	10.0	4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: ICV 200-122801/16 Calibration Date: 11/01/2017 05:07

Instrument ID: CHG.i Calib Start Date: 10/31/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/01/2017 01:45

Lab File ID: 200-27684-016.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8772	0.9500		10.8	10.0	8.3	30.0
1,3-Dichlorobenzene	Ave	0.5957	0.6503		10.9	10.0	9.2	30.0
1,4-Dichlorobenzene	Ave	0.5925	0.6392		10.8	10.0	7.9	30.0
Benzyl chloride	Ave	0.6439	0.6755		10.5	10.0	4.9	30.0
n-Butylbenzene	Ave	0.7712	0.8236		10.7	10.0	6.8	30.0
n-Undecane	Ave	0.3741	0.3527		9.43	10.0	-5.7	30.0
1,2-Dichlorobenzene	Ave	0.5578	0.5853		10.5	10.0	4.9	30.0
n-Dodecane	Ave	0.2660	0.2553		9.60	10.0	-4.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3306	0.2941		8.89	10.0	-11.0	30.0
Hexachlorobutadiene	Ave	0.3440	0.3234		9.40	10.0	-6.0	30.0
Naphthalene	Ave	0.6069	0.5005		8.25	10.0	-17.5	30.0
1,2,3-Trichlorobenzene	Ave	0.2729	0.2327		8.52	10.0	-14.7	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-016.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 01-Nov-2017 05:07:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-016
Operator ID: vtp Instrument ID: CHG.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:35 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 10:25:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.128	-0.006	97	185631	10.0	9.34	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	1237730	10.0	9.69	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	528007	10.0	9.43	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.395	-0.005	90	1064926	10.0	10.6	
5 Chloromethane	50	3.508	3.513	-0.005	99	236298	10.0	9.00	
6 Butane	43	3.663	3.668	-0.005	96	337343	10.0	9.38	
7 Vinyl chloride	62	3.700	3.705	-0.005	98	290336	10.0	9.28	
8 Butadiene	54	3.759	3.764	-0.005	93	182080	10.0	9.19	
10 Bromomethane	94	4.310	4.310	0.000	98	360580	10.0	9.54	
11 Chloroethane	64	4.492	4.492	0.000	98	111458	10.0	9.43	
12 2-Methylbutane	43	4.545	4.540	0.005	87	219854	10.0	9.76	
13 Vinyl bromide	106	4.808	4.813	-0.005	98	369018	10.0	9.58	
14 Trichlorofluoromethane	101	4.882	4.882	0.000	99	1063831	10.0	9.42	
16 Pentane	43	4.989	4.989	0.000	98	333551	10.0	10.2	
17 Ethanol	45	5.359	5.359	0.000	96	99497	15.0	11.7	
18 Ethyl ether	59	5.428	5.428	0.000	95	156598	10.0	11.1	
20 1,1,2-Trichloro-1,2,2-trif	101	5.760	5.760	0.000	95	727445	10.0	9.78	
19 Acrolein	56	5.770	5.770	0.000	95	61971	10.0	13.6	
21 1,1-Dichloroethene	96	5.819	5.819	0.000	97	305884	10.0	9.43	
9 BFB									
22 Acetone	43	6.043	6.049	-0.006	99	304023	10.0	9.54	
23 Carbon disulfide	76	6.182	6.188	-0.006	99	908139	10.0	11.2	
24 Isopropyl alcohol	45	6.279	6.279	0.000	100	223124	10.0	7.22	
25 3-Chloro-1-propene	41	6.498	6.498	0.000	94	234899	10.0	8.82	
26 Acetonitrile	41	6.642	6.642	0.000	98	106327	10.0	9.43	
27 Methylene Chloride	49	6.755	6.755	0.000	87	283589	10.0	9.61	
28 2-Methyl-2-propanol	59	6.974	6.974	0.000	94	396071	10.0	8.03	
29 Methyl tert-butyl ether	73	7.135	7.135	0.000	94	753816	10.0	10.1	
31 trans-1,2-Dichloroethene	61	7.145	7.151	-0.006	93	411209	10.0	10.2	
32 Acrylonitrile	53	7.317	7.311	0.006	93	128643	10.0	10.5	
33 Hexane	57	7.482	7.488	-0.006	90	335941	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	7.953	7.953	0.000	99	535834	10.0	9.87	
35 Vinyl acetate	43	8.017	8.017	0.000	100	505743	10.0	10.7	
37 cis-1,2-Dichloroethene	96	8.980	8.980	0.000	89	378091	10.0	9.37	
38 2-Butanone (MEK)	72	9.055	9.055	0.000	98	112065	10.0	9.89	
39 Ethyl acetate	88	9.077	9.077	0.000	99	18764	10.0	11.2	
* 40 Chlorobromomethane	128	9.424	9.424	0.000	73	477245	10.0	10.0	
41 Tetrahydrofuran	42	9.462	9.467	-0.005	84	229181	10.0	9.74	
42 Chloroform	83	9.537	9.537	0.000	95	897283	10.0	9.84	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.6	
43 Cyclohexane	84	9.772	9.772	0.000	94	442081	10.0	9.98	
44 1,1,1-Trichloroethane	97	9.804	9.804	0.000	94	1043146	10.0	9.72	
45 Carbon tetrachloride	117	10.040	10.045	-0.005	97	1206765	10.0	10.3	
46 Isooctane	57	10.446	10.451	-0.005	98	1504729	10.0	9.68	
47 Benzene	78	10.500	10.500	0.000	95	1137840	10.0	9.25	
48 1,2-Dichloroethane	62	10.681	10.682	-0.001	99	675113	10.0	9.47	
49 n-Heptane	43	10.826	10.826	0.000	90	561830	10.0	9.46	
* 50 1,4-Difluorobenzene	114	11.318	11.318	0.000	93	2444162	10.0	10.0	
52 n-Butanol	56	11.751	11.757	-0.006	89	148412	10.0	8.65	
53 Trichloroethene	95	11.778	11.778	0.000	99	735564	10.0	10.1	
54 1,2-Dichloropropane	63	12.335	12.340	-0.005	88	487986	10.0	9.55	
A 51 GRO	1	12.420	(4.530-20.310)		0	160775356	10.0	0	
55 Methyl methacrylate	69	12.511	12.511	0.000	96	388605	10.0	10.9	
57 Dibromomethane	174	12.586	12.586	0.000	97	716359	10.0	9.86	
56 1,4-Dioxane	88	12.591	12.591	0.000	87	165250	10.0	7.27	
58 Dichlorobromomethane	83	12.870	12.870	0.000	98	1241474	10.0	10.0	
60 cis-1,3-Dichloropropene	75	13.790	13.790	0.000	92	811321	10.0	10.1	
61 4-Methyl-2-pentanone (MIBK	43	14.105	14.111	-0.006	96	728512	10.0	9.91	
A 59 TVOC as Toluene	92	14.338	(3.118-25.558)		0	243336401	10.0	0	
A 63 Toluene Range	92	14.373	(14.333-14.413)		0	3888000	NC	NC	
65 Toluene	92	14.367	14.373	-0.006	94	976717	10.0	9.92	
A 62 C8 Range	1	14.438	(14.371-14.471)		0	3617570	NC	NC	
64 n-Octane	43	14.421	14.421	0.000	89	858015	10.0	9.59	
66 trans-1,3-Dichloropropene	75	14.972	14.972	0.000	96	845133	10.0	10.0	
67 1,1,2-Trichloroethane	83	15.346	15.341	0.005	97	539811	10.0	9.89	
68 Tetrachloroethene	166	15.432	15.432	0.000	97	1061132	10.0	9.98	
69 2-Hexanone	43	15.828	15.828	0.000	95	690785	10.0	9.81	
71 Chlorodibromomethane	129	16.101	16.101	0.000	97	1319609	10.0	10.0	
72 Ethylene Dibromide	107	16.374	16.374	0.000	99	1072149	10.0	10.4	
* 74 Chlorobenzene-d5	117	17.272	17.272	0.000	84	2185387	10.0	10.0	
75 Chlorobenzene	112	17.337	17.337	0.000	96	1369135	10.0	10.0	
76 Ethylbenzene	91	17.492	17.492	0.000	98	2034685	10.0	10.2	
77 n-Nonane	57	17.620	17.625	-0.005	87	805542	10.0	9.96	
78 m-Xylene & p-Xylene	106	17.748	17.748	0.000	0	1634426	20.0	20.4	
79 o-Xylene	106	18.599	18.599	0.000	99	830837	10.0	10.1	
80 Styrene	104	18.658	18.658	0.000	97	1195278	10.0	11.0	
81 Bromoform	173	19.102	19.107	-0.005	97	1270119	10.0	10.8	
82 Isopropylbenzene	105	19.337	19.337	0.000	96	2226947	10.0	10.1	
S 73 Xylenes, Total	106				0		30.0	30.5	
* 83 4-Bromofluorobenzene	95	19.722	19.728	-0.006	97	1500051	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.038	20.038	0.000	99	1246048	10.0	10.3	
85 N-Propylbenzene	91	20.102	20.102	0.000	99	2572442	10.0	10.3	
86 1,2,3-Trichloropropane	75	20.134	20.134	0.000	97	915653	10.0	9.73	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57	20.300	20.300	0.000	93	808402	10.0	10.5	
88 4-Ethyltoluene	105	20.306	20.306	0.000	90	2117109	10.0	11.1	
89 2-Chlorotoluene	91	20.306	20.306	0.000	90	1803426	10.0	10.2	
90 1,3,5-Trimethylbenzene	105	20.418	20.418	0.000	93	1791275	10.0	10.3	
91 Alpha Methyl Styrene	118	20.803	20.803	0.000	92	925032	10.0	11.4	
92 tert-Butylbenzene	119	20.926	20.926	0.000	92	1694029	10.0	10.2	
93 1,2,4-Trimethylbenzene	105	21.028	21.028	0.000	97	1765736	10.0	10.5	
94 sec-Butylbenzene	105	21.263	21.263	0.000	99	2479396	10.0	10.4	
95 4-Isopropyltoluene	119	21.477	21.477	0.000	98	2075629	10.0	10.8	
96 1,3-Dichlorobenzene	146	21.493	21.493	0.000	96	1420852	10.0	10.9	
97 1,4-Dichlorobenzene	146	21.632	21.638	-0.006	96	1396721	10.0	10.8	
98 Benzyl chloride	91	21.841	21.846	-0.005	99	1475985	10.0	10.5	
100 n-Butylbenzene	91	22.055	22.055	0.000	99	1799608	10.0	10.7	
99 Undecane	57	22.092	22.092	0.000	94	770726	10.0	9.43	
101 1,2-Dichlorobenzene	146	22.167	22.167	0.000	97	1278745	10.0	10.5	
102 Dodecane	57	23.655	23.655	0.000	98	557904	10.0	9.60	
103 1,2,4-Trichlorobenzene	180	24.617	24.617	0.000	94	642639	10.0	8.89	
104 Hexachlorobutadiene	225	24.799	24.799	0.000	97	706617	10.0	9.40	
105 Naphthalene	128	25.088	25.088	0.000	99	1093573	10.0	8.25	
106 1,2,3-Trichlorobenzene	180	25.543	25.548	-0.005	95	508433	10.0	8.52	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00707	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

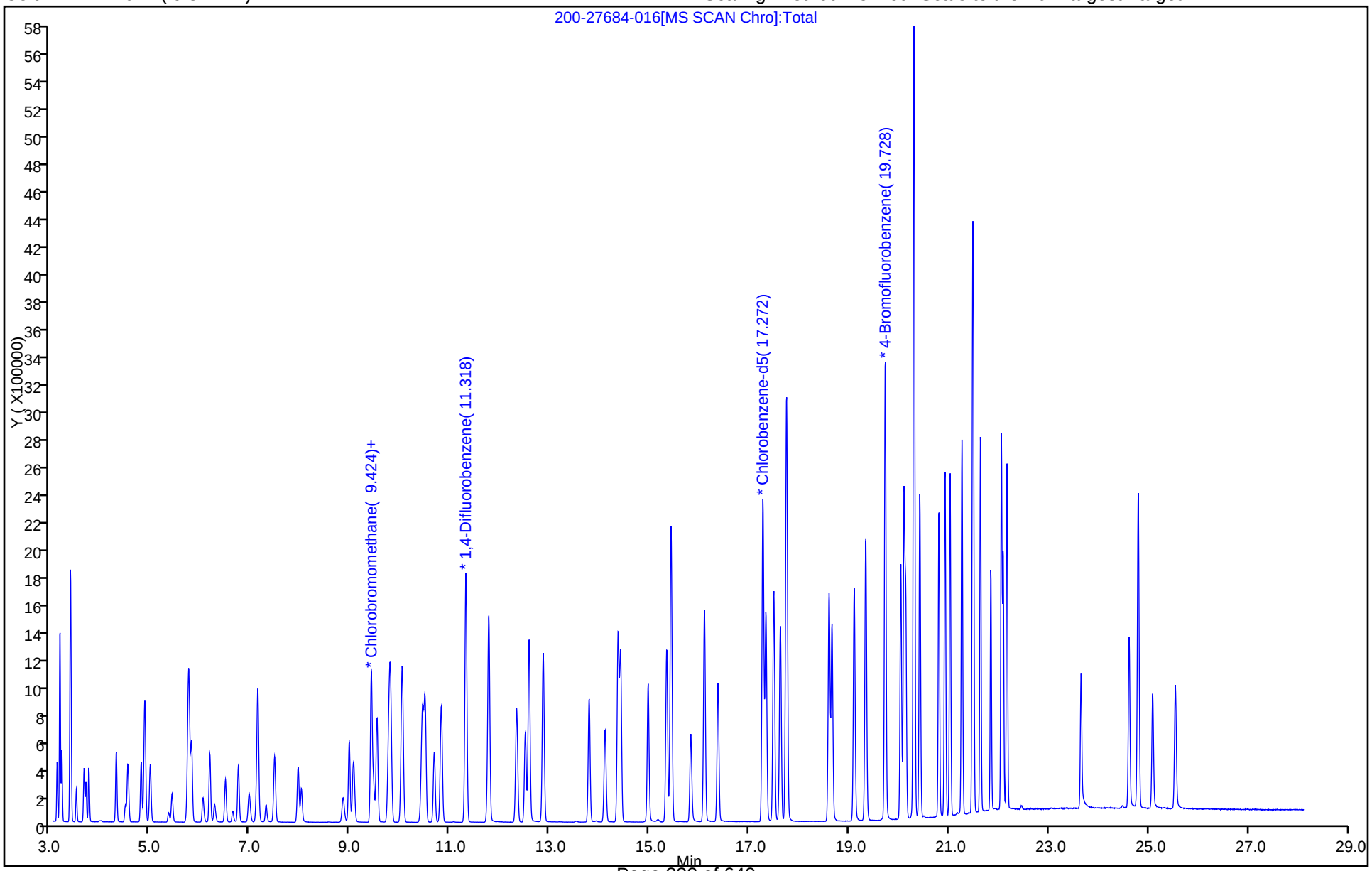
Report Date: 01-Nov-2017 10:59:49 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-016.D

Injection Date:	01-Nov-2017 05:07:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	icv			Worklist Smp#:	16
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: CCVIS 200-123382/2 Calibration Date: 11/15/2017 11:54

Instrument ID: CHG.i Calib Start Date: 10/31/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/01/2017 01:45

Lab File ID: 200-27906-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.4167	0.4928		11.8	10.0	18.3	30.0
Dichlorodifluoromethane	Ave	2.678	2.868		10.7	10.0	7.1	30.0
Freon 22	Ave	1.174	1.304		11.1	10.0	11.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.114	2.216		10.5	10.0	4.8	30.0
Chloromethane	Ave	0.5501	0.6062		11.0	10.0	10.2	30.0
n-Butane	Ave	0.7533	0.8677		11.5	10.0	15.2	30.0
Vinyl chloride	Ave	0.6557	0.7259		11.1	10.0	10.7	30.0
1,3-Butadiene	Ave	0.4151	0.4716		11.4	10.0	13.6	30.0
Bromomethane	Ave	0.7920	0.8487		10.7	10.0	7.2	30.0
Chloroethane	Ave	0.2477	0.2832		11.4	10.0	14.4	30.0
Isopentane	Ave	0.4720	0.5273		11.2	10.0	11.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.8075	0.8624		10.7	10.0	6.8	30.0
Trichlorofluoromethane	Ave	2.366	2.486		10.5	10.0	5.1	30.0
n-Pentane	Ave	0.6865	0.8016		11.7	10.0	16.8	30.0
Ethanol	Ave	0.1787	0.1948		16.4	15.0	9.0	30.0
Ethyl ether	Ave	0.2948	0.3437		11.7	10.0	16.6	30.0
Freon TF	Ave	1.559	1.638		10.5	10.0	5.1	30.0
Acrolein	Ave	0.0955	0.1201		12.6	10.0	25.7	30.0
1,1-Dichloroethene	Ave	0.6798	0.7166		10.5	10.0	5.4	30.0
Acetone	Ave	0.6677	0.7952		11.9	10.0	19.1	30.0
Carbon disulfide	Ave	1.700	1.859		10.9	10.0	9.3	30.0
Isopropyl alcohol	Ave	0.6479	0.7493		11.6	10.0	15.6	30.0
3-Chloropropene	Ave	0.5580	0.6169		11.1	10.0	10.5	30.0
Acetonitrile	Ave	0.2362	0.2740		11.6	10.0	16.0	30.0
Methylene Chloride	Ave	0.6185	0.6975		11.3	10.0	12.8	30.0
tert-Butyl alcohol	Ave	1.033	1.166		11.3	10.0	12.9	30.0
Methyl tert-butyl ether	Ave	1.566	1.771		11.3	10.0	13.1	30.0
trans-1,2-Dichloroethene	Ave	0.8422	0.9396		11.2	10.0	11.6	30.0
Acrylonitrile	Ave	0.2570	0.3015		11.7	10.0	17.3	30.0
n-Hexane	Ave	0.6771	0.7594		11.2	10.0	12.1	30.0
1,1-Dichloroethane	Ave	1.137	1.268		11.1	10.0	11.5	30.0
Vinyl acetate	Ave	0.9943	1.184		11.9	10.0	19.1	30.0
cis-1,2-Dichloroethene	Ave	0.8454	0.8748		10.3	10.0	3.5	30.0
Methyl Ethyl Ketone	Ave	0.2374	0.2710		11.4	10.0	14.2	30.0
Ethyl acetate	Ave	0.0352	0.0408		11.6	10.0	16.0	30.0
Tetrahydrofuran	Ave	0.0963	0.1087		11.3	10.0	12.9	30.0
Chloroform	Ave	1.910	2.040		10.7	10.0	6.8	30.0
Cyclohexane	Ave	0.1812	0.1887		10.4	10.0	4.1	30.0
1,1,1-Trichloroethane	Ave	0.4389	0.4388		10.0	10.0	-0.0	30.0
Carbon tetrachloride	Ave	0.4771	0.4926		10.3	10.0	3.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: CCVIS 200-123382/2 Calibration Date: 11/15/2017 11:54

Instrument ID: CHG.i Calib Start Date: 10/31/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/01/2017 01:45

Lab File ID: 200-27906-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.6359	0.6646		10.4	10.0	4.5	30.0
Benzene	Ave	0.5031	0.5022		9.98	10.0	-0.2	30.0
1,2-Dichloroethane	Ave	0.2918	0.3022		10.4	10.0	3.6	30.0
n-Heptane	Ave	0.2430	0.2529		10.4	10.0	4.1	30.0
n-Butanol	Ave	0.0702	0.0723		10.3	10.0	3.0	30.0
Trichloroethene	Ave	0.2968	0.3011		10.1	10.0	1.5	30.0
1,2-Dichloropropane	Ave	0.2090	0.2089		9.99	10.0	-0.0	30.0
Methyl methacrylate	Ave	0.1459	0.1590		10.9	10.0	9.0	30.0
Dibromomethane	Ave	0.2974	0.2809		9.44	10.0	-5.5	30.0
1,4-Dioxane	Ave	0.0929	0.0965		10.4	10.0	3.8	30.0
Bromodichloromethane	Ave	0.5080	0.5237		10.3	10.0	3.1	30.0
cis-1,3-Dichloropropene	Ave	0.3279	0.3350		10.2	10.0	2.1	30.0
Methyl isobutyl ketone	Ave	0.3009	0.3326		11.1	10.0	10.5	30.0
Toluene	Ave	0.4506	0.4567		10.1	10.0	1.3	30.0
n-Octane	Ave	0.3659	0.3743		10.2	10.0	2.3	30.0
trans-1,3-Dichloropropene	Ave	0.3447	0.3505		10.2	10.0	1.7	30.0
1,1,2-Trichloroethane	Ave	0.2499	0.2536		10.1	10.0	1.5	30.0
Tetrachloroethene	Ave	0.4864	0.4644		9.54	10.0	-4.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.3224	0.3518		10.9	10.0	9.1	30.0
Dibromochloromethane	Ave	0.6011	0.6241		10.4	10.0	3.8	30.0
1,2-Dibromoethane	Ave	0.4726	0.4840		10.2	10.0	2.4	30.0
Chlorobenzene	Ave	0.6235	0.6197		9.94	10.0	-0.6	30.0
Ethylbenzene	Ave	0.9164	0.9414		10.3	10.0	2.7	30.0
n-Nonane	Ave	0.3701	0.3745		10.1	10.0	1.2	30.0
m,p-Xylene	Ave	0.3671	0.3744		20.4	20.0	2.0	30.0
Xylene, o-	Ave	0.3762	0.3848		10.2	10.0	2.3	30.0
Styrene	Ave	0.4995	0.5394		10.8	10.0	8.0	30.0
Bromoform	Ave	0.5369	0.5475		10.2	10.0	2.0	30.0
Cumene	Ave	1.008	1.039		10.3	10.0	3.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5550	0.5688		10.2	10.0	2.5	30.0
n-Propylbenzene	Ave	1.139	1.203		10.6	10.0	5.6	30.0
1,2,3-Trichloropropane	Ave	0.4308	0.4365		10.1	10.0	1.3	30.0
n-Decane	Ave	0.3521	0.3817		10.8	10.0	8.4	30.0
2-Chlorotoluene	Ave	0.8102	0.8562		10.6	10.0	5.7	30.0
4-Ethyltoluene	Ave	0.8759	0.9728		11.1	10.0	11.1	30.0
1,3,5-Trimethylbenzene	Ave	0.7960	0.8256		10.4	10.0	3.7	30.0
Alpha Methyl Styrene	Ave	0.3703	0.4111		11.1	10.0	11.0	30.0
tert-Butylbenzene	Ave	0.7598	0.7816		10.3	10.0	2.9	30.0
1,2,4-Trimethylbenzene	Ave	0.7715	0.8203		10.6	10.0	6.3	30.0
sec-Butylbenzene	Ave	1.089	1.156		10.6	10.0	6.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: CCVIS 200-123382/2 Calibration Date: 11/15/2017 11:54

Instrument ID: CHG.i Calib Start Date: 10/31/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/01/2017 01:45

Lab File ID: 200-27906-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.8772	0.9724		11.1	10.0	10.9	30.0
1,3-Dichlorobenzene	Ave	0.5957	0.6375		10.7	10.0	7.0	30.0
1,4-Dichlorobenzene	Ave	0.5925	0.6264		10.6	10.0	5.7	30.0
Benzyl chloride	Ave	0.6439	0.7542		11.7	10.0	17.1	30.0
n-Butylbenzene	Ave	0.7712	0.8512		11.0	10.0	10.4	30.0
n-Undecane	Ave	0.3741	0.3564		9.52	10.0	-4.7	30.0
1,2-Dichlorobenzene	Ave	0.5578	0.5729		10.3	10.0	2.7	30.0
n-Dodecane	Ave	0.2660	0.2495		9.38	10.0	-6.2	30.0
1,2,4-Trichlorobenzene	Ave	0.3306	0.2843		8.60	10.0	-14.0	30.0
Hexachlorobutadiene	Ave	0.3440	0.3045		8.85	10.0	-11.5	30.0
Naphthalene	Ave	0.6069	0.5371		8.85	10.0	-11.5	30.0
1,2,3-Trichlorobenzene	Ave	0.2729	0.2246		8.23	10.0	-17.7	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-002.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 15-Nov-2017 11:54:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027906-002
Operator ID: vtp Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Nov-2017 12:45:35 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bunmaa Date: 16-Nov-2017 12:45:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.128	0.000	97	199877	10.0	11.8	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	1163260	10.0	10.7	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	529047	10.0	11.1	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	98	898568	10.0	10.5	
5 Chloromethane	50	3.508	3.508	0.000	99	245876	10.0	11.0	
6 Butane	43	3.663	3.663	0.000	96	351906	10.0	11.5	
7 Vinyl chloride	62	3.700	3.700	0.000	98	294413	10.0	11.1	
8 Butadiene	54	3.759	3.759	0.000	94	191263	10.0	11.4	
10 Bromomethane	94	4.305	4.305	0.000	98	344226	10.0	10.7	
11 Chloroethane	64	4.487	4.487	0.000	98	114877	10.0	11.4	
12 2-Methylbutane	43	4.535	4.535	0.000	88	213856	10.0	11.2	
13 Vinyl bromide	106	4.802	4.802	0.000	98	349777	10.0	10.7	
14 Trichlorofluoromethane	101	4.872	4.872	0.000	99	1008167	10.0	10.5	
16 Pentane	43	4.984	4.984	0.000	99	325115	10.0	11.7	
17 Ethanol	45	5.343	5.343	0.000	96	118553	15.0	16.4	
18 Ethyl ether	59	5.418	5.418	0.000	97	139411	10.0	11.7	
20 1,1,2-Trichloro-1,2,2-trif	101	5.749	5.749	0.000	97	664480	10.0	10.5	
19 Acrolein	56	5.760	5.760	0.000	96	48713	10.0	12.6	
9 BFB									
21 1,1-Dichloroethene	96	5.808	5.808	0.000	98	290650	10.0	10.5	
22 Acetone	43	6.027	6.027	0.000	100	322521	10.0	11.9	
23 Carbon disulfide	76	6.172	6.172	0.000	99	754001	10.0	10.9	
24 Isopropyl alcohol	45	6.263	6.263	0.000	100	303882	10.0	11.6	
25 3-Chloro-1-propene	41	6.482	6.482	0.000	95	250203	10.0	11.1	
26 Acetonitrile	41	6.627	6.627	0.000	97	111138	10.0	11.6	
27 Methylene Chloride	49	6.744	6.744	0.000	90	282889	10.0	11.3	
28 2-Methyl-2-propanol	59	6.953	6.953	0.000	94	472993	10.0	11.3	
29 Methyl tert-butyl ether	73	7.119	7.119	0.000	95	718362	10.0	11.3	
31 trans-1,2-Dichloroethene	61	7.135	7.135	0.000	95	381065	10.0	11.2	
32 Acrylonitrile	53	7.295	7.295	0.000	92	122292	10.0	11.7	
33 Hexane	57	7.466	7.466	0.000	90	307987	10.0	11.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	7.937	7.937	0.000	99	514198	10.0	11.1	
35 Vinyl acetate	43	8.001	8.001	0.000	100	480318	10.0	11.9	
37 cis-1,2-Dichloroethene	96	8.964	8.964	0.000	91	354796	10.0	10.3	
38 2-Butanone (MEK)	72	9.034	9.034	0.000	98	109930	10.0	11.4	
39 Ethyl acetate	88	9.061	9.061	0.000	100	16539	10.0	11.6	
* 40 Chlorobromomethane	128	9.403	9.403	0.000	75	405662	10.0	10.0	
41 Tetrahydrofuran	42	9.446	9.446	0.000	86	232495	10.0	11.3	
42 Chloroform	83	9.515	9.515	0.000	96	827561	10.0	10.7	
S 30 1,2-Dichloroethene, Total	61				0		20.0	21.5	
43 Cyclohexane	84	9.756	9.756	0.000	95	403561	10.0	10.4	
44 1,1,1-Trichloroethane	97	9.788	9.788	0.000	94	938491	10.0	10.0	
45 Carbon tetrachloride	117	10.024	10.024	0.000	98	1053574	10.0	10.3	
46 Isooctane	57	10.436	10.436	0.000	98	1421409	10.0	10.4	
47 Benzene	78	10.484	10.484	0.000	95	1074085	10.0	9.98	
48 1,2-Dichloroethane	62	10.666	10.666	0.000	99	646382	10.0	10.4	
49 n-Heptane	43	10.810	10.810	0.000	91	540985	10.0	10.4	
* 50 1,4-Difluorobenzene	114	11.302	11.302	0.000	94	2139264	10.0	10.0	
52 n-Butanol	56	11.736	11.736	0.000	91	154560	10.0	10.3	
53 Trichloroethene	95	11.757	11.757	0.000	97	644053	10.0	10.1	
54 1,2-Dichloropropane	63	12.313	12.313	0.000	86	446719	10.0	9.99	
A 51 GRO	1	12.410	(4.525-20.294)		0	149458327	10.0	0	
55 Methyl methacrylate	69	12.490	12.490	0.000	93	340007	10.0	10.9	
57 Dibromomethane	174	12.565	12.565	0.000	97	600820	10.0	9.44	
56 1,4-Dioxane	88	12.570	12.570	0.000	90	206426	10.0	10.4	
58 Dichlorobromomethane	83	12.848	12.848	0.000	98	1120040	10.0	10.3	
60 cis-1,3-Dichloropropene	75	13.768	13.768	0.000	94	716425	10.0	10.2	
61 4-Methyl-2-pentanone (MIBK	43	14.089	14.089	0.000	97	711391	10.0	11.1	
A 59 TVOC as Toluene	92	14.327	(3.118-25.537)		0	223445137	10.0	0	
65 Toluene	92	14.352	14.352	0.000	95	857998	10.0	10.1	
A 63 Toluene Range	92	14.352	(14.312-14.392)		0	3554859	NC	NC	
A 62 C8 Range	1	14.422	(14.355-14.455)		0	3237284	NC	NC	
64 n-Octane	43	14.405	14.405	0.000	90	800544	10.0	10.2	
66 trans-1,3-Dichloropropene	75	14.951	14.951	0.000	98	749743	10.0	10.2	
67 1,1,2-Trichloroethane	83	15.325	15.325	0.000	98	476397	10.0	10.1	
68 Tetrachloroethene	166	15.416	15.416	0.000	96	872446	10.0	9.54	
69 2-Hexanone	43	15.807	15.807	0.000	94	660994	10.0	10.9	
71 Chlorodibromomethane	129	16.079	16.079	0.000	97	1172656	10.0	10.4	
72 Ethylene Dibromide	107	16.352	16.352	0.000	99	909416	10.0	10.2	
* 74 Chlorobenzene-d5	117	17.256	17.256	0.000	85	1879231	10.0	10.0	
75 Chlorobenzene	112	17.315	17.315	0.000	95	1164241	10.0	9.94	
76 Ethylbenzene	91	17.470	17.470	0.000	98	1768780	10.0	10.3	
77 n-Nonane	57	17.610	17.610	0.000	88	703634	10.0	10.1	
78 m-Xylene & p-Xylene	106	17.727	17.727	0.000	0	1407017	20.0	20.4	
79 o-Xylene	106	18.583	18.583	0.000	99	723064	10.0	10.2	
80 Styrene	104	18.642	18.642	0.000	98	1013462	10.0	10.8	
81 Bromoform	173	19.086	19.086	0.000	96	1028714	10.0	10.2	
82 Isopropylbenzene	105	19.321	19.321	0.000	96	1951487	10.0	10.3	
S 73 Xylenes, Total	106				0		30.0	30.6	
* 83 4-Bromofluorobenzene	95	19.712	19.712	0.000	96	1342622	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.022	20.022	0.000	99	1068712	10.0	10.2	
85 N-Propylbenzene	91	20.086	20.086	0.000	99	2260118	10.0	10.6	
86 1,2,3-Trichloropropane	75	20.119	20.119	0.000	98	820065	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57	20.284	20.284	0.000	92	717202	10.0	10.8	
88 4-Ethyltoluene	105	20.290	20.290	0.000	90	1827821	10.0	11.1	
89 2-Chlorotoluene	91	20.290	20.290	0.000	91	1608673	10.0	10.6	
90 1,3,5-Trimethylbenzene	105	20.407	20.407	0.000	93	1551111	10.0	10.4	
91 Alpha Methyl Styrene	118	20.787	20.787	0.000	91	772460	10.0	11.1	
92 tert-Butylbenzene	119	20.910	20.910	0.000	92	1468504	10.0	10.3	
93 1,2,4-Trimethylbenzene	105	21.012	21.012	0.000	97	1541145	10.0	10.6	
94 sec-Butylbenzene	105	21.253	21.253	0.000	99	2172228	10.0	10.6	
95 4-Isopropyltoluene	119	21.467	21.467	0.000	98	1827024	10.0	11.1	
96 1,3-Dichlorobenzene	146	21.483	21.483	0.000	97	1197839	10.0	10.7	
97 1,4-Dichlorobenzene	146	21.622	21.622	0.000	96	1176893	10.0	10.6	
98 Benzyl chloride	91	21.830	21.830	0.000	98	1416985	10.0	11.7	
100 n-Butylbenzene	91	22.044	22.044	0.000	99	1599371	10.0	11.0	
99 Undecane	57	22.082	22.082	0.000	94	669557	10.0	9.52	
101 1,2-Dichlorobenzene	146	22.157	22.157	0.000	97	1076486	10.0	10.3	
102 Dodecane	57	23.639	23.639	0.000	96	468753	10.0	9.38	
103 1,2,4-Trichlorobenzene	180	24.602	24.602	0.000	94	534223	10.0	8.60	
104 Hexachlorobutadiene	225	24.783	24.783	0.000	96	572117	10.0	8.85	
105 Naphthalene	128	25.067	25.067	0.000	99	1009078	10.0	8.85	
106 1,2,3-Trichlorobenzene	180	25.527	25.527	0.000	94	422057	10.0	8.23	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00653	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

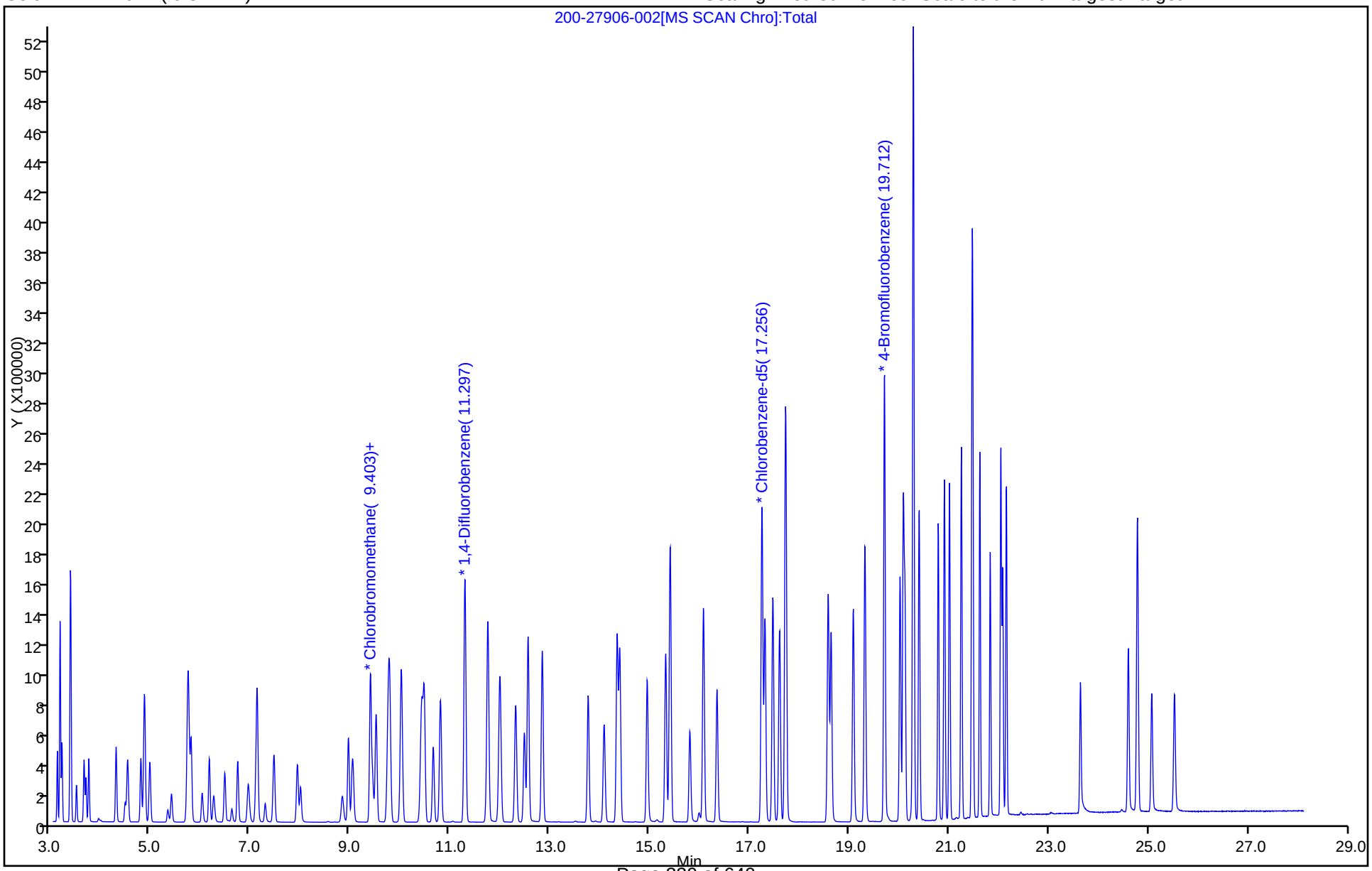
Report Date: 16-Nov-2017 12:45:36 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-002.D

Injection Date:	15-Nov-2017 11:54:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: ICV 200-123127/17 Calibration Date: 11/09/2017 04:54

Instrument ID: CHW.i Calib Start Date: 11/08/2017 17:28

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/09/2017 01:23

Lab File ID: 27803-17.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.085	1.096		10.1	10.0	1.0	30.0
Dichlorodifluoromethane	Ave	3.875	3.888		10.0	10.0	0.3	30.0
Freon 22	Ave	2.168	2.152		9.92	10.0	-0.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	4.075	3.979		9.76	10.0	-2.4	30.0
Chloromethane	Ave	1.279	1.259		9.84	10.0	-1.6	30.0
n-Butane	Ave	2.455	2.420		9.86	10.0	-1.4	30.0
Vinyl chloride	Ave	1.702	1.622		9.53	10.0	-4.7	30.0
1,3-Butadiene	Ave	1.350	1.265		9.37	10.0	-6.3	30.0
Bromomethane	Ave	1.404	1.380		9.83	10.0	-1.7	30.0
Chloroethane	Ave	0.8416	0.8514		10.1	10.0	1.2	30.0
Isopentane	Ave	1.911	1.796		9.40	10.0	-6.0	30.0
Bromoethene(Vinyl Bromide)	Ave	1.468	1.440		9.80	10.0	-1.9	30.0
Trichlorofluoromethane	Ave	3.781	3.696		9.77	10.0	-2.2	30.0
n-Pentane	Ave	2.804	2.820		10.1	10.0	0.5	30.0
Ethanol	Ave	0.6072	0.7693		19.0	15.0	26.7	30.0
Ethyl ether	Ave	1.134	1.085		9.57	10.0	-4.3	30.0
Acrolein	Ave	0.4634	0.4358		9.40	10.0	-6.0	30.0
Freon TF	Ave	2.926	2.833		9.68	10.0	-3.2	30.0
1,1-Dichloroethene	Ave	1.492	1.383		9.27	10.0	-7.3	30.0
Acetone	Ave	2.214	2.303		10.4	10.0	4.0	30.0
Carbon disulfide	Ave	3.728	3.809		10.2	10.0	2.2	30.0
Isopropyl alcohol	Ave	2.520	2.768		11.0	10.0	9.8	30.0
3-Chloropropene	Ave	1.898	2.015		10.6	10.0	6.2	30.0
Acetonitrile	Ave	0.9555	1.008		10.5	10.0	5.5	30.0
Methylene Chloride	Ave	1.646	1.626		9.88	10.0	-1.2	30.0
tert-Butyl alcohol	Ave	3.100	3.437		11.1	10.0	10.9	30.0
Methyl tert-butyl ether	Ave	4.578	4.489		9.80	10.0	-1.9	30.0
trans-1,2-Dichloroethene	Ave	2.105	2.082		9.89	10.0	-1.1	30.0
Acrylonitrile	Ave	0.9529	0.9905		10.4	10.0	3.9	30.0
n-Hexane	Ave	2.625	2.532		9.65	10.0	-3.5	30.0
1,1-Dichloroethane	Ave	3.015	2.823		9.36	10.0	-6.4	30.0
Vinyl acetate	Ave	3.828	3.865		10.1	10.0	1.0	30.0
cis-1,2-Dichloroethene	Ave	1.633	1.535		9.40	10.0	-6.0	30.0
Methyl Ethyl Ketone	Ave	0.7884	0.8065		10.2	10.0	2.3	30.0
Ethyl acetate	Ave	0.1255	0.1295		10.3	10.0	3.2	30.0
Tetrahydrofuran	Ave	0.3578	0.3694		10.3	10.0	3.2	30.0
Chloroform	Ave	3.138	3.043		9.70	10.0	-3.0	30.0
Cyclohexane	Ave	0.4233	0.4119		9.73	10.0	-2.7	30.0
1,1,1-Trichloroethane	Ave	0.5920	0.5724		9.67	10.0	-3.3	30.0
Carbon tetrachloride	Ave	0.6053	0.5645		9.32	10.0	-6.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: ICV 200-123127/17 Calibration Date: 11/09/2017 04:54

Instrument ID: CHW.i Calib Start Date: 11/08/2017 17:28

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/09/2017 01:23

Lab File ID: 27803-17.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.686	1.643		9.74	10.0	-2.6	30.0
Benzene	Ave	0.9775	0.9293		9.51	10.0	-4.9	30.0
1,2-Dichloroethane	Ave	0.3617	0.3523		9.74	10.0	-2.6	30.0
n-Heptane	Ave	0.6385	0.6123		9.59	10.0	-4.1	30.0
n-Butanol	Ave	0.1804	0.1999		11.1	10.0	10.9	30.0
Trichloroethene	Ave	0.4110	0.3796		9.23	10.0	-7.7	30.0
1,2-Dichloropropane	Ave	0.3774	0.3622		9.60	10.0	-4.0	30.0
Methyl methacrylate	Ave	0.3383	0.3430		10.1	10.0	1.4	30.0
1,4-Dioxane	Ave	0.1794	0.1901		10.6	10.0	6.0	30.0
Dibromomethane	Ave	0.3529	0.3371		9.55	10.0	-4.5	30.0
Bromodichloromethane	Ave	0.6526	0.6387		9.79	10.0	-2.1	30.0
cis-1,3-Dichloropropene	Ave	0.4950	0.4900		9.90	10.0	-1.0	30.0
Methyl isobutyl ketone	Ave	0.7435	0.7908		10.6	10.0	6.4	30.0
n-Octane	Ave	0.9068	0.8821		9.73	10.0	-2.7	30.0
Toluene	Ave	0.7679	0.7340		9.56	10.0	-4.4	30.0
trans-1,3-Dichloropropene	Ave	0.4588	0.4525		9.86	10.0	-1.4	30.0
1,1,2-Trichloroethane	Ave	0.3741	0.3596		9.61	10.0	-3.9	30.0
Tetrachloroethene	Ave	0.6563	0.6057		9.23	10.0	-7.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7205	0.7846		10.9	10.0	8.9	30.0
Dibromochloromethane	Ave	0.7000	0.6692		9.56	10.0	-4.4	30.0
1,2-Dibromoethane	Ave	0.6096	0.5974		9.80	10.0	-2.0	30.0
Chlorobenzene	Ave	0.9856	0.9458		9.59	10.0	-4.0	30.0
Ethylbenzene	Ave	1.715	1.675		9.77	10.0	-2.3	30.0
n-Nonane	Ave	0.9199	0.8873		9.64	10.0	-3.5	30.0
m,p-Xylene	Ave	0.6697	0.6539		19.5	20.0	-2.4	30.0
Xylene, o-	Ave	0.6669	0.6394		9.58	10.0	-4.1	30.0
Styrene	Ave	0.9753	0.9600		9.84	10.0	-1.6	30.0
Bromoform	Ave	0.6363	0.5937		9.33	10.0	-6.7	30.0
Cumene	Ave	1.952	1.924		9.85	10.0	-1.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.997	0.9771		9.80	10.0	-2.0	30.0
n-Propylbenzene	Ave	2.344	2.377		10.1	10.0	1.4	30.0
1,2,3-Trichloropropane	Ave	0.7492	0.7442		9.93	10.0	-0.7	30.0
n-Decane	Ave	1.138	1.170		10.3	10.0	2.8	30.0
4-Ethyltoluene	Ave	1.898	1.930		10.2	10.0	1.7	30.0
2-Chlorotoluene	Ave	1.613	1.597		9.90	10.0	-1.0	30.0
1,3,5-Trimethylbenzene	Ave	1.632	1.620		9.93	10.0	-0.7	30.0
Alpha Methyl Styrene	Ave	0.7442	0.7707		10.4	10.0	3.6	30.0
tert-Butylbenzene	Ave	1.584	1.567		9.89	10.0	-1.1	30.0
1,2,4-Trimethylbenzene	Ave	1.601	1.625		10.1	10.0	1.5	30.0
sec-Butylbenzene	Ave	2.383	2.422		10.2	10.0	1.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: ICV 200-123127/17 Calibration Date: 11/09/2017 04:54

Instrument ID: CHW.i Calib Start Date: 11/08/2017 17:28

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/09/2017 01:23

Lab File ID: 27803-17.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.944	2.008		10.3	10.0	3.3	30.0
1,3-Dichlorobenzene	Ave	0.9769	0.995		10.2	10.0	1.9	30.0
1,4-Dichlorobenzene	Ave	0.9222	0.9351		10.1	10.0	1.4	30.0
Benzyl chloride	Ave	1.081	1.053		9.73	10.0	-2.6	30.0
n-Butylbenzene	Ave	1.668	1.811		10.9	10.0	8.5	30.0
n-Undecane	Ave	0.9702	0.9723		10.0	10.0	0.2	30.0
1,2-Dichlorobenzene	Ave	0.9426	0.9479		10.1	10.0	0.6	30.0
n-Dodecane	Ave	0.7310	0.6733		9.21	10.0	-7.9	30.0
1,2,4-Trichlorobenzene	Ave	0.4266	0.3584		8.40	10.0	-16.0	30.0
Hexachlorobutadiene	Ave	0.6030	0.5886		9.76	10.0	-2.4	30.0
Naphthalene	Ave	0.8716	0.6834		7.84	10.0	-21.6	30.0
1,2,3-Trichlorobenzene	Ave	0.3574	0.3179		8.89	10.0	-11.1	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-17.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 09-Nov-2017 04:54:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027803-17
Operator ID: pad Instrument ID: CHW.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 09-Nov-2017 12:51:09 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 09-Nov-2017 09:51:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.063	5.058	0.005	98	229678	10.0	10.1	
2 Dichlorodifluoromethane	85	5.176	5.176	0.000	99	815070	10.0	10.0	
3 Chlorodifluoromethane	51	5.256	5.250	0.006	97	451017	10.0	9.92	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.582	5.577	0.005	90	834126	10.0	9.76	
5 Chloromethane	50	5.775	5.769	0.006	99	263846	10.0	9.84	
6 Butane	43	6.048	6.042	0.006	98	507247	10.0	9.86	
7 Vinyl chloride	62	6.101	6.096	0.005	98	340044	10.0	9.53	
8 Butadiene	54	6.197	6.192	0.005	95	265155	10.0	9.37	
10 Bromomethane	94	6.995	6.994	0.000	99	289264	10.0	9.83	
9 BFB									
11 Chloroethane	64	7.246	7.241	0.005	99	178470	10.0	10.1	
12 2-Methylbutane	43	7.315	7.310	0.005	93	376511	10.0	9.40	
13 Vinyl bromide	106	7.653	7.647	0.006	99	301809	10.0	9.80	
14 Trichlorofluoromethane	101	7.743	7.738	0.005	99	774807	10.0	9.77	
16 Pentane	43	7.883	7.877	0.006	97	591027	10.0	10.1	
17 Ethanol	45	8.252	8.246	0.006	98	241978	15.0	19.0	
18 Ethyl ether	59	8.359	8.353	0.006	94	227351	10.0	9.57	
19 Acrolein	56	8.739	8.733	0.006	95	91346	10.0	9.40	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.744	0.005	98	593917	10.0	9.68	
21 1,1-Dichloroethene	96	8.813	8.813	0.000	96	289897	10.0	9.27	
22 Acetone	43	9.011	9.011	0.000	97	482758	10.0	10.4	
23 Carbon disulfide	76	9.204	9.204	0.000	99	798481	10.0	10.2	
24 Isopropyl alcohol	45	9.215	9.215	0.000	99	580100	10.0	11.0	
25 3-Chloro-1-propene	41	9.514	9.509	0.005	93	422392	10.0	10.6	
26 Acetonitrile	41	9.632	9.632	0.000	99	211251	10.0	10.5	
27 Methylene Chloride	49	9.771	9.771	0.000	95	340924	10.0	9.88	
28 2-Methyl-2-propanol	59	9.899	9.894	0.005	93	720382	10.0	11.1	
29 Methyl tert-butyl ether	73	10.108	10.108	0.000	98	940989	10.0	9.80	
31 trans-1,2-Dichloroethene	61	10.167	10.161	0.006	98	436332	10.0	9.89	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.3	
32 Acrylonitrile	53	10.301	10.301	0.000	95	207622	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.493	10.493	0.000	94	530816	10.0	9.65	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	591666	10.0	9.36	
35 Vinyl acetate	43	10.991	10.985	0.006	100	810075	10.0	10.1	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	97	321738	10.0	9.40	
38 2-Butanone (MEK)	72	11.975	11.980	-0.005	96	169058	10.0	10.2	
39 Ethyl acetate	88	11.991	11.986	0.005	97	27149	10.0	10.3	
41 Tetrahydrofuran	42	12.382	12.382	0.000	96	414106	10.0	10.3	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	96	209652	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	95	637854	10.0	9.70	
43 Cyclohexane	84	12.740	12.740	0.000	98	461828	10.0	9.73	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	95	641696	10.0	9.67	
45 Carbon tetrachloride	117	12.975	12.981	-0.006	98	632897	10.0	9.32	
46 Isooctane	57	13.334	13.334	0.000	100	1841847	10.0	9.74	
47 Benzene	78	13.393	13.393	0.000	95	1041909	10.0	9.51	
48 1,2-Dichloroethane	62	13.543	13.543	0.001	97	394939	10.0	9.74	
49 n-Heptane	43	13.650	13.650	0.000	94	686511	10.0	9.59	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1121346	10.0	10.0	
52 n-Butanol	56	14.350	14.350	0.000	89	224147	10.0	11.1	
53 Trichloroethene	95	14.516	14.516	0.000	98	425531	10.0	9.23	
A 51 GRO	1	14.738	(7.300-22.176)		0	137116307	10.0	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	93	406092	10.0	9.60	
55 Methyl methacrylate	69	15.094	15.094	0.000	96	384587	10.0	10.1	
56 1,4-Dioxane	88	15.169	15.174	-0.005	96	213112	10.0	10.6	
57 Dibromomethane	174	15.238	15.238	0.000	96	377966	10.0	9.55	
58 Dichlorobromomethane	83	15.468	15.468	0.000	97	716024	10.0	9.79	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	92	549399	10.0	9.90	
A 59 TVOC as Toluene	92	16.413	(5.048-27.777)		0	219249370	10.0	2546.4	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	97	886533	10.0	10.6	
65 Toluene	92	16.838	16.838	0.000	92	756613	10.0	9.56	
64 n-Octane	43	16.838	16.838	0.000	87	988918	10.0	9.73	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	96	507319	10.0	9.86	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	96	370679	10.0	9.61	
68 Tetrachloroethene	166	17.833	17.833	0.000	98	624412	10.0	9.23	
69 2-Hexanone	43	18.106	18.106	0.000	94	808765	10.0	10.9	
71 Chlorodibromomethane	129	18.443	18.443	0.000	98	689831	10.0	9.56	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	615857	10.0	9.80	
* 74 Chlorobenzene-d5	117	19.556	19.556	0.000	86	1031039	10.0	10.0	
75 Chlorobenzene	112	19.609	19.614	-0.005	94	974957	10.0	9.59	
76 Ethylbenzene	91	19.743	19.743	0.000	98	1727078	10.0	9.77	
77 n-Nonane	57	19.818	19.823	-0.005	93	914640	10.0	9.64	
78 m-Xylene & p-Xylene	106	19.978	19.984	-0.006	0	1348130	20.0	19.5	
S 73 Xylenes, Total	106				0		30.0	29.1	
79 o-Xylene	106	20.749	20.754	-0.005	99	659088	10.0	9.58	
80 Styrene	104	20.797	20.797	0.000	98	989568	10.0	9.84	
81 Bromoform	173	21.182	21.187	-0.005	98	611981	10.0	9.33	
82 Isopropylbenzene	105	21.353	21.358	-0.005	96	1983429	10.0	9.85	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.958	-0.006	97	1007259	10.0	9.80	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	2449935	10.0	10.1	
86 1,2,3-Trichloropropane	75	22.054	22.059	-0.005	98	767185	10.0	9.93	
87 n-Decane	57	22.166	22.166	0.000	89	1205783	10.0	10.3	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	1989636	10.0	10.2	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	1646233	10.0	9.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.300	22.305	-0.005	93	1670361	10.0	9.93	
91 Alpha Methyl Styrene	118	22.658	22.658	0.000	89	794448	10.0	10.4	
92 tert-Butylbenzene	119	22.781	22.781	0.000	94	1615200	10.0	9.89	
93 1,2,4-Trimethylbenzene	105	22.872	22.872	0.000	97	1674820	10.0	10.1	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	2496891	10.0	10.2	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	2070133	10.0	10.3	
96 1,3-Dichlorobenzene	146	23.338	23.343	-0.005	97	1025729	10.0	10.2	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	963965	10.0	10.1	
98 Benzyl chloride	91	23.680	23.686	-0.006	99	1085195	10.0	9.73	
100 n-Butylbenzene	91	23.889	23.894	-0.005	98	1866525	10.0	10.9	
99 Undecane	57	23.894	23.894	0.000	96	1002289	10.0	10.0	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	97	977166	10.0	10.1	
102 Dodecane	57	25.579	25.585	-0.006	97	694094	10.0	9.21	
103 1,2,4-Trichlorobenzene	180	26.719	26.724	-0.005	94	369443	10.0	8.40	
104 Hexachlorobutadiene	225	26.911	26.917	-0.006	97	606717	10.0	9.76	
105 Naphthalene	128	27.254	27.259	-0.005	100	704497	10.0	7.84	
106 1,2,3-Trichlorobenzene	180	27.767	27.767	0.000	95	327661	10.0	8.89	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00707	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

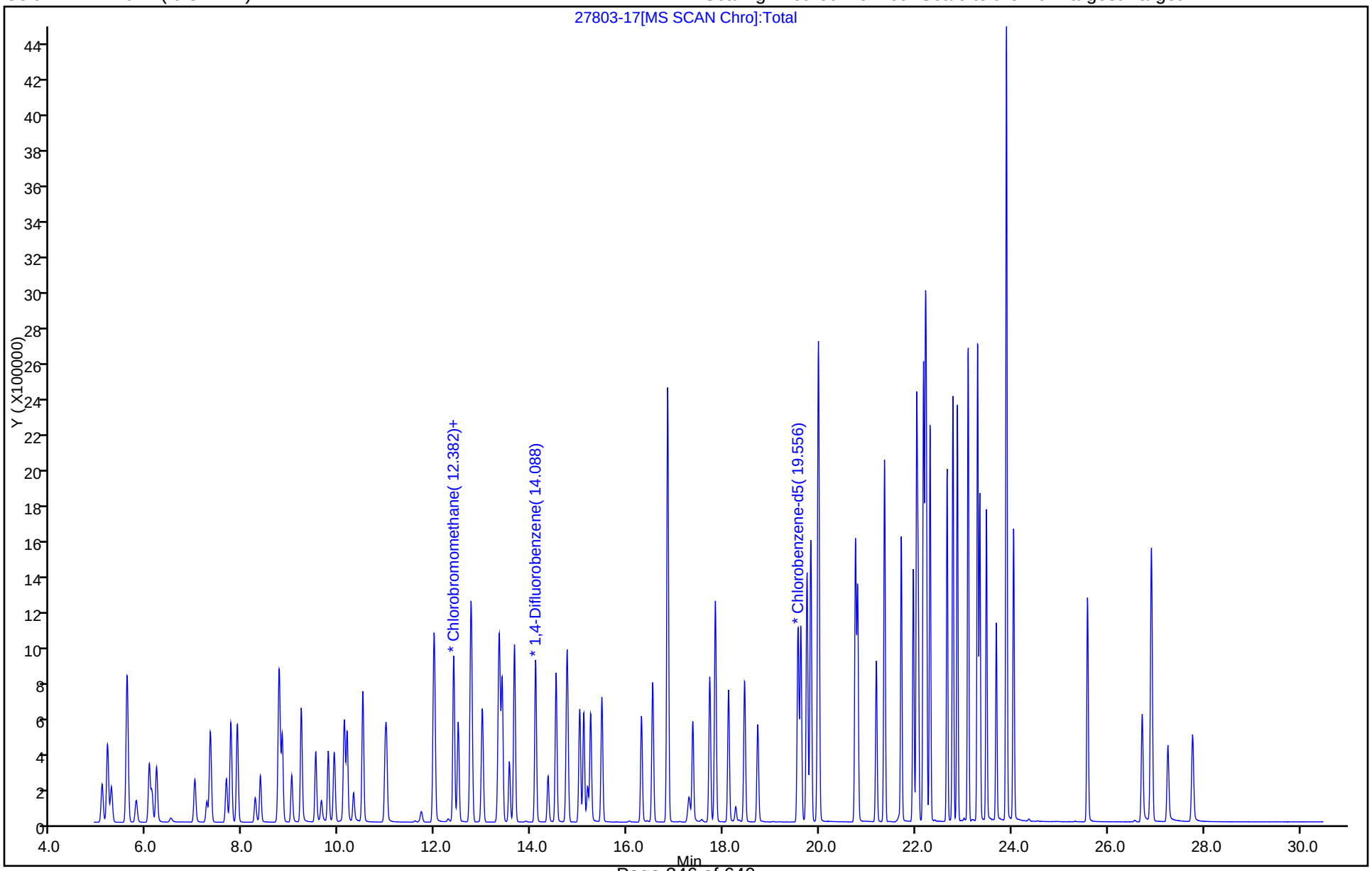
Report Date: 09-Nov-2017 12:51:19 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-17.d

Injection Date:	09-Nov-2017 04:54:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	icv			Worklist Smp#:	17
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: CCVIS 200-123310/3 Calibration Date: 11/14/2017 11:14

Instrument ID: CHW.i Calib Start Date: 11/08/2017 17:28

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/09/2017 01:23

Lab File ID: 27883-03.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	1.085	1.235		11.4	10.0	13.8	30.0
Dichlorodifluoromethane	Ave	3.875	4.168		10.8	10.0	7.6	30.0
Freon 22	Ave	2.168	2.372		10.9	10.0	9.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	4.075	4.223		10.4	10.0	3.6	30.0
Chloromethane	Ave	1.279	1.409		11.0	10.0	10.2	30.0
n-Butane	Ave	2.455	2.759		11.2	10.0	12.4	30.0
Vinyl chloride	Ave	1.702	1.786		10.5	10.0	5.0	30.0
1,3-Butadiene	Ave	1.350	1.404		10.4	10.0	4.0	30.0
Bromomethane	Ave	1.404	1.436		10.2	10.0	2.3	30.0
Chloroethane	Ave	0.8416	0.9147		10.9	10.0	8.7	30.0
Isopentane	Ave	1.911	2.030		10.6	10.0	6.3	30.0
Bromoethene(Vinyl Bromide)	Ave	1.468	1.488		10.1	10.0	1.4	30.0
Trichlorofluoromethane	Ave	3.781	3.824		10.1	10.0	1.2	30.0
n-Pentane	Ave	2.804	3.158		11.3	10.0	12.6	30.0
Ethanol	Ave	0.6072	0.7503		18.5	15.0	23.6	30.0
Ethyl ether	Ave	1.134	1.179		10.4	10.0	4.0	30.0
Acrolein	Ave	0.4634	0.5139		11.1	10.0	10.9	30.0
Freon TF	Ave	2.926	2.920		9.98	10.0	-0.2	30.0
1,1-Dichloroethene	Ave	1.492	1.434		9.61	10.0	-3.9	30.0
Acetone	Ave	2.214	2.548		11.5	10.0	15.1	30.0
Carbon disulfide	Ave	3.728	3.932		10.5	10.0	5.5	30.0
Isopropyl alcohol	Ave	2.520	2.977		11.8	10.0	18.1	30.0
3-Chloropropene	Ave	1.898	2.180		11.5	10.0	14.9	30.0
Acetonitrile	Ave	0.9555	1.116		11.7	10.0	16.8	30.0
Methylene Chloride	Ave	1.646	1.781		10.8	10.0	8.2	30.0
tert-Butyl alcohol	Ave	3.100	3.643		11.8	10.0	17.5	30.0
Methyl tert-butyl ether	Ave	4.578	4.663		10.2	10.0	1.9	30.0
trans-1,2-Dichloroethene	Ave	2.105	2.221		10.5	10.0	5.5	30.0
Acrylonitrile	Ave	0.9529	1.073		11.3	10.0	12.6	30.0
n-Hexane	Ave	2.625	2.674		10.2	10.0	1.9	30.0
1,1-Dichloroethane	Ave	3.015	3.003		9.96	10.0	-0.4	30.0
Vinyl acetate	Ave	3.828	4.359		11.4	10.0	13.9	30.0
cis-1,2-Dichloroethene	Ave	1.633	1.568		9.60	10.0	-4.0	30.0
Methyl Ethyl Ketone	Ave	0.7884	0.8391		10.6	10.0	6.4	30.0
Ethyl acetate	Ave	0.1255	0.1299		10.4	10.0	3.5	30.0
Tetrahydrofuran	Ave	0.3578	0.4113		11.5	10.0	15.0	30.0
Chloroform	Ave	3.138	3.148		10.0	10.0	0.3	30.0
Cyclohexane	Ave	0.4233	0.4188		9.89	10.0	-1.1	30.0
1,1,1-Trichloroethane	Ave	0.5920	0.5829		9.85	10.0	-1.5	30.0
Carbon tetrachloride	Ave	0.6053	0.5868		9.69	10.0	-3.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: CCVIS 200-123310/3 Calibration Date: 11/14/2017 11:14

Instrument ID: CHW.i Calib Start Date: 11/08/2017 17:28

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/09/2017 01:23

Lab File ID: 27883-03.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.686	1.728		10.2	10.0	2.5	30.0
Benzene	Ave	0.9775	0.9548		9.77	10.0	-2.3	30.0
1,2-Dichloroethane	Ave	0.3617	0.3758		10.4	10.0	3.9	30.0
n-Heptane	Ave	0.6385	0.6720		10.5	10.0	5.3	30.0
n-Butanol	Ave	0.1804	0.2029		11.2	10.0	12.5	30.0
Trichloroethene	Ave	0.4110	0.3867		9.41	10.0	-5.9	30.0
1,2-Dichloropropane	Ave	0.3774	0.3825		10.1	10.0	1.3	30.0
Methyl methacrylate	Ave	0.3383	0.3586		10.6	10.0	6.0	30.0
1,4-Dioxane	Ave	0.1794	0.1880		10.5	10.0	4.8	30.0
Dibromomethane	Ave	0.3529	0.3476		9.85	10.0	-1.5	30.0
Bromodichloromethane	Ave	0.6526	0.6693		10.3	10.0	2.6	30.0
cis-1,3-Dichloropropene	Ave	0.4950	0.5163		10.4	10.0	4.3	30.0
Methyl isobutyl ketone	Ave	0.7435	0.8771		11.8	10.0	18.0	30.0
n-Octane	Ave	0.9068	0.9744		10.7	10.0	7.4	30.0
Toluene	Ave	0.7679	0.7472		9.73	10.0	-2.7	30.0
trans-1,3-Dichloropropene	Ave	0.4588	0.4878		10.6	10.0	6.3	30.0
1,1,2-Trichloroethane	Ave	0.3741	0.3698		9.88	10.0	-1.2	30.0
Tetrachloroethene	Ave	0.6563	0.6114		9.31	10.0	-6.8	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7205	0.8742		12.1	10.0	21.3	30.0
Dibromochloromethane	Ave	0.7000	0.7181		10.3	10.0	2.6	30.0
1,2-Dibromoethane	Ave	0.6096	0.6167		10.1	10.0	1.2	30.0
Chlorobenzene	Ave	0.9856	0.9650		9.79	10.0	-2.1	30.0
Ethylbenzene	Ave	1.715	1.714		9.99	10.0	-0.0	30.0
n-Nonane	Ave	0.9199	0.9297		10.1	10.0	1.1	30.0
m,p-Xylene	Ave	0.6697	0.6670		19.9	20.0	-0.4	30.0
Xylene, o-	Ave	0.6669	0.6532		9.79	10.0	-2.1	30.0
Styrene	Ave	0.9753	0.9944		10.2	10.0	2.0	30.0
Bromoform	Ave	0.6363	0.7026		11.0	10.0	10.4	30.0
Cumene	Ave	1.952	1.962		10.1	10.0	0.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.997	1.009		10.1	10.0	1.2	30.0
n-Propylbenzene	Ave	2.344	2.440		10.4	10.0	4.1	30.0
1,2,3-Trichloropropane	Ave	0.7492	0.7764		10.4	10.0	3.6	30.0
n-Decane	Ave	1.138	1.231		10.8	10.0	8.2	30.0
4-Ethyltoluene	Ave	1.898	1.981		10.4	10.0	4.4	30.0
2-Chlorotoluene	Ave	1.613	1.650		10.2	10.0	2.3	30.0
1,3,5-Trimethylbenzene	Ave	1.632	1.650		10.1	10.0	1.1	30.0
Alpha Methyl Styrene	Ave	0.7442	0.8029		10.8	10.0	7.9	30.0
tert-Butylbenzene	Ave	1.584	1.595		10.1	10.0	0.7	30.0
1,2,4-Trimethylbenzene	Ave	1.601	1.680		10.5	10.0	5.0	30.0
sec-Butylbenzene	Ave	2.383	2.497		10.5	10.0	4.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Lab Sample ID: CCVIS 200-123310/3 Calibration Date: 11/14/2017 11:14

Instrument ID: CHW.i Calib Start Date: 11/08/2017 17:28

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 11/09/2017 01:23

Lab File ID: 27883-03.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.944	2.071		10.7	10.0	6.5	30.0
1,3-Dichlorobenzene	Ave	0.9769	1.053		10.8	10.0	7.8	30.0
1,4-Dichlorobenzene	Ave	0.9222	1.024		11.1	10.0	11.0	30.0
Benzyl chloride	Ave	1.081	1.294		12.0	10.0	19.6	30.0
n-Butylbenzene	Ave	1.668	1.920		11.5	10.0	15.1	30.0
n-Undecane	Ave	0.9702	1.104		11.4	10.0	13.8	30.0
1,2-Dichlorobenzene	Ave	0.9426	0.996		10.6	10.0	5.7	30.0
n-Dodecane	Ave	0.7310	0.8293		11.3	10.0	13.4	30.0
1,2,4-Trichlorobenzene	Ave	0.4266	0.4629		10.9	10.0	8.5	30.0
Hexachlorobutadiene	Ave	0.6030	0.5963		9.89	10.0	-1.1	30.0
Naphthalene	Ave	0.8716	0.9566		11.0	10.0	9.8	30.0
1,2,3-Trichlorobenzene	Ave	0.3574	0.3923		11.0	10.0	9.8	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-03.d
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Nov-2017 11:14:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027883-003
Operator ID: pad Instrument ID: CHW.i
Sublist: chrom-TO15_MasterMethod_(v1)*sub1

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Nov-2017 08:19:55 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: puangmaleek Date: 15-Nov-2017 08:19:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.069	5.069	0.000	98	266456	10.0	11.4	
2 Dichlorodifluoromethane	85	5.181	5.181	0.000	99	899376	10.0	10.8	
3 Chlorodifluoromethane	51	5.261	5.261	0.000	97	511841	10.0	10.9	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.582	5.582	0.000	91	911257	10.0	10.4	
5 Chloromethane	50	5.775	5.775	0.000	99	304134	10.0	11.0	
6 Butane	43	6.048	6.048	0.000	99	595422	10.0	11.2	
7 Vinyl chloride	62	6.101	6.101	0.000	98	385399	10.0	10.5	
8 Butadiene	54	6.198	6.198	0.000	97	302910	10.0	10.4	
9 BFB									
10 Bromomethane	94	6.995	6.995	0.000	99	309801	10.0	10.2	
11 Chloroethane	64	7.246	7.246	0.000	99	197397	10.0	10.9	
12 2-Methylbutane	43	7.316	7.316	0.000	94	438162	10.0	10.6	
13 Vinyl bromide	106	7.653	7.653	0.000	99	321194	10.0	10.1	
14 Trichlorofluoromethane	101	7.744	7.744	0.000	98	825268	10.0	10.1	
16 Pentane	43	7.877	7.877	0.000	97	681550	10.0	11.3	
17 Ethanol	45	8.252	8.252	0.000	99	242983	15.0	18.5	
18 Ethyl ether	59	8.359	8.359	0.000	94	254504	10.0	10.4	
19 Acrolein	56	8.739	8.739	0.000	96	110888	10.0	11.1	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.749	0.000	98	630069	10.0	9.98	
21 1,1-Dichloroethene	96	8.814	8.814	0.000	96	309496	10.0	9.61	
22 Acetone	43	9.011	9.011	0.000	98	549762	10.0	11.5	
23 Carbon disulfide	76	9.204	9.204	0.000	100	848529	10.0	10.5	
24 Isopropyl alcohol	45	9.215	9.215	0.000	99	642317	10.0	11.8	
25 3-Chloro-1-propene	41	9.509	9.509	0.000	93	470481	10.0	11.5	
26 Acetonitrile	41	9.627	9.627	0.000	100	240765	10.0	11.7	
27 Methylene Chloride	49	9.771	9.771	0.000	98	384398	10.0	10.8	
28 2-Methyl-2-propanol	59	9.894	9.894	0.000	93	786231	10.0	11.8	
29 Methyl tert-butyl ether	73	10.103	10.103	0.000	98	1006171	10.0	10.2	
31 trans-1,2-Dichloroethene	61	10.167	10.167	0.000	98	479191	10.0	10.5	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.1	
32 Acrylonitrile	53	10.301	10.301	0.000	95	231592	10.0	11.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Hexane	57	10.488	10.488	0.000	95	577055	10.0	10.2	
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	648053	10.0	9.96	
35 Vinyl acetate	43	10.985	10.985	0.000	100	940697	10.0	11.4	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	96	338376	10.0	9.60	
38 2-Butanone (MEK)	72	11.981	11.981	0.000	95	181072	10.0	10.6	
39 Ethyl acetate	88	11.986	11.986	0.000	96	28036	10.0	10.4	
41 Tetrahydrofuran	42	12.382	12.382	0.000	96	479204	10.0	11.5	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	98	215838	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	97	679294	10.0	10.0	
43 Cyclohexane	84	12.740	12.740	0.000	96	487932	10.0	9.89	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	95	679210	10.0	9.85	
45 Carbon tetrachloride	117	12.981	12.981	0.000	99	683759	10.0	9.69	
46 Isooctane	57	13.329	13.329	0.000	99	2013671	10.0	10.2	
47 Benzene	78	13.393	13.393	0.000	96	1112515	10.0	9.77	
48 1,2-Dichloroethane	62	13.543	13.543	0.000	97	437822	10.0	10.4	
49 n-Heptane	43	13.650	13.650	0.000	96	783010	10.0	10.5	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1165375	10.0	10.0	
52 n-Butanol	56	14.350	14.350	0.000	90	236393	10.0	11.2	
53 Trichloroethene	95	14.516	14.516	0.000	98	450588	10.0	9.41	
A 51 GRO	1	14.741	(7.306-22.176)		0	150336105	10.0	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	93	445662	10.0	10.1	
55 Methyl methacrylate	69	15.094	15.094	0.000	94	417786	10.0	10.6	
56 1,4-Dioxane	88	15.174	15.174	0.000	97	219073	10.0	10.5	
57 Dibromomethane	174	15.233	15.233	0.000	97	405020	10.0	9.85	
58 Dichlorobromomethane	83	15.469	15.469	0.000	98	779832	10.0	10.3	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	94	601598	10.0	10.4	
A 59 TVOC as Toluene	92	16.418	(5.059-27.778)		0	243754164	10.0	2724.0	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	98	1021982	10.0	11.8	
65 Toluene	92	16.838	16.838	0.000	92	800986	10.0	9.73	
64 n-Octane	43	16.838	16.838	0.000	95	1135280	10.0	10.7	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	98	568300	10.0	10.6	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	97	396470	10.0	9.88	
68 Tetrachloroethene	166	17.833	17.833	0.000	97	655440	10.0	9.31	
69 2-Hexanone	43	18.106	18.106	0.000	93	937131	10.0	12.1	
71 Chlorodibromomethane	129	18.438	18.438	0.000	99	769797	10.0	10.3	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	661103	10.0	10.1	
* 74 Chlorobenzene-d5	117	19.550	19.550	0.000	87	1072250	10.0	10.0	
75 Chlorobenzene	112	19.609	19.609	0.000	93	1034469	10.0	9.79	
76 Ethylbenzene	91	19.743	19.743	0.000	98	1836966	10.0	10.0	
77 n-Nonane	57	19.818	19.818	0.000	94	996725	10.0	10.1	
78 m-Xylene & p-Xylene	106	19.978	19.978	0.000	0	1430195	20.0	19.9	
S 73 Xylenes, Total	106				0		30.0	29.7	
79 o-Xylene	106	20.749	20.749	0.000	98	700303	10.0	9.79	
80 Styrene	104	20.797	20.797	0.000	99	1066011	10.0	10.2	
81 Bromoform	173	21.187	21.187	0.000	98	753214	10.0	11.0	
82 Isopropylbenzene	105	21.359	21.359	0.000	96	2103791	10.0	10.1	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.952	0.000	97	1081993	10.0	10.1	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	2616134	10.0	10.4	
86 1,2,3-Trichloropropane	75	22.054	22.054	0.000	98	832284	10.0	10.4	
87 n-Decane	57	22.166	22.166	0.000	89	1319399	10.0	10.8	
88 4-Ethyltoluene	105	22.204	22.204	0.000	98	2123209	10.0	10.4	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	1768499	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	22.300	22.300	0.000	93	1769343	10.0	10.1	
91 Alpha Methyl Styrene	118	22.659	22.659	0.000	89	860739	10.0	10.8	
92 tert-Butylbenzene	119	22.776	22.776	0.000	94	1709561	10.0	10.1	
93 1,2,4-Trimethylbenzene	105	22.873	22.873	0.000	97	1801313	10.0	10.5	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	2676948	10.0	10.5	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	2220279	10.0	10.7	
96 1,3-Dichlorobenzene	146	23.338	23.338	0.000	97	1129132	10.0	10.8	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	1097552	10.0	11.1	
98 Benzyl chloride	91	23.680	23.680	0.000	99	1386741	10.0	12.0	
100 n-Butylbenzene	91	23.889	23.889	0.000	98	2058123	10.0	11.5	
99 Undecane	57	23.894	23.894	0.000	96	1183164	10.0	11.4	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	97	1068241	10.0	10.6	
102 Dodecane	57	25.579	25.579	0.000	97	889025	10.0	11.3	
103 1,2,4-Trichlorobenzene	180	26.719	26.719	0.000	94	496291	10.0	10.9	
104 Hexachlorobutadiene	225	26.912	26.912	0.000	98	639297	10.0	9.89	
105 Naphthalene	128	27.254	27.254	0.000	99	1025537	10.0	11.0	
106 1,2,3-Trichlorobenzene	180	27.768	27.768	0.000	96	420601	10.0	11.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00650	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

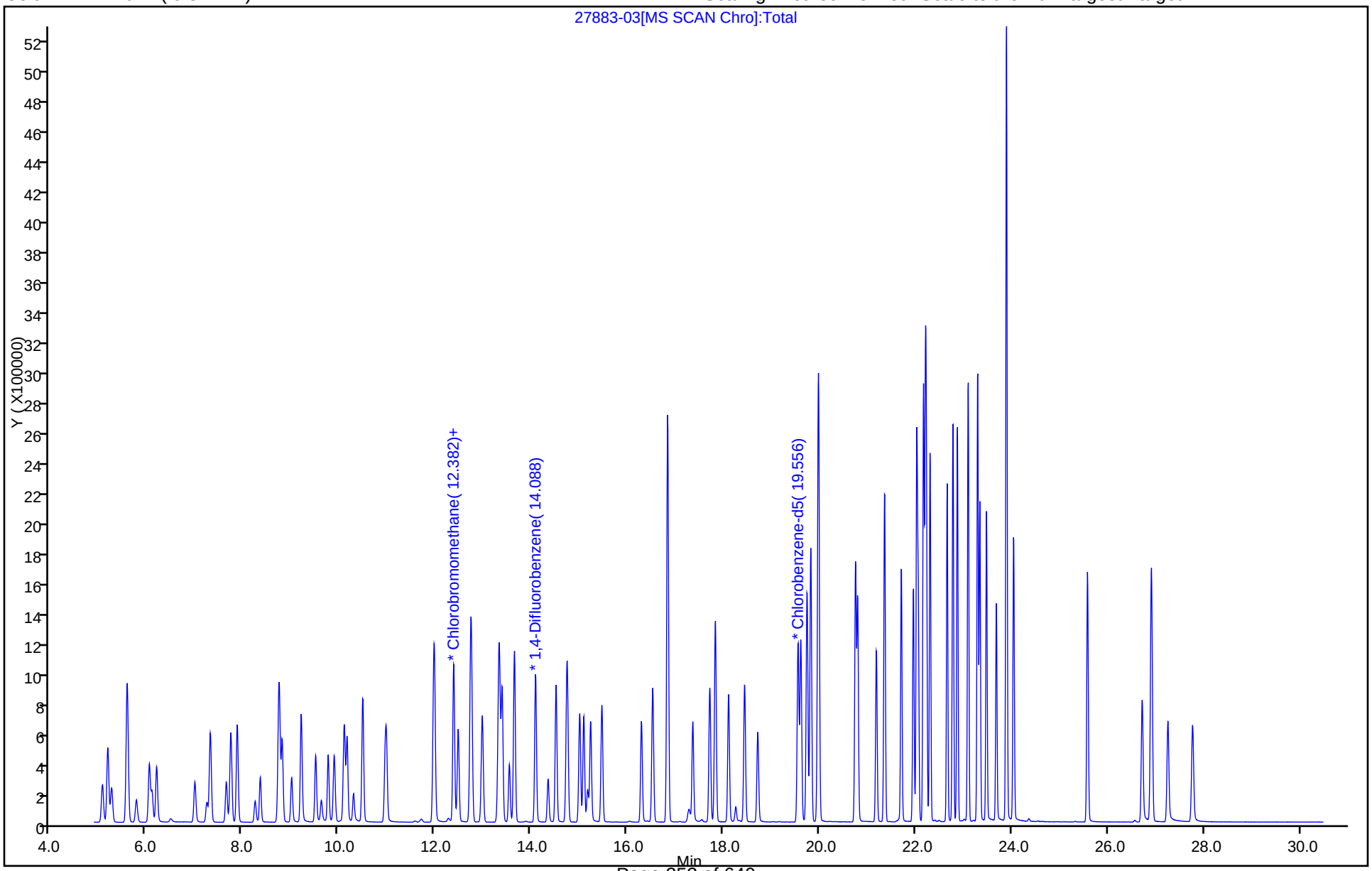
Report Date: 15-Nov-2017 08:19:55 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-03.d

Injection Date:	14-Nov-2017 11:14:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	ccvis			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-001.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 31-Oct-2017 16:32:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0027684-001
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 01-Nov-2017 10:59:04 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: daiglep Date: 01-Nov-2017 10:33:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		9.424				10.0	ND	
* 50 1,4-Difluorobenzene	114		11.318				10.0	ND	
* 74 Chlorobenzene-d5	117		17.272				10.0	ND	
* 83 4-Bromofluorobenzene	95		19.728				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

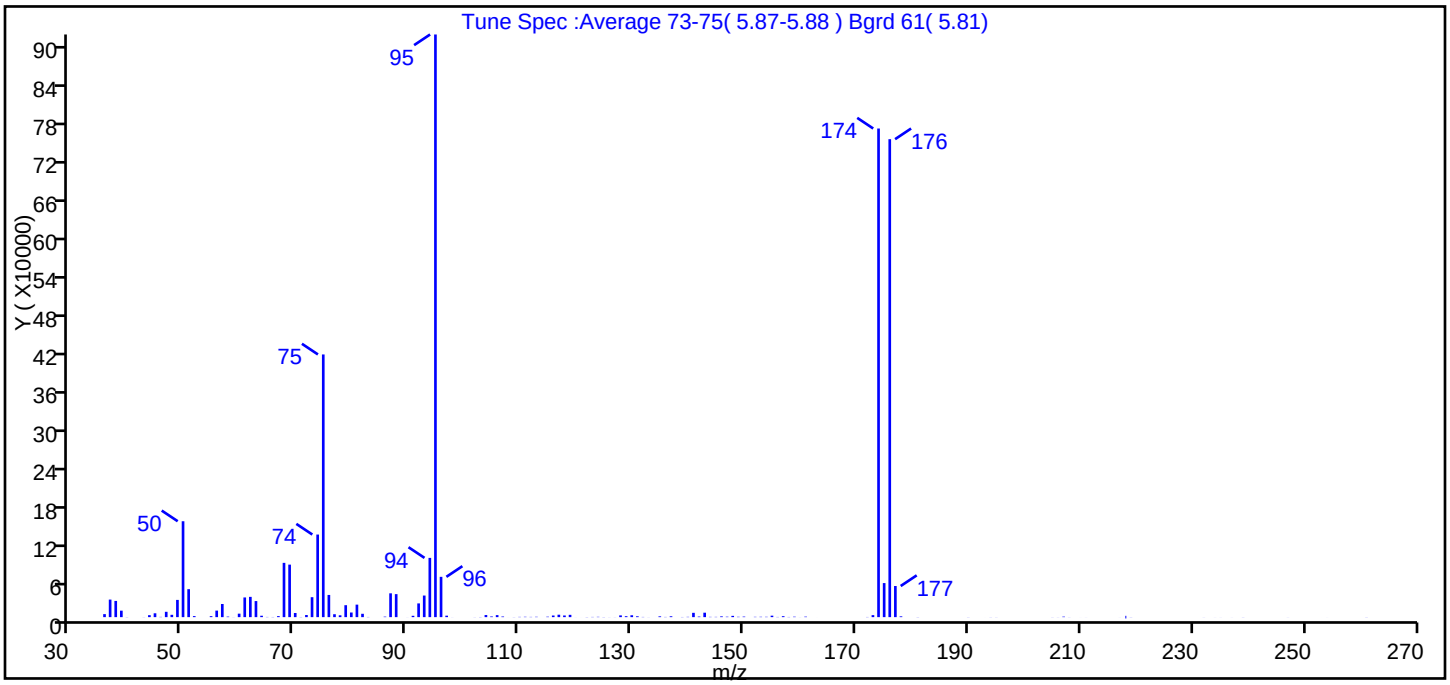
ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-001.D
Injection Date: 31-Oct-2017 16:32:30 Instrument ID: CHG.i
Lims ID: bfb
Client ID:
Operator ID: vtp ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	16.5
75	30.0 to 66.0 Percent of m/e 95	45.1
96	5.0 to 9.0 Percent of m/e 95	6.9
173	Less than 2.0 Percent of m/e 174	0.3 (0.4)
174	50.0 to 120.0 Percent of m/e 95	83.9
175	4.0 to 9.0 Percent of m/e 174	5.8 (7.0)
176	93.0 to 101.0 Percent of m/e 174	82.0 (97.8)
177	5.0 to 9.0 Percent of m/e 176	5.3 (6.5)

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-001.D\TO15_MasterMethod_(v1)
Injection Date: 31-Oct-2017 16:32:30
Spectrum: Tune Spec :Average 73-75(5.87-5.88) Bgrd 61(5.81)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 144

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4773	76.00	35048	119.00	3642	157.00	1491
37.00	27720	77.00	4610	120.00	38	158.00	287
38.00	25608	78.00	2898	121.00	21	159.00	701
39.00	10231	79.00	18864	122.00	199	160.00	72
40.00	196	80.00	7314	123.00	329	161.00	776
43.00	134	81.00	19744	124.00	490	163.00	13
44.00	3098	82.00	5303	125.00	202	172.00	275
45.00	6098	83.00	280	126.00	99	173.00	3162
46.00	373	86.00	785	127.00	101	174.00	771520
47.00	8436	87.00	37616	128.00	2746	175.00	53792
48.00	3679	88.00	36328	129.00	1471	176.00	754688
49.00	27216	90.00	64	130.00	2968	177.00	49160
50.00	151424	91.00	2110	131.00	1326	178.00	1240
51.00	44168	92.00	21688	132.00	322	181.00	185
52.00	1629	93.00	34112	133.00	94	190.00	145
55.00	1539	94.00	93568	134.00	4	193.00	17
56.00	10309	95.00	920000	135.00	1248	194.00	128
57.00	20760	96.00	63648	136.00	315	195.00	111
58.00	870	97.00	2324	137.00	1357	205.00	121
59.00	106	98.00	67	139.00	260	206.00	102
60.00	5504	102.00	123	140.00	458	207.00	770
61.00	31096	103.00	237	141.00	6816	208.00	117
62.00	32016	104.00	3309	142.00	895	210.00	26
63.00	25376	105.00	1063	143.00	7017	211.00	50
64.00	2226	106.00	3191	144.00	428	217.00	53
65.00	301	107.00	1000	145.00	414	218.00	1
66.00	250	108.00	35	146.00	1200	219.00	164
67.00	1611	109.00	153	147.00	702	232.00	81
68.00	85720	110.00	398	148.00	2021	234.00	50
69.00	82928	111.00	566	149.00	550	235.00	60
70.00	6534	112.00	372	150.00	853	237.00	51
71.00	245	113.00	562	152.00	494	239.00	128
72.00	3339	115.00	702	153.00	565	247.00	78

Report Date: 01-Nov-2017 10:59:05 Chrom Revision: 2.2 28-Sep-2017 09:29:16
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-001.D\TO15_MasterMethod_(v1)
Injection Date: 31-Oct-2017 16:32:30
Spectrum: Tune Spec :Average 73-75(5.87-5.88) Bgrd 61(5.81)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 144

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	31488	116.00	2578	154.00	536	253.00	8
74.00	130424	117.00	3840	155.00	2327	254.00	35
75.00	414784	118.00	2617	156.00	308	261.00	149

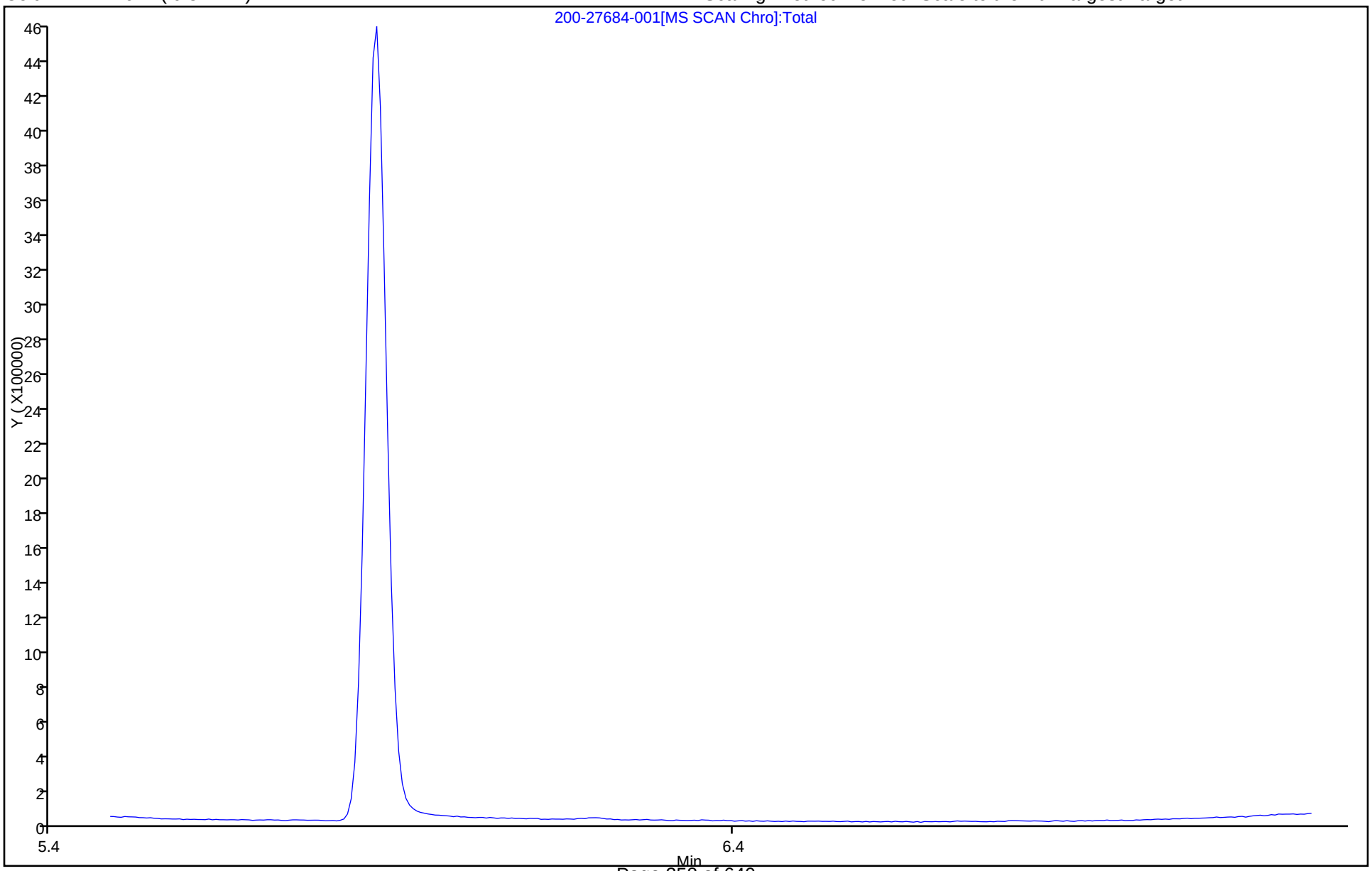
Report Date: 01-Nov-2017 10:59:05 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-001.D

Injection Date:	31-Oct-2017 16:32:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-001.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 15-Nov-2017 11:02:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0027906-001
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Nov-2017 12:43:46 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bunmaa Date: 16-Nov-2017 12:43:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		9.403				10.0	ND	
* 50 1,4-Difluorobenzene	114		11.302				10.0	ND	
* 74 Chlorobenzene-d5	117		17.256				10.0	ND	
* 83 4-Bromofluorobenzene	95		19.712				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

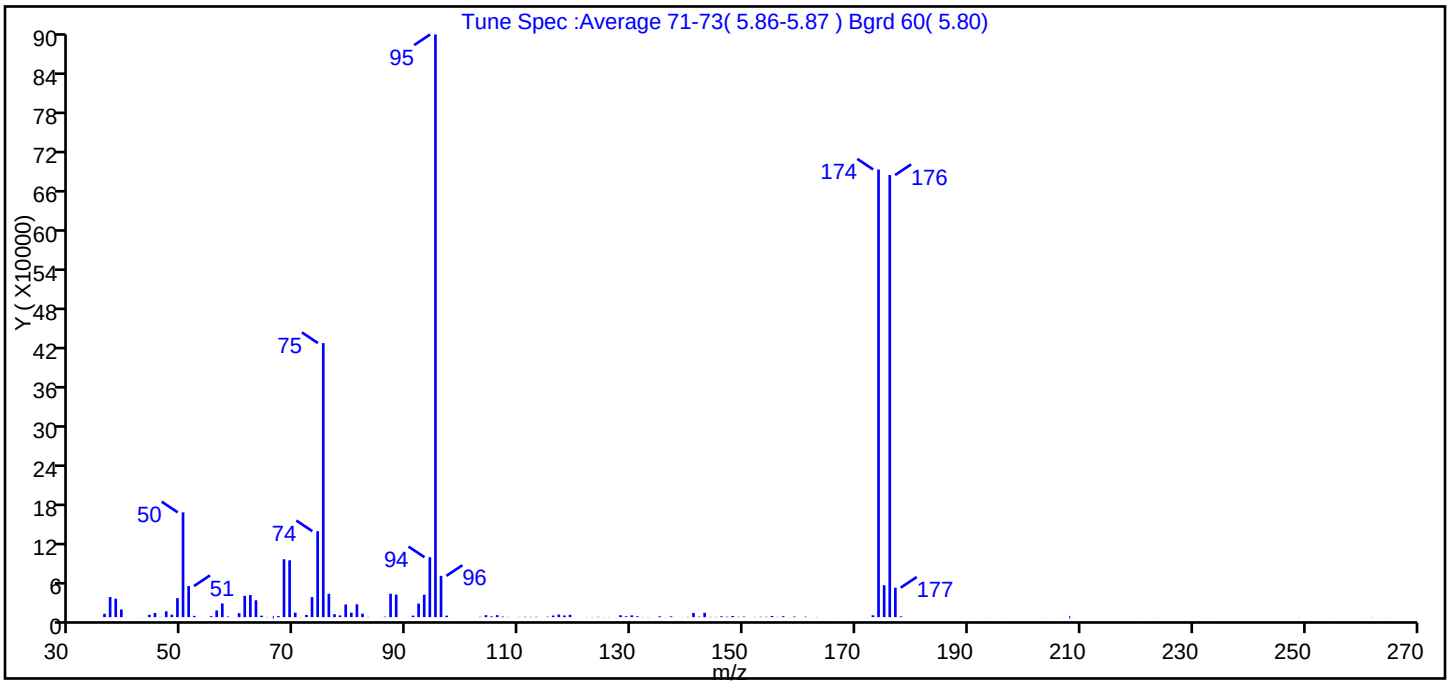
ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-001.D
Injection Date: 15-Nov-2017 11:02:30 Instrument ID: CHG.i
Lims ID: bfb
Client ID:
Operator ID: vtp ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	18.0
75	30.0 to 66.0 Percent of m/e 95	47.0
96	5.0 to 9.0 Percent of m/e 95	7.1
173	Less than 2.0 Percent of m/e 174	0.3 (0.4)
174	50.0 to 120.0 Percent of m/e 95	76.8
175	4.0 to 9.0 Percent of m/e 174	5.5 (7.1)
176	93.0 to 101.0 Percent of m/e 174	75.9 (98.8)
177	5.0 to 9.0 Percent of m/e 176	5.1 (6.7)

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-001.D\TO15_MasterMethod_(v1)
Injection Date: 15-Nov-2017 11:02:30
Spectrum: Tune Spec :Average 71-73(5.86-5.87) Bgrd 60(5.80)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5189	76.00	35808	120.00	9	161.00	679
37.00	30832	77.00	4547	122.00	188	163.00	254
38.00	28320	78.00	2647	123.00	276	164.00	5
39.00	11796	79.00	19440	124.00	458	166.00	55
40.00	127	80.00	6926	125.00	143	172.00	201
43.00	160	81.00	19760	126.00	223	173.00	2899
44.00	3552	82.00	5333	127.00	65	174.00	687040
45.00	6448	83.00	394	128.00	2944	175.00	49040
46.00	394	84.00	55	129.00	1351	176.00	678528
47.00	8994	86.00	730	130.00	2820	177.00	45216
48.00	3732	87.00	35912	131.00	1274	178.00	1171
49.00	29184	88.00	34616	132.00	252	189.00	73
50.00	160832	90.00	57	133.00	227	190.00	61
51.00	47696	91.00	2322	135.00	1349	191.00	21
52.00	1936	92.00	20864	136.00	180	193.00	56
53.00	57	93.00	34344	137.00	1148	194.00	59
55.00	1532	94.00	91968	139.00	245	196.00	50
56.00	10364	95.00	894272	140.00	434	203.00	64
57.00	21000	96.00	63328	141.00	6453	204.00	57
58.00	931	97.00	2285	142.00	722	205.00	35
59.00	98	98.00	58	143.00	6604	206.00	65
60.00	6120	103.00	469	144.00	423	208.00	2
61.00	32744	104.00	3030	145.00	362	221.00	47
62.00	33896	105.00	1169	146.00	1243	223.00	109
63.00	25880	106.00	3103	147.00	669	232.00	70
64.00	2262	107.00	853	148.00	1746	234.00	61
65.00	294	108.00	390	149.00	501	239.00	34
66.00	1	109.00	9	150.00	847	249.00	100
67.00	1721	110.00	346	151.00	62	253.00	31
68.00	88888	111.00	541	152.00	355	255.00	88
69.00	87248	112.00	413	153.00	578	260.00	55
70.00	6785	113.00	564	154.00	515	262.00	245
71.00	207	115.00	656	155.00	1837	263.00	51

Report Date: 16-Nov-2017 12:43:46 Chrom Revision: 2.2 28-Sep-2017 09:29:16
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-001.D\TO15_MasterMethod_(v1)
Injection Date: 15-Nov-2017 11:02:30
Spectrum: Tune Spec :Average 71-73(5.86-5.87) Bgrd 60(5.80)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3355	116.00	2446	156.00	375	265.00	157
73.00	30720	117.00	4006	157.00	1424		
74.00	131904	118.00	2563	158.00	187		
75.00	420608	119.00	3579	159.00	930		

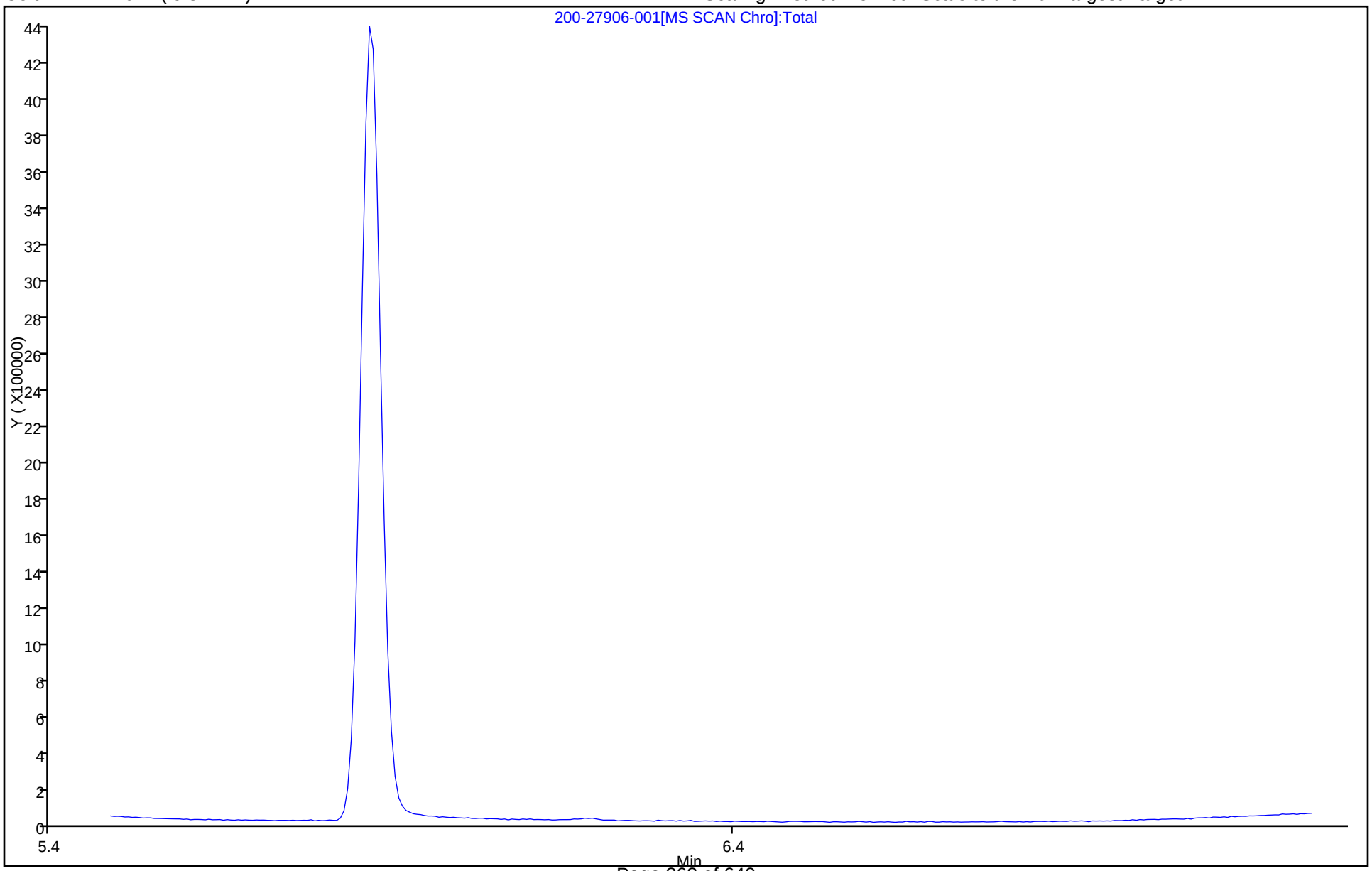
Report Date: 16-Nov-2017 12:43:46 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-001.D

Injection Date:	15-Nov-2017 11:02:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-01.d
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 14-Nov-2017 09:29:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 0.0 mL Dil. Factor: 1.0000
Sample Info: 200-0027883-001
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Nov-2017 08:19:07 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: puangmaleek Date: 15-Nov-2017 08:19:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		12.387				10.0	ND	
* 50 1,4-Difluorobenzene	114		14.088				10.0	ND	
* 74 Chlorobenzene-d5	117		19.550				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

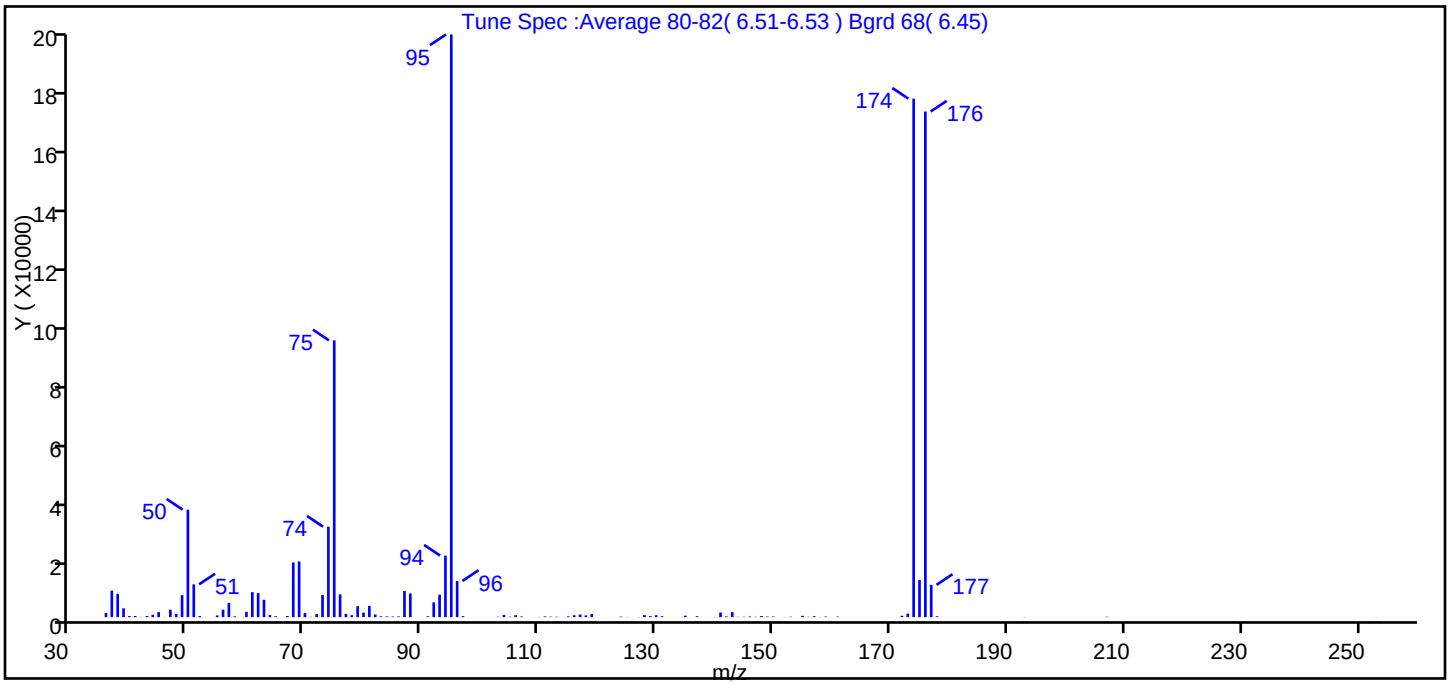
ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-01.d
Injection Date: 14-Nov-2017 09:29:30 Instrument ID: CHW.i
Lims ID: bfb
Client ID:
Operator ID: pad ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 0.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	18.5
75	30.0 to 66.0 Percent of m/e 95	47.5
96	5.0 to 9.0 Percent of m/e 95	6.2
173	Less than 2.0 Percent of m/e 174	0.6 (0.7)
174	50.0 to 120.0 Percent of m/e 95	89.0
175	4.0 to 9.0 Percent of m/e 174	6.4 (7.2)
176	93.0 to 101.0 Percent of m/e 174	86.8 (97.5)
177	5.0 to 9.0 Percent of m/e 176	5.5 (6.4)

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-01.d\TO15_MasterMethod_(v1).rslt\sp
Injection Date: 14-Nov-2017 09:29:30
Spectrum: Tune Spec :Average 80-82(6.51-6.53) Bgrd 68(6.45)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1417	67.00	384	96.00	12063	142.00	233
37.00	8835	68.00	18216	97.00	333	143.00	1664
38.00	7789	69.00	18552	103.00	127	144.00	85
39.00	2936	70.00	1344	104.00	727	145.00	116
40.00	366	71.00	97	105.00	150	146.00	225
41.00	377	72.00	997	106.00	652	147.00	113
42.00	61	73.00	7363	107.00	232	148.00	375
43.00	379	74.00	30144	110.00	75	149.00	192
44.00	793	75.00	92216	111.00	233	150.00	214
45.00	1661	76.00	7580	112.00	155	152.00	58
46.00	62	77.00	1090	113.00	130	153.00	134
47.00	2479	78.00	639	115.00	270	155.00	439
48.00	1023	79.00	3651	116.00	635	156.00	118
49.00	7303	80.00	1509	117.00	892	157.00	330
50.00	35816	81.00	3744	118.00	572	158.00	53
51.00	10921	82.00	883	119.00	1048	159.00	209
52.00	356	83.00	270	124.00	171	161.00	191
55.00	574	84.00	245	125.00	54	172.00	460
56.00	2488	85.00	209	127.00	51	173.00	1186
57.00	4767	86.00	232	128.00	682	174.00	172736
58.00	272	87.00	8724	129.00	345	175.00	12364
60.00	1748	88.00	7886	130.00	645	176.00	168448
61.00	8328	91.00	297	131.00	301	177.00	10754
62.00	8002	92.00	4925	135.00	489	178.00	293
63.00	5772	93.00	7478	137.00	307	193.00	72
64.00	675	94.00	20504	140.00	63	207.00	142
65.00	293	95.00	194112	141.00	1548	253.00	35

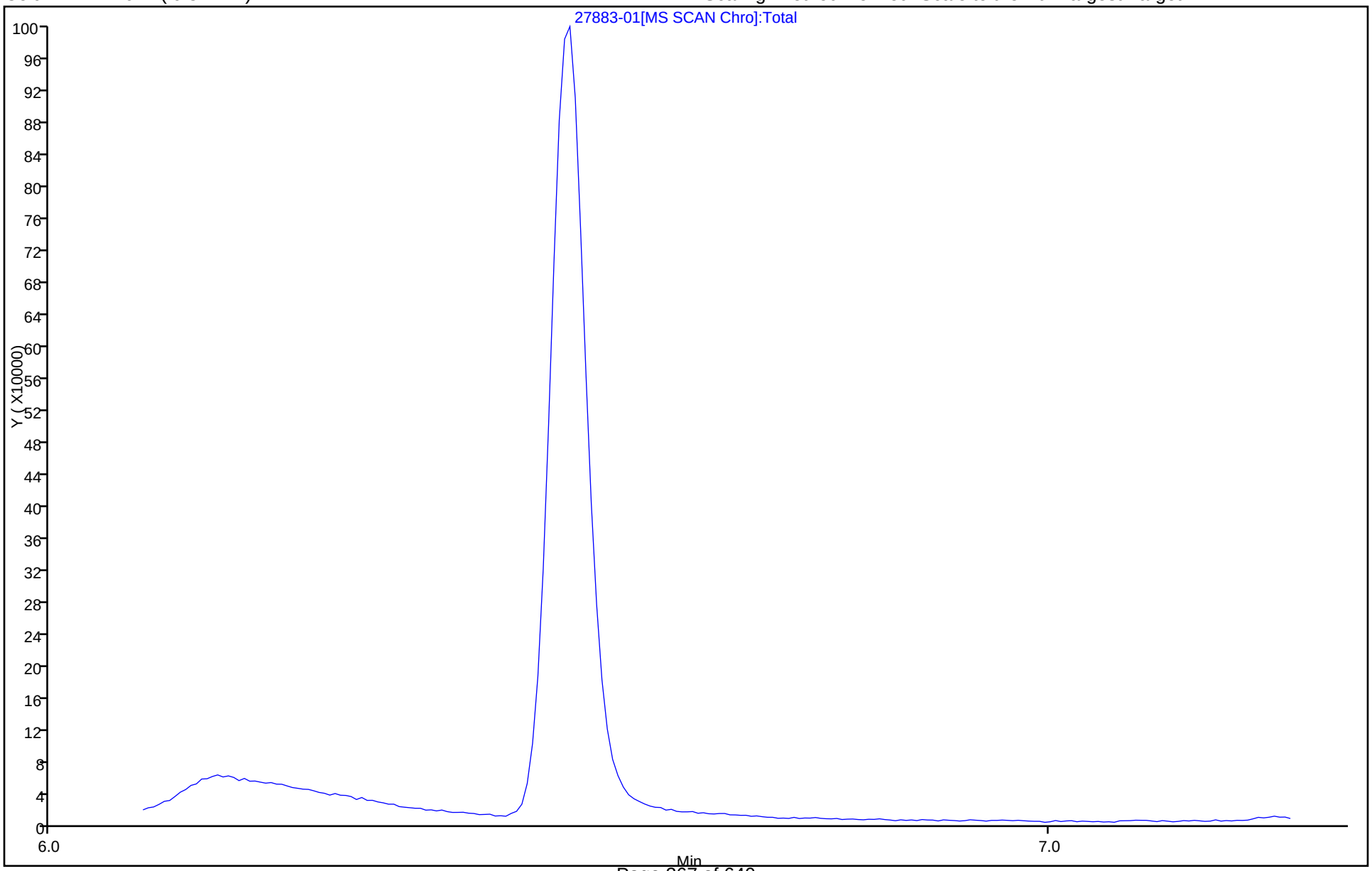
Report Date: 15-Nov-2017 08:19:08 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-01.d

Injection Date:	14-Nov-2017 09:29:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	0.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: Lab Sample ID: MB 200-123310/5

Matrix: Air Lab File ID: 27883-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 11/14/2017 13:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123310 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.035	0.035
127-18-4	Tetrachloroethene	165.83	0.0098	U	0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
79-01-6	Trichloroethene	131.39	0.0091	U	0.035	0.0091
75-01-4	Vinyl chloride	62.50	0.018	U	0.035	0.018

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: Lab Sample ID: MB 200-123310/5

Matrix: Air Lab File ID: 27883-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 11/14/2017 13:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123310 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.14	0.11
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.14	0.14
127-18-4	Tetrachloroethene	165.83	0.066	U	0.24	0.066
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
79-01-6	Trichloroethene	131.39	0.049	U	0.19	0.049
75-01-4	Vinyl chloride	62.50	0.046	U	0.089	0.046

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 14-Nov-2017 13:00:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027883-005
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Nov-2017 08:26:57 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: puangmaleek Date: 15-Nov-2017 08:26:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		5.069					ND	
2 Dichlorodifluoromethane	85		5.181					ND	
3 Chlorodifluoromethane	51		5.261					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.582					ND	
5 Chloromethane	50		5.775					ND	
6 Butane	43		6.048					ND	
7 Vinyl chloride	62		6.101					ND	
8 Butadiene	54		6.198					ND	
10 Bromomethane	94		6.995					ND	
11 Chloroethane	64		7.246					ND	
12 2-Methylbutane	43		7.316					ND	
13 Vinyl bromide	106		7.653					ND	
14 Trichlorofluoromethane	101		7.744					ND	
16 Pentane	43		7.877					ND	
17 Ethanol	45	8.257	8.252	0.005	19	1328		0.0894	
18 Ethyl ether	59		8.359					ND	
T 15 Methyl Acetate TIC	43		8.560					ND	
19 Acrolein	56		8.739					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.749					ND	
21 1,1-Dichloroethene	96		8.814					ND	
22 Acetone	43	9.028	9.028	0.017	83	17010		0.3141	7
23 Carbon disulfide	76		9.204					ND	
24 Isopropyl alcohol	45	9.226	9.215	0.011	99	16684		0.2707	
25 3-Chloro-1-propene	41		9.509					ND	
26 Acetonitrile	41		9.627					ND	
27 Methylene Chloride	49	9.777	9.777	0.006	55	2770		0.0688	M
28 2-Methyl-2-propanol	59		9.894					ND	
29 Methyl tert-butyl ether	73		10.103					ND	
31 trans-1,2-Dichloroethene	61		10.167					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
32 Acrylonitrile	53		10.301					ND	
33 Hexane	57		10.488					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		10.959					ND	
35 Vinyl acetate	43		10.985					ND	
37 cis-1,2-Dichloroethene	96		11.959					ND	
38 2-Butanone (MEK)	72		11.981					ND	
39 Ethyl acetate	88		11.986					ND	
41 Tetrahydrofuran	42		12.382					ND	
* 40 Chlorobromomethane	128	12.382	12.387	-0.005	96	244612	10.0	10.0	
42 Chloroform	83		12.478					ND	
43 Cyclohexane	84		12.740					ND	
44 1,1,1-Trichloroethane	97		12.756					ND	
45 Carbon tetrachloride	117		12.981					ND	
46 Isooctane	57		13.329					ND	
47 Benzene	78	13.388	13.393	-0.005	85	2139		0.0168	
48 1,2-Dichloroethane	62		13.543					ND	
49 n-Heptane	43		13.650					ND	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1304593	10.0	10.0	
52 n-Butanol	56		14.350					ND	
53 Trichloroethene	95		14.516					ND	
A 51 GRO	1	14.741	(7.306-22.176)		0	3716612		0	
54 1,2-Dichloropropane	63		15.008					ND	
T 36 Methyl cyclohexane TIC	55		15.012					ND	
55 Methyl methacrylate	69		15.094					ND	
56 1,4-Dioxane	88		15.174					ND	
57 Dibromomethane	174	15.233	15.233	0.000	17	532		0.0116	
58 Dichlorobromomethane	83		15.469					ND	
60 cis-1,3-Dichloropropene	75		16.292					ND	
A 59 TVOC as Toluene	92	16.418	(5.059-27.778)		0	3949598		39.4	
61 4-Methyl-2-pentanone (MIBK	43		16.528					ND	
65 Toluene	92	16.849	16.849	0.011	8	1378		0.0162	M
64 n-Octane	43		16.838					ND	
66 trans-1,3-Dichloropropene	75		17.362					ND	
67 1,1,2-Trichloroethane	83		17.715					ND	
68 Tetrachloroethene	166		17.833					ND	
69 2-Hexanone	43		18.106					ND	
71 Chlorodibromomethane	129		18.438					ND	
72 Ethylene Dibromide	107	18.716	18.716	0.000	1	832		0.0123	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 74 Chlorobenzene-d5	117	19.556	19.550	0.006	87	1109525	10.0	10.0	
75 Chlorobenzene	112		19.609					ND	
76 Ethylbenzene	91	19.748	19.748	0.005	86	1993		0.0105	M
77 n-Nonane	57		19.818					ND	
78 m-Xylene & p-Xylene	106	19.984	19.978	0.006	0	1208		0.0163	
S 73 Xylenes, Total	106				0			0.0163	7
79 o-Xylene	106		20.749					ND	
80 Styrene	104		20.797					ND	
81 Bromoform	173		21.187					ND	
82 Isopropylbenzene	105		21.359					ND	
84 1,1,2,2-Tetrachloroethane	83		21.952					ND	
85 N-Propylbenzene	91	22.033	22.033	0.006	14	2308		0.008875	7
86 1,2,3-Trichloropropane	75		22.054					ND	
87 n-Decane	57		22.166					ND	
88 4-Ethyltoluene	105	22.204	22.204	0.000	10	2050		0.009737	7

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		22.225					ND	
90 1,3,5-Trimethylbenzene	105		22.300					ND	
91 Alpha Methyl Styrene	118	22.659	22.659	0.000	86	643		0.007787	
92 tert-Butylbenzene	119		22.776					ND	
93 1,2,4-Trimethylbenzene	105	22.878	22.878	0.005	80	1898		0.0107	M
94 sec-Butylbenzene	105		23.097					ND	
95 4-Isopropyltoluene	119		23.295					ND	
96 1,3-Dichlorobenzene	146	23.338	23.338	0.000	92	1942		0.0179	
97 1,4-Dichlorobenzene	146	23.483	23.477	0.005	83	2109		0.0206	
98 Benzyl chloride	91		23.680					ND	
100 n-Butylbenzene	91		23.889					ND	
99 Undecane	57		23.894					ND	
101 1,2-Dichlorobenzene	146	24.050	24.044	0.006	95	2093		0.0200	
102 Dodecane	57		25.579					ND	
103 1,2,4-Trichlorobenzene	180		26.719					ND	
104 Hexachlorobutadiene	225	26.917	26.912	0.005	87	1859		0.0278	
105 Naphthalene	128		27.254					ND	
106 1,2,3-Trichlorobenzene	180	27.784	27.768	0.016	1	677		0.0171	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

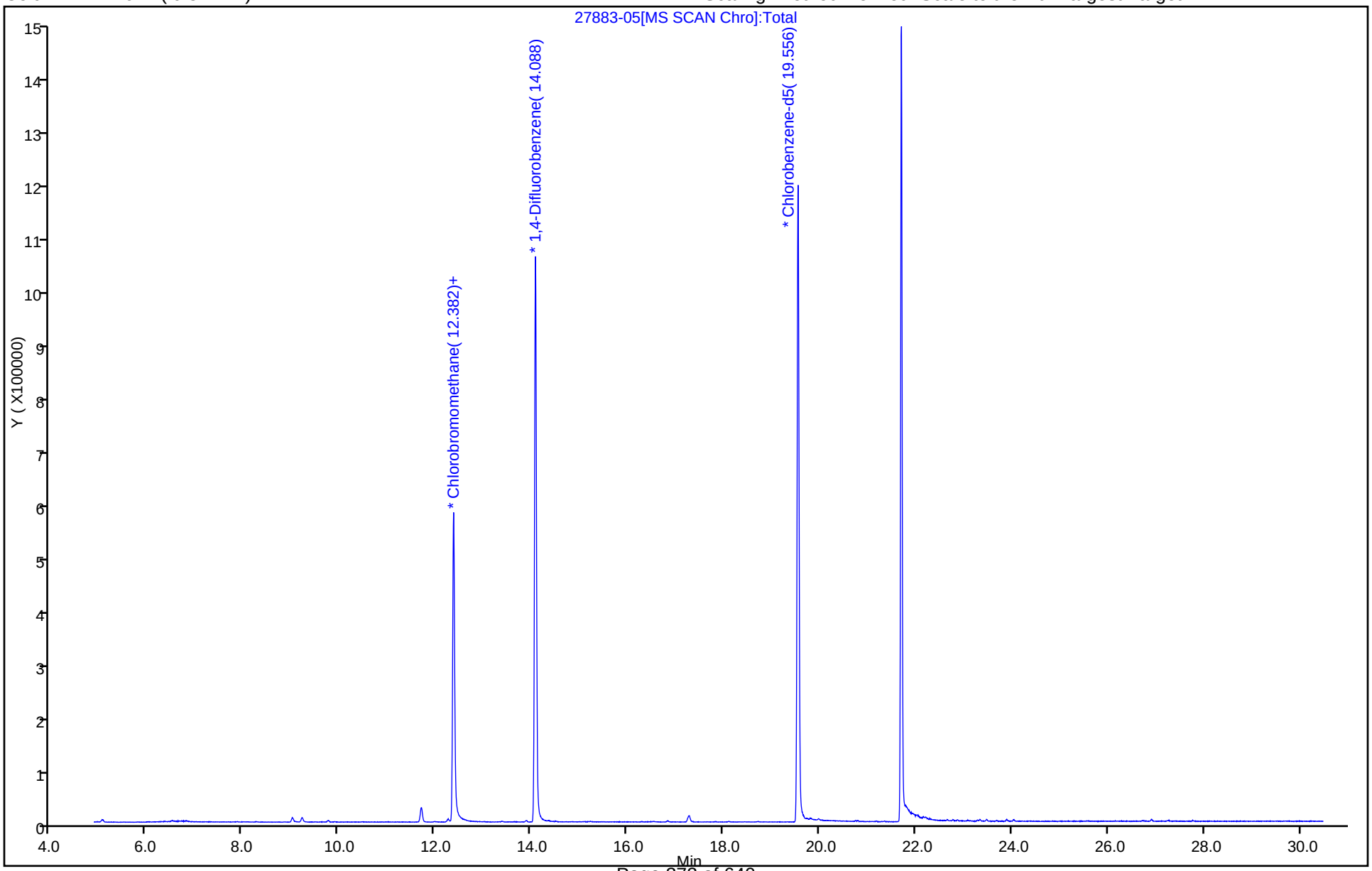
Report Date: 15-Nov-2017 08:26:58 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d

Injection Date:	14-Nov-2017 13:00:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 15-Nov-2017 08:26:58 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d

Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i

Lims ID: mb

Client ID:

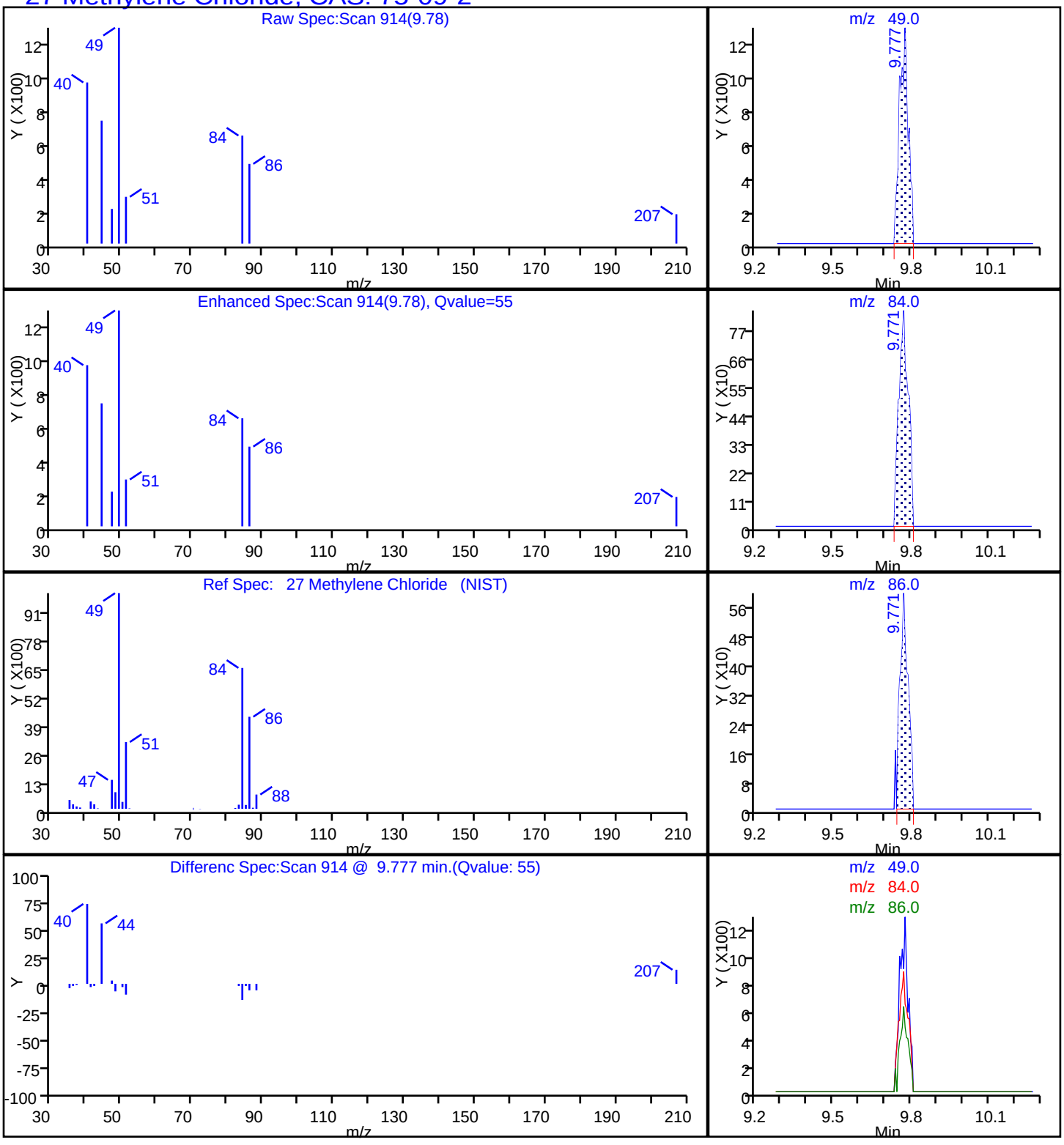
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5

Purge Vol: 200.000 mL Dil. Factor: 1.0000

Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL

Column: RTX-624 (0.32 mm) Detector MS SCAN

27 Methylene Chloride, CAS: 75-09-2



Report Date: 15-Nov-2017 08:26:58 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d

Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i

Lims ID: mb

Client ID:

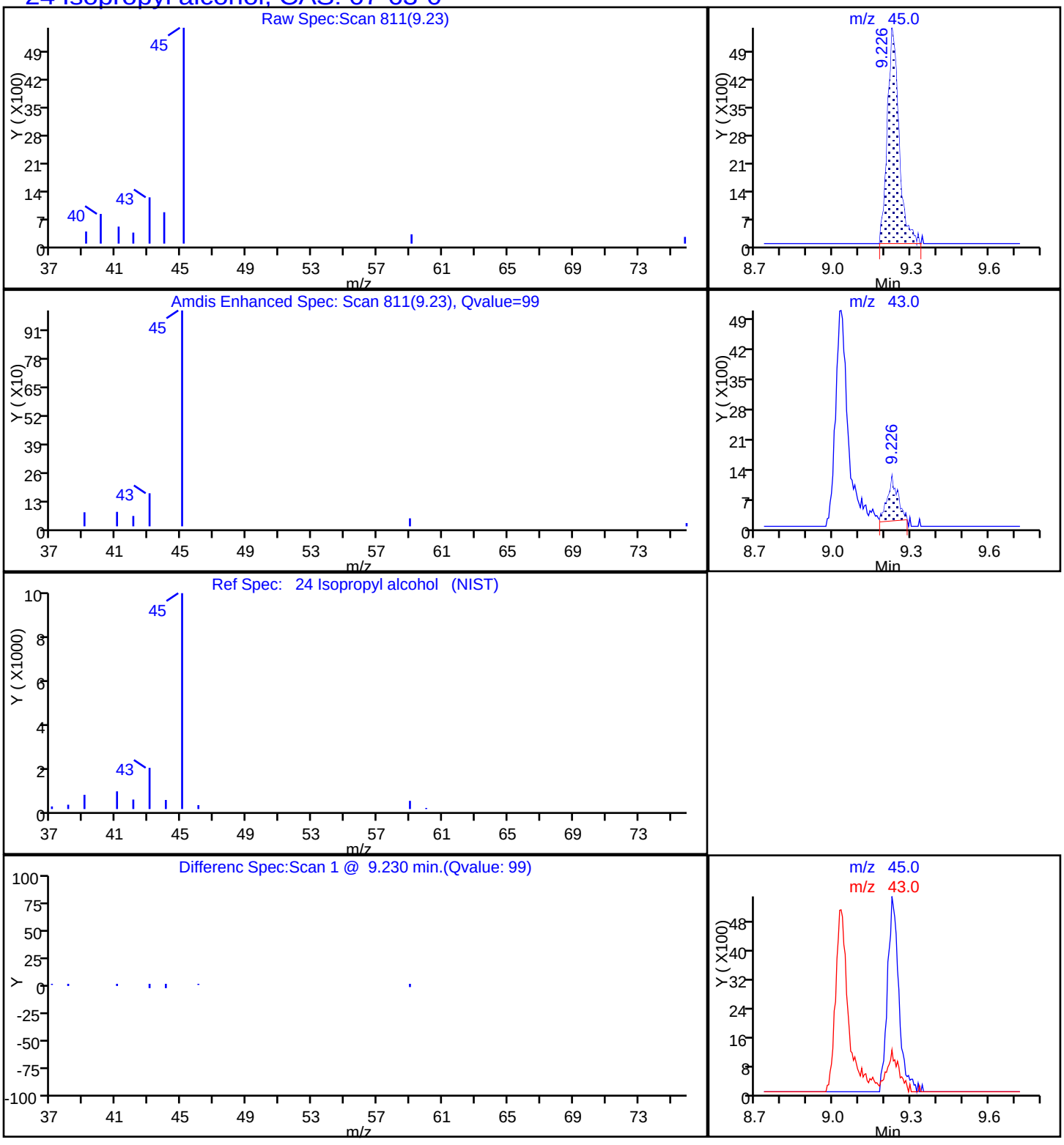
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5

Purge Vol: 200.000 mL Dil. Factor: 1.0000

Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL

Column: RTX-624 (0.32 mm) Detector MS SCAN

24 Isopropyl alcohol, CAS: 67-63-0



Manual Integration/User Assign Peak Report

TestAmerica Burlington

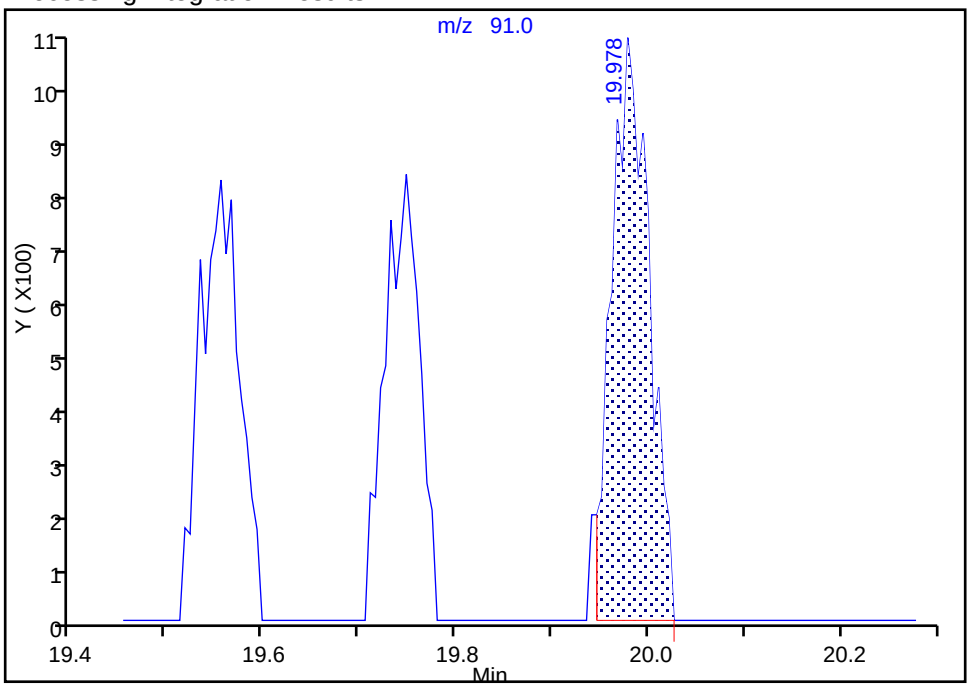
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d				
Injection Date:	14-Nov-2017 13:00:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 1

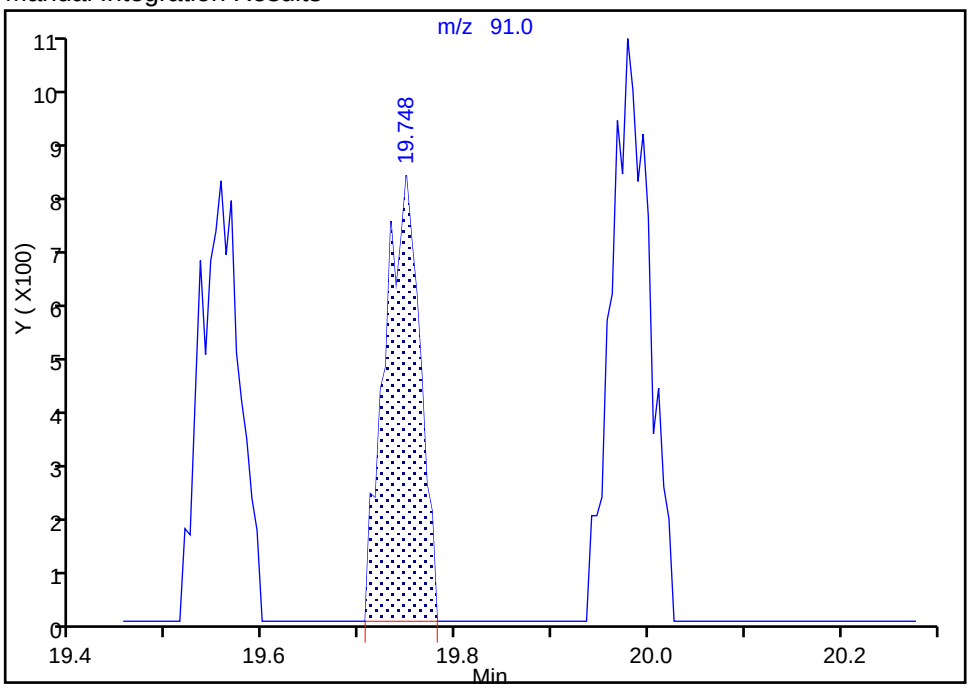
Processing Integration Results

RT: 19.98
Area: 2791
Amount: 0.014669
Amount Units: ppb v/v



Manual Integration Results

RT: 19.75
Area: 1993
Amount: 0.010475
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:24:17
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

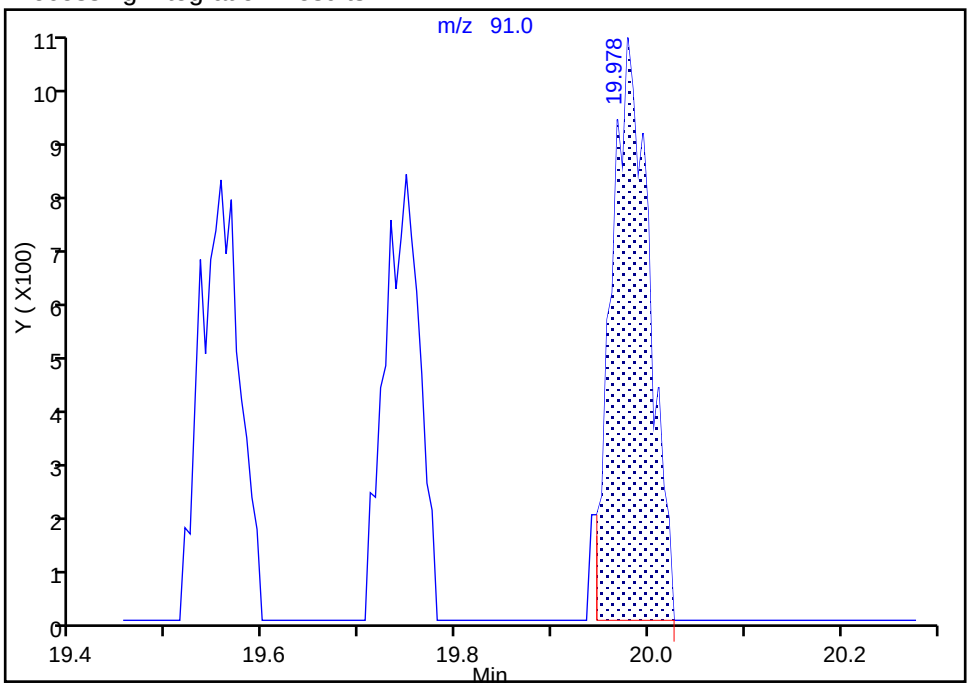
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d
Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Signal: 1

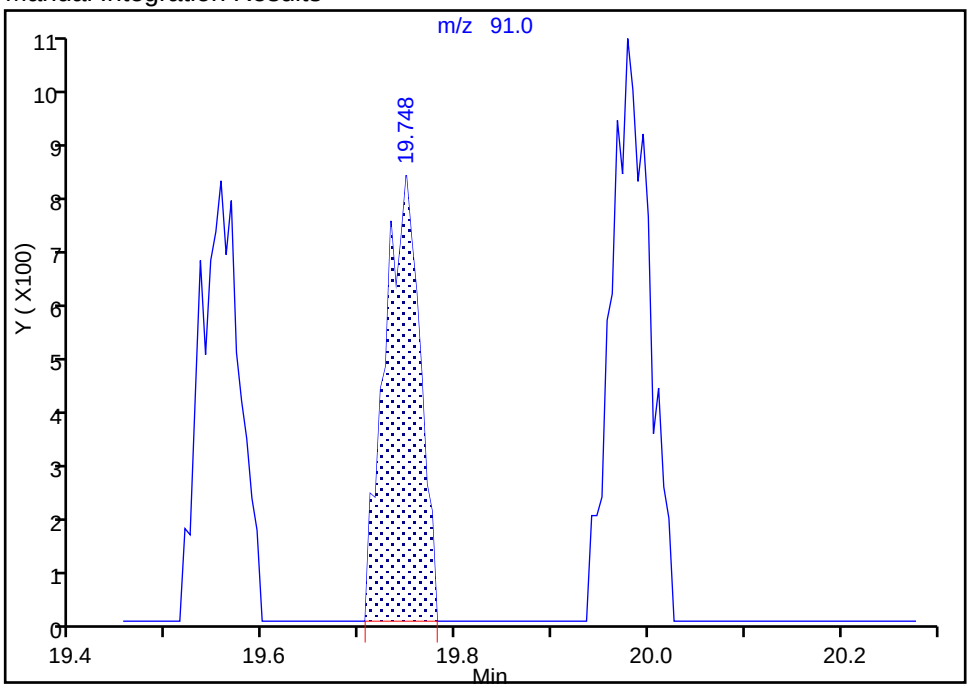
Processing Integration Results

RT: 19.98
Area: 2791
Amount: 0.014669
Amount Units: ppb v/v



Manual Integration Results

RT: 19.75
Area: 1993
Amount: 0.010475
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:24:27
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

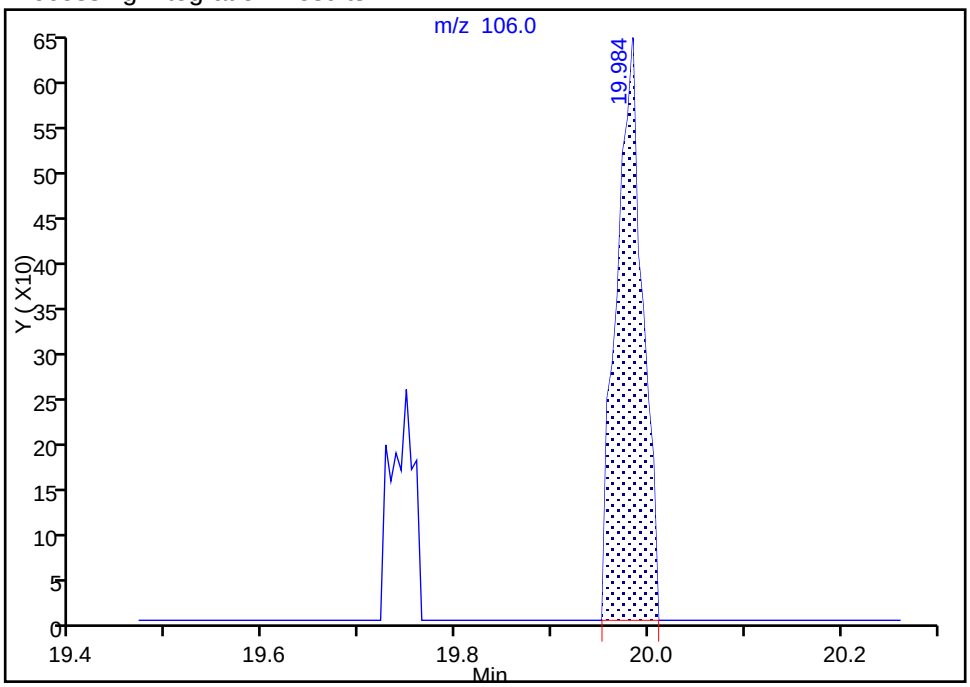
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d
Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Signal: 2

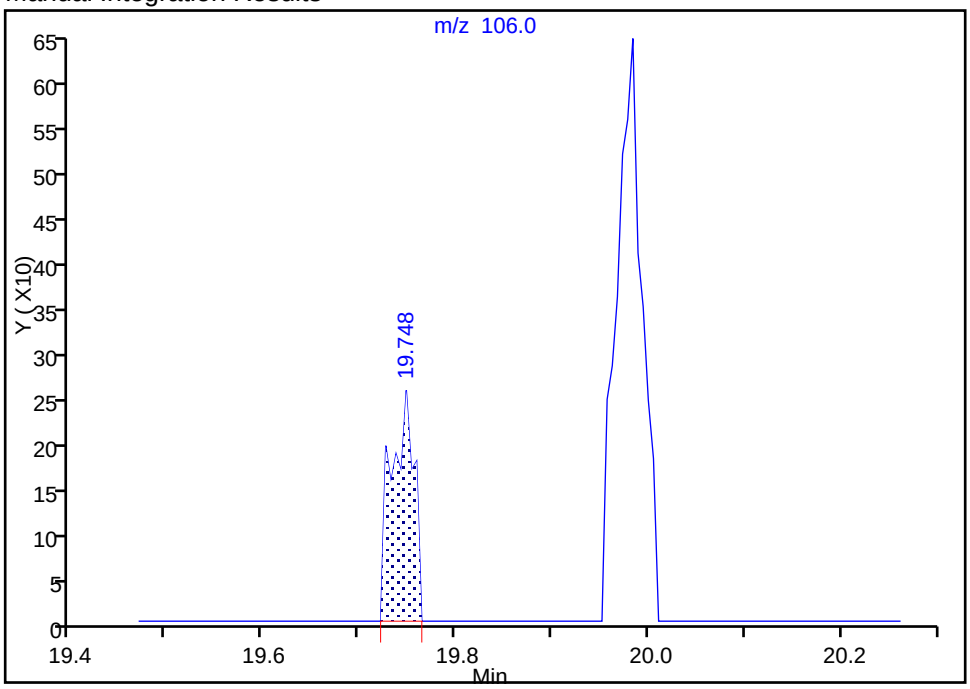
Processing Integration Results

RT: 19.98
Area: 1208
Amount: 0.014669
Amount Units: ppb v/v



Manual Integration Results

RT: 19.75
Area: 414
Amount: 0.010475
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:24:37
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

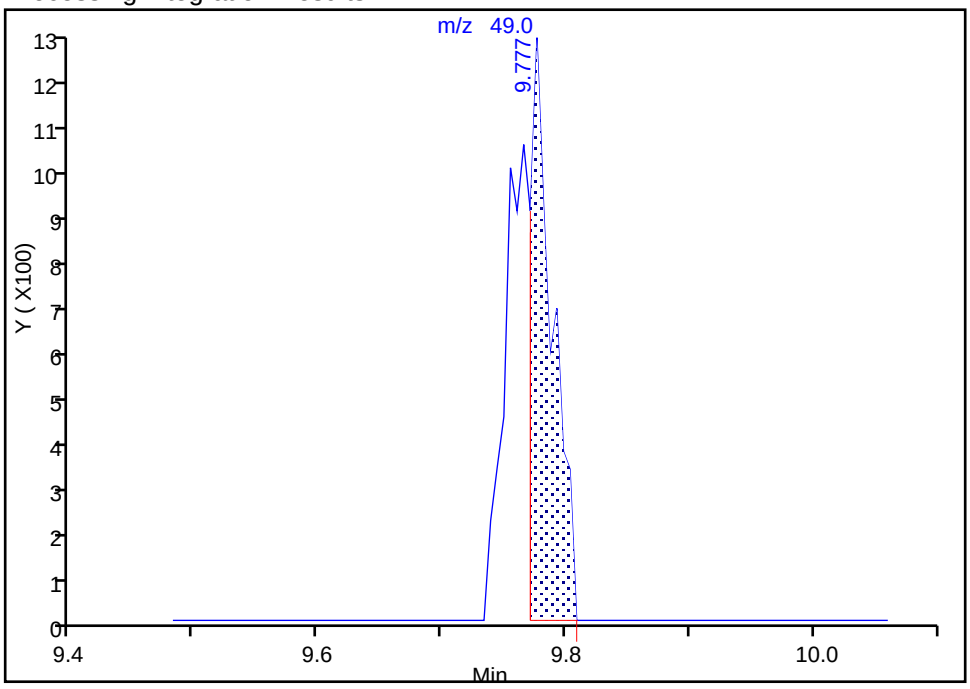
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d				
Injection Date:	14-Nov-2017 13:00:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

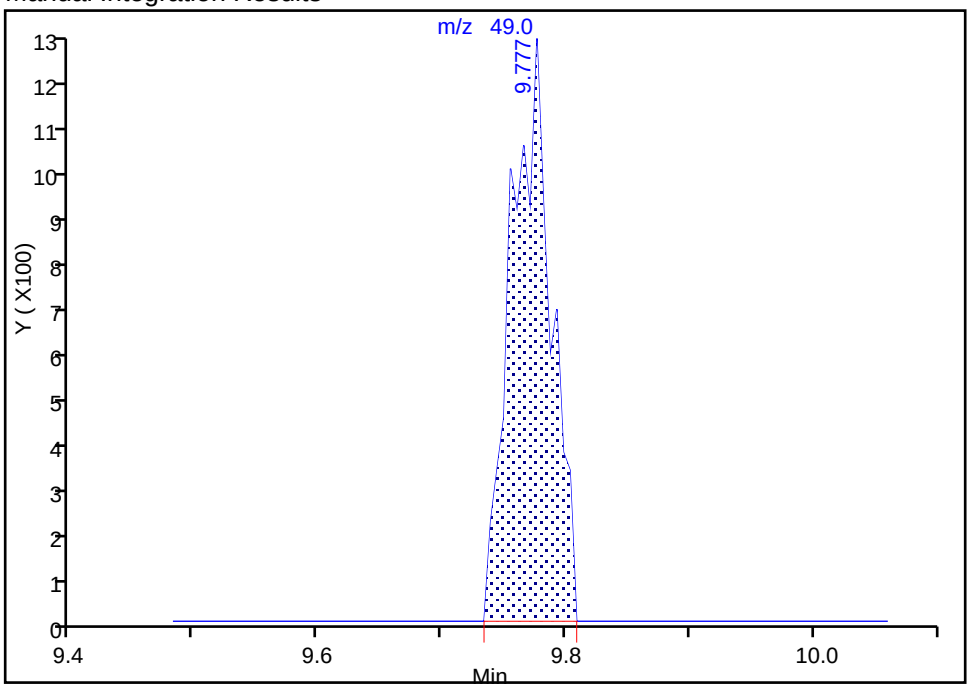
Processing Integration Results

RT: 9.78
Area: 1557
Amount: 0.038675
Amount Units: ppb v/v



Manual Integration Results

RT: 9.78
Area: 2770
Amount: 0.068804
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:22:35

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

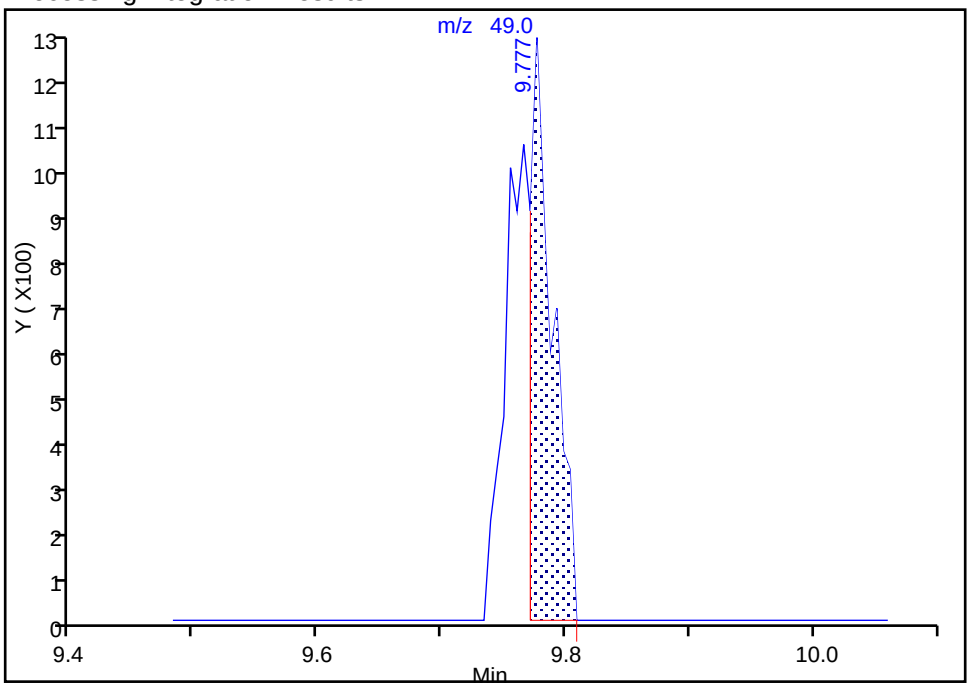
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d				
Injection Date:	14-Nov-2017 13:00:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

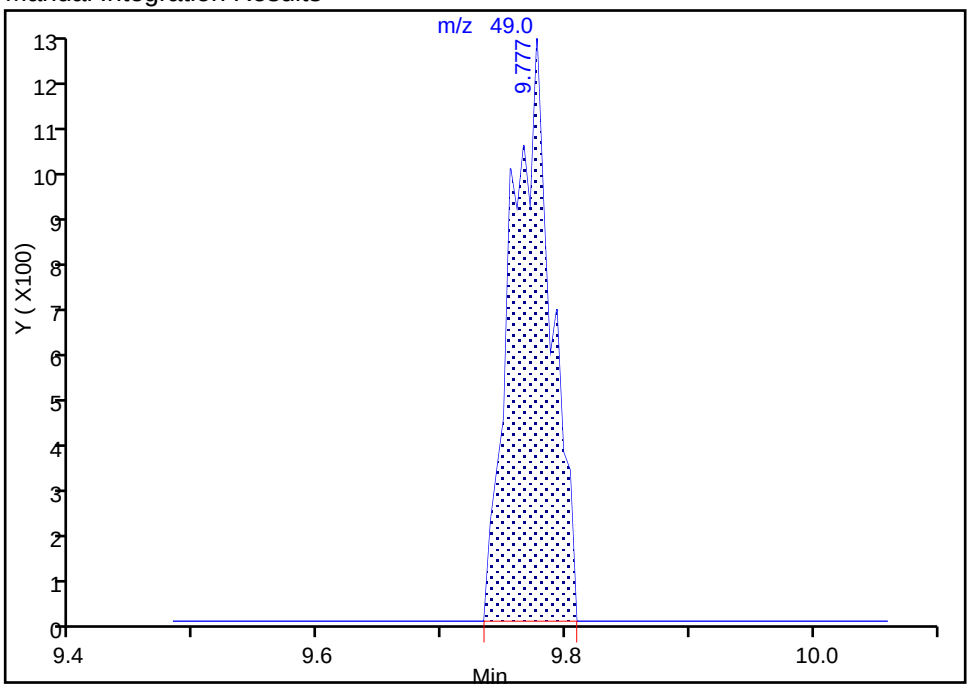
Processing Integration Results

RT: 9.78
Area: 1557
Amount: 0.038675
Amount Units: ppb v/v



Manual Integration Results

RT: 9.78
Area: 2770
Amount: 0.068804
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:22:48
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

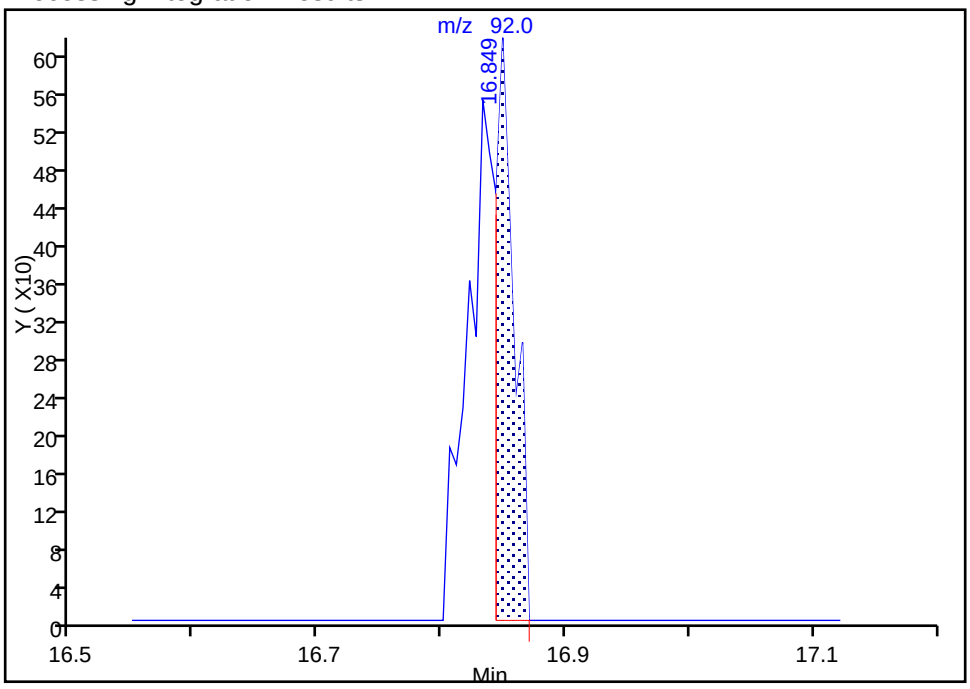
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d				
Injection Date:	14-Nov-2017 13:00:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

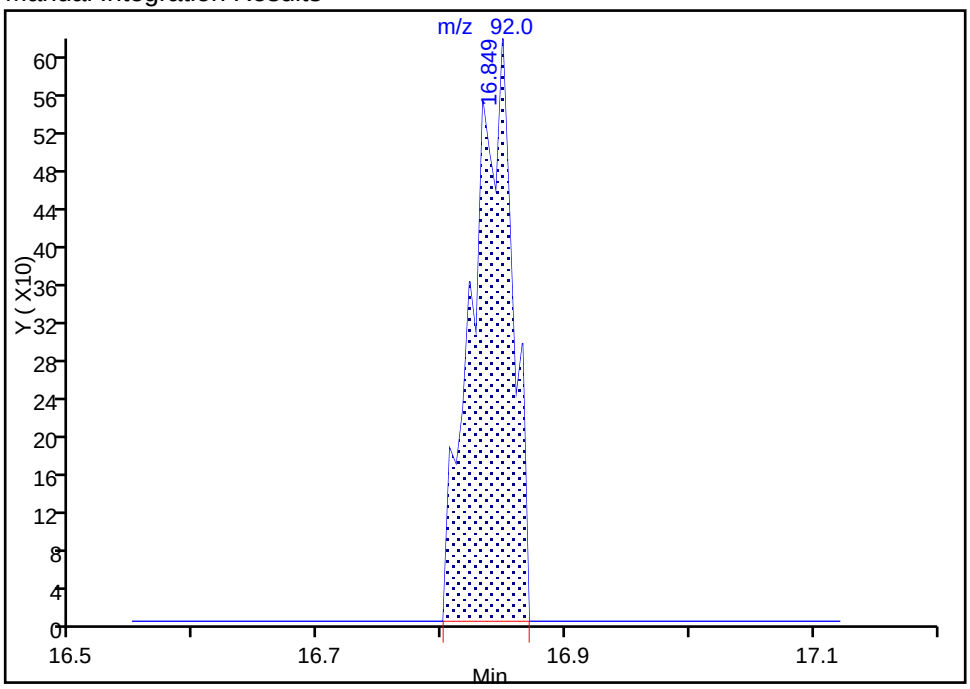
Processing Integration Results

RT: 16.85
Area: 650
Amount: 0.007630
Amount Units: ppb v/v



Manual Integration Results

RT: 16.85
Area: 1378
Amount: 0.016175
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:23:39

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

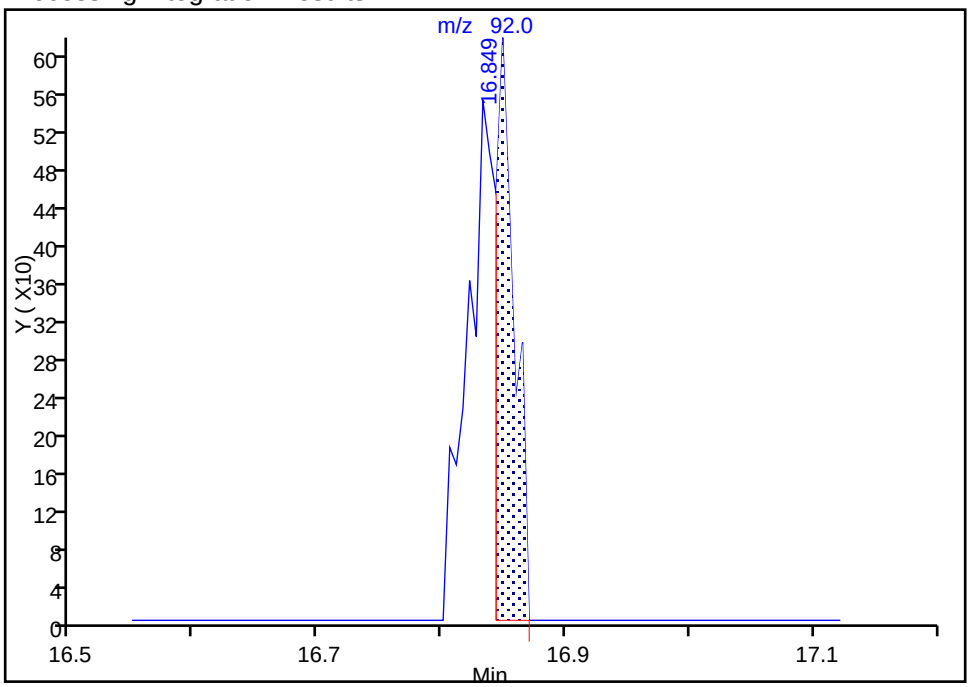
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d
Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

65 Toluene, CAS: 108-88-3

Signal: 1

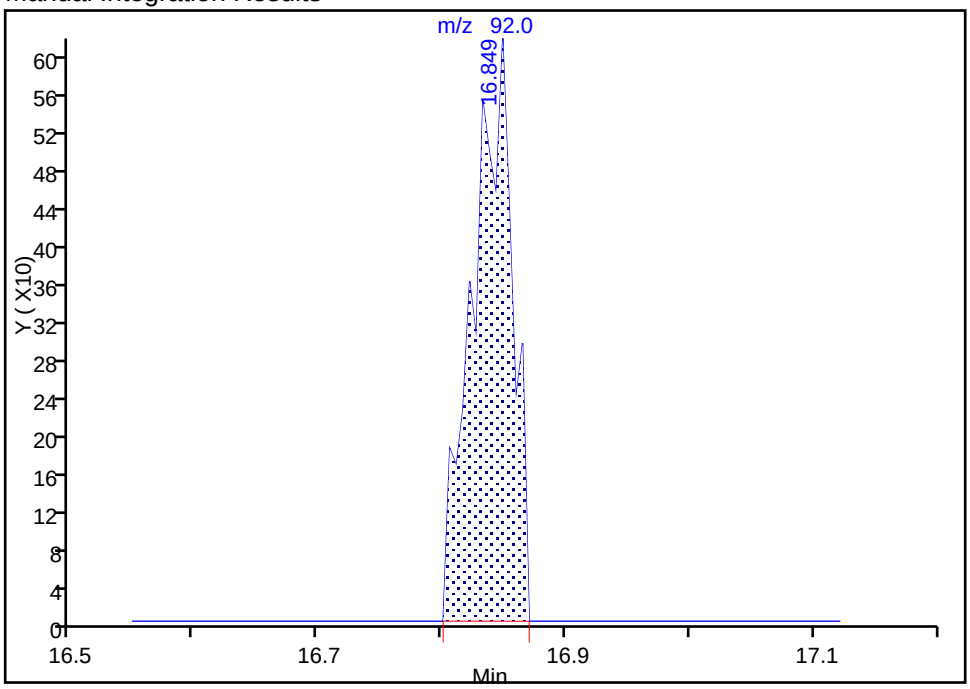
Processing Integration Results

RT: 16.85
Area: 650
Amount: 0.007630
Amount Units: ppb v/v



Manual Integration Results

RT: 16.85
Area: 1378
Amount: 0.016175
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:23:45
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

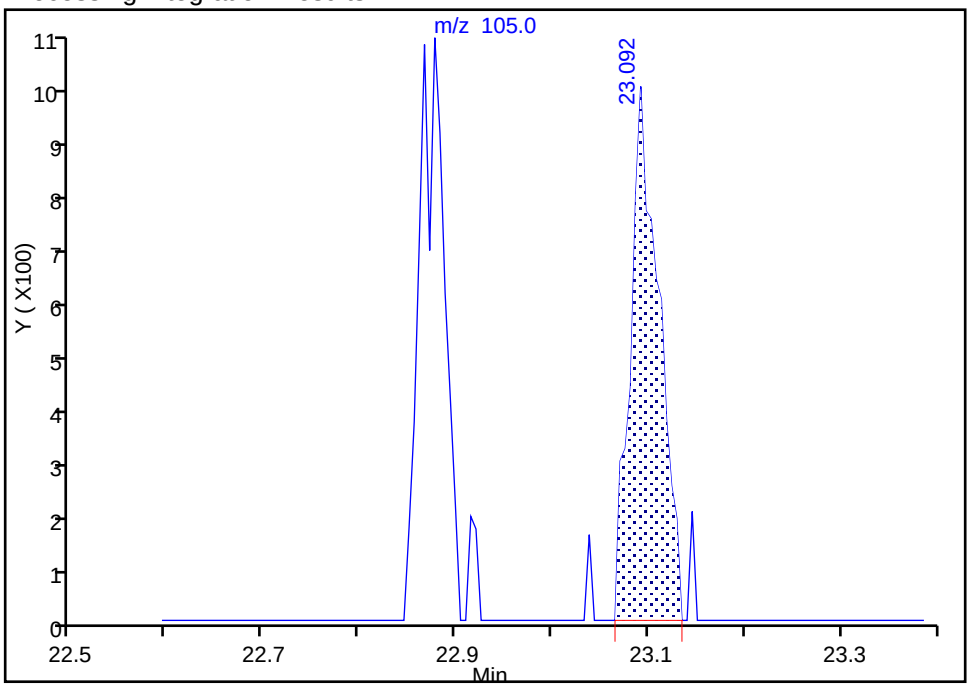
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d
Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

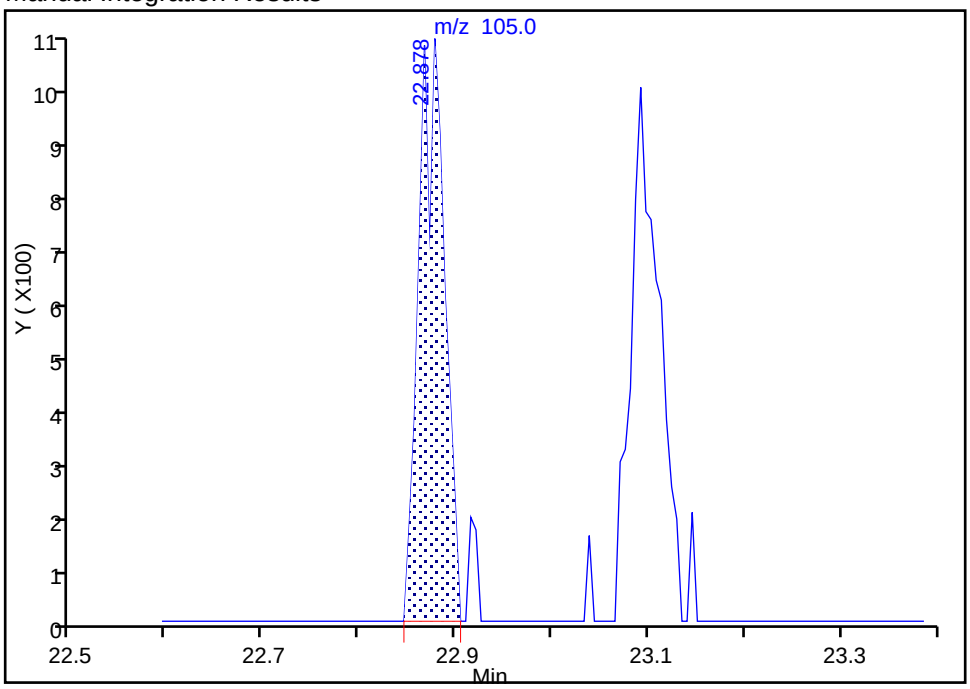
Processing Integration Results

RT: 23.09
Area: 1941
Amount: 0.010929
Amount Units: ppb v/v



Manual Integration Results

RT: 22.88
Area: 1898
Amount: 0.010687
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:26:08
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

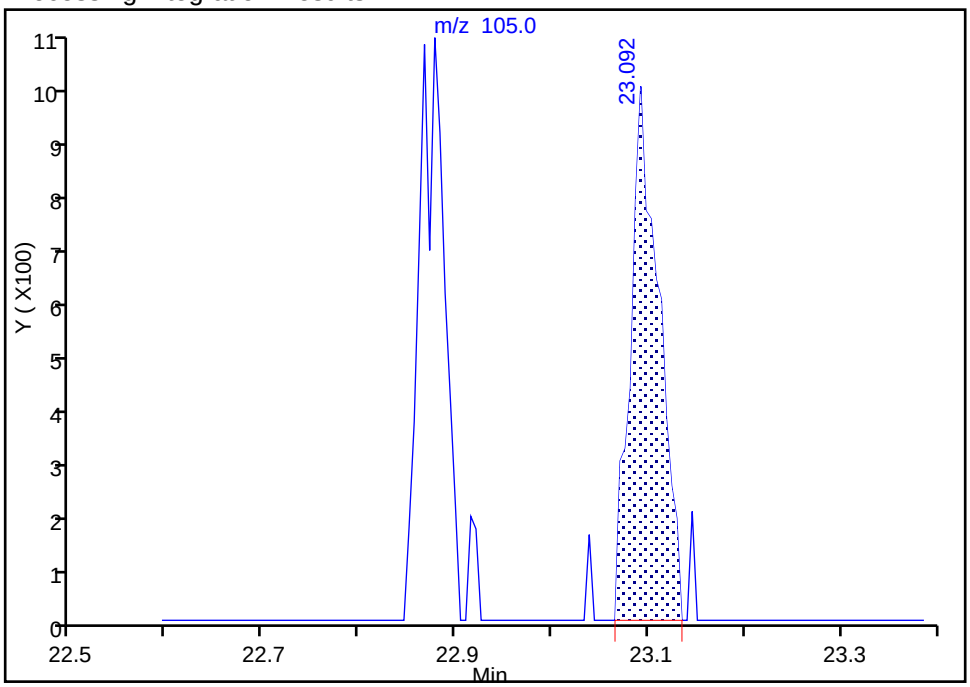
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-05.d
Injection Date: 14-Nov-2017 13:00:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

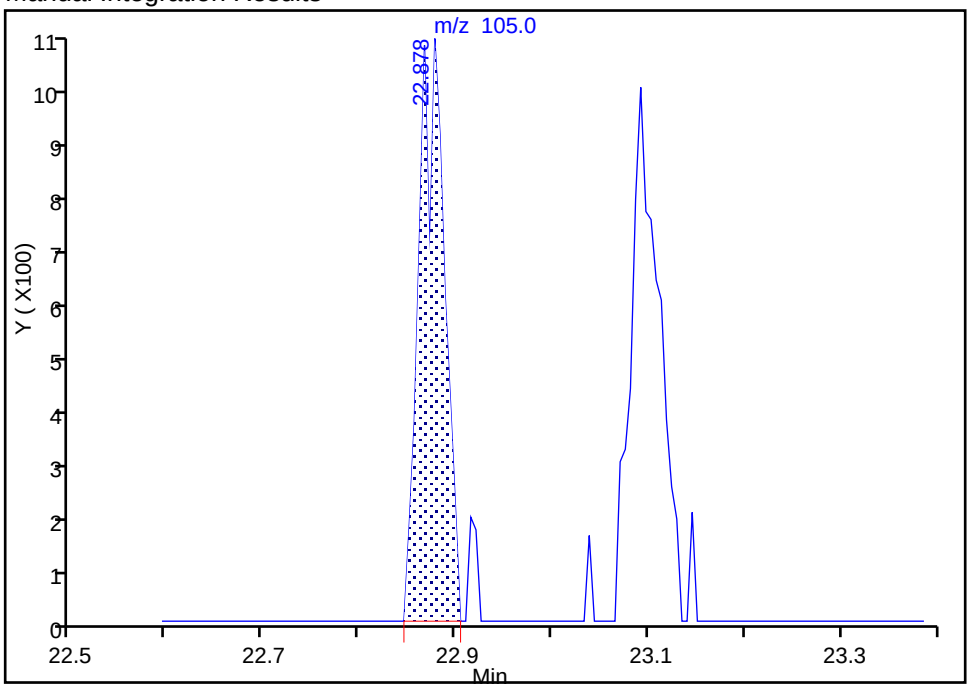
Processing Integration Results

RT: 23.09
Area: 1941
Amount: 0.010929
Amount Units: ppb v/v



Manual Integration Results

RT: 22.88
Area: 1898
Amount: 0.010687
Amount Units: ppb v/v



Reviewer: puangmaleek, 15-Nov-2017 08:26:15
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: Lab Sample ID: MB 200-123382/4

Matrix: Air Lab File ID: 200-27906-004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 13:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.035	0.035
127-18-4	Tetrachloroethene	165.83	0.0098	U	0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
79-01-6	Trichloroethene	131.39	0.0091	U	0.035	0.0091
75-01-4	Vinyl chloride	62.50	0.018	U	0.035	0.018

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: Lab Sample ID: MB 200-123382/4

Matrix: Air Lab File ID: 200-27906-004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 13:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.14	0.11
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.14	0.14
127-18-4	Tetrachloroethene	165.83	0.066	U	0.24	0.066
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
79-01-6	Trichloroethene	131.39	0.049	U	0.19	0.049
75-01-4	Vinyl chloride	62.50	0.046	U	0.089	0.046

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 15-Nov-2017 13:36:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027906-004
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Nov-2017 12:57:39 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bunmaa Date: 16-Nov-2017 12:57:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.133	3.133	0.005	85	1127		0.0690	7
2 Dichlorodifluoromethane	85		3.181					ND	
3 Chlorodifluoromethane	51		3.219					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390					ND	
5 Chloromethane	50		3.508					ND	
6 Butane	43	3.679	3.673	0.016	38	1335		0.0452	7M
7 Vinyl chloride	62		3.700					ND	
8 Butadiene	54		3.759					ND	
10 Bromomethane	94		4.305					ND	
11 Chloroethane	64		4.487					ND	
12 2-Methylbutane	43		4.535					ND	
13 Vinyl bromide	106		4.802					ND	
14 Trichlorofluoromethane	101		4.872					ND	
16 Pentane	43		4.984					ND	
17 Ethanol	45		5.343					ND	
18 Ethyl ether	59		5.418					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.749					ND	
19 Acrolein	56		5.760					ND	
21 1,1-Dichloroethene	96		5.808					ND	
22 Acetone	43	6.075	6.075	0.048	62	4485		0.1713	7
23 Carbon disulfide	76	6.172	6.172	0.000	42	1115		0.0167	M
24 Isopropyl alcohol	45		6.263					ND	
25 3-Chloro-1-propene	41		6.482					ND	
26 Acetonitrile	41		6.627					ND	
27 Methylene Chloride	49	6.755	6.749	0.011	1	705		0.0291	7M
28 2-Methyl-2-propanol	59		6.953					ND	
29 Methyl tert-butyl ether	73		7.119					ND	
31 trans-1,2-Dichloroethene	61		7.135					ND	
32 Acrylonitrile	53		7.295					ND	
33 Hexane	57		7.466					ND	
34 1,1-Dichloroethane	63		7.937					ND	
35 Vinyl acetate	43		8.001					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		8.964					ND	
38 2-Butanone (MEK)	72		9.034					ND	
39 Ethyl acetate	88		9.061					ND	
* 40 Chlorobromomethane	128	9.403	9.403	0.000	74	392042	10.0	10.0	
41 Tetrahydrofuran	42		9.446					ND	
42 Chloroform	83		9.515					ND	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84		9.756					ND	
44 1,1,1-Trichloroethane	97		9.788					ND	
45 Carbon tetrachloride	117		10.024					ND	
46 Isooctane	57	10.425	10.457	-0.011	1	1470		0.0114	7M
47 Benzene	78		10.484					ND	
48 1,2-Dichloroethane	62		10.666					ND	
49 n-Heptane	43		10.810					ND	
* 50 1,4-Difluorobenzene	114	11.297	11.302	-0.005	94	2020099	10.0	10.0	
52 n-Butanol	56		11.736					ND	
53 Trichloroethene	95		11.757					ND	
54 1,2-Dichloropropane	63		12.313					ND	
A 51 GRO	1	12.410	(4.525-20.294)		0	658144		0	
55 Methyl methacrylate	69		12.490					ND	
57 Dibromomethane	174	12.565	12.565	0.000	88	1121		0.0187	
56 1,4-Dioxane	88		12.570					ND	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
58 Dichlorobromomethane	83		12.848					ND	
60 cis-1,3-Dichloropropene	75		13.768					ND	
61 4-Methyl-2-pentanone (MIBK	43		14.089					ND	
A 59 TVOC as Toluene	92	14.327	(3.118-25.537)		0	707655		0	
65 Toluene	92		14.352					ND	
A 63 Toluene Range	92	14.352	(14.312-14.392)		0	3694		NC	
A 62 C8 Range	1	14.411	(14.367-14.455)		0	6287		NC	
64 n-Octane	43	14.410	14.405	0.005	67	1171		0.0158	
66 trans-1,3-Dichloropropene	75		14.951					ND	
67 1,1,2-Trichloroethane	83		15.325					ND	
68 Tetrachloroethene	166		15.416					ND	
69 2-Hexanone	43		15.807					ND	
71 Chlorodibromomethane	129		16.079					ND	
72 Ethylene Dibromide	107		16.352					ND	
* 74 Chlorobenzene-d5	117	17.256	17.256	0.000	86	1714394	10.0	10.0	
75 Chlorobenzene	112		17.315					ND	
76 Ethylbenzene	91		17.470					ND	
77 n-Nonane	57		17.610					ND	
78 m-Xylene & p-Xylene	106	17.716	17.727	-0.011	0	889		0.0141	
79 o-Xylene	106		18.583					ND	
80 Styrene	104		18.642					ND	
81 Bromoform	173		19.086					ND	
82 Isopropylbenzene	105		19.321					ND	
S 73 Xylenes, Total	106				0			0.0141	7
* 83 4-Bromofluorobenzene	95	19.706	19.712	-0.006	94	1110200	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.022					ND	M
85 N-Propylbenzene	91		20.086					ND	M
86 1,2,3-Trichloropropane	75		20.119					ND	
87 n-Decane	57		20.284					ND	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105		20.290					ND	
89 2-Chlorotoluene	91		20.290					ND	
90 1,3,5-Trimethylbenzene	105		20.407					ND	
91 Alpha Methyl Styrene	118		20.787					ND	
92 tert-Butylbenzene	119		20.910					ND	
93 1,2,4-Trimethylbenzene	105		21.012					ND	
94 sec-Butylbenzene	105		21.253					ND	
95 4-Isopropyltoluene	119		21.467					ND	
96 1,3-Dichlorobenzene	146	21.483	21.483	0.000	93	1951		0.0191	
97 1,4-Dichlorobenzene	146	21.627	21.622	0.005	91	2701		0.0266	
98 Benzyl chloride	91	21.825	21.830	-0.005	94	2295		0.0208	
100 n-Butylbenzene	91		22.044					ND	
99 Undecane	57		22.082					ND	
101 1,2-Dichlorobenzene	146	22.162	22.157	0.005	92	1854		0.0194	
102 Dodecane	57		23.639					ND	
103 1,2,4-Trichlorobenzene	180	24.596	24.602	-0.006	51	2353		0.0415	
104 Hexachlorobutadiene	225	24.783	24.783	0.000	72	1085		0.0184	
105 Naphthalene	128	25.072	25.067	0.005	95	4788		0.0460	
106 1,2,3-Trichlorobenzene	180		25.527					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

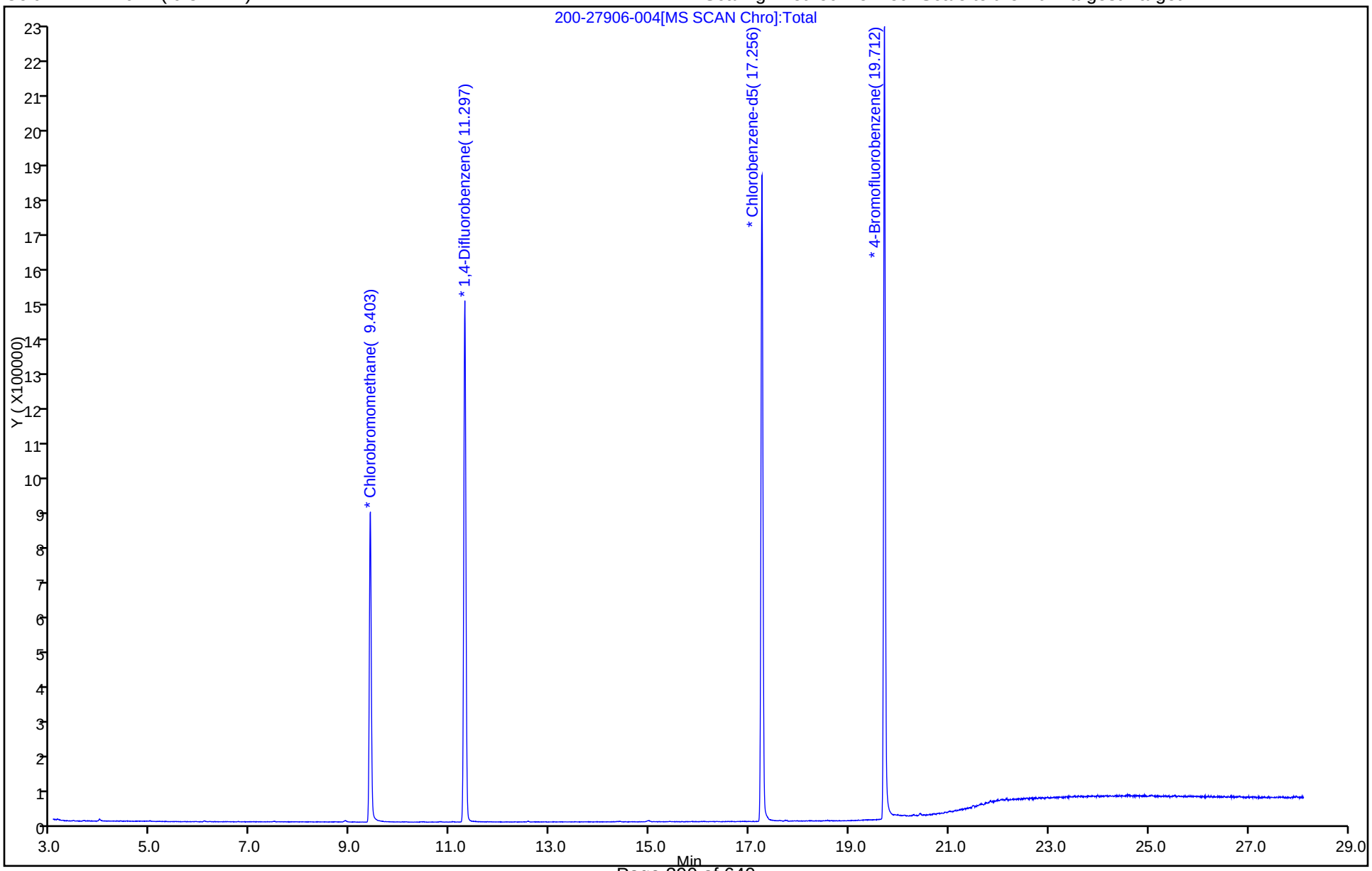
Report Date: 16-Nov-2017 12:57:40 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D

Injection Date:	15-Nov-2017 13:36:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

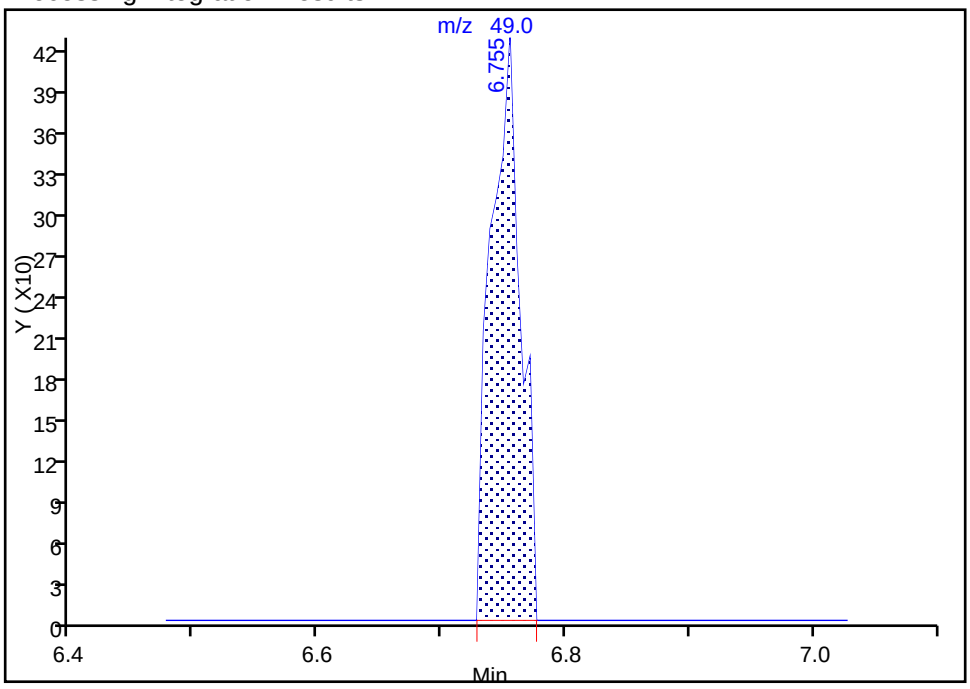
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D				
Injection Date:	15-Nov-2017 13:36:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

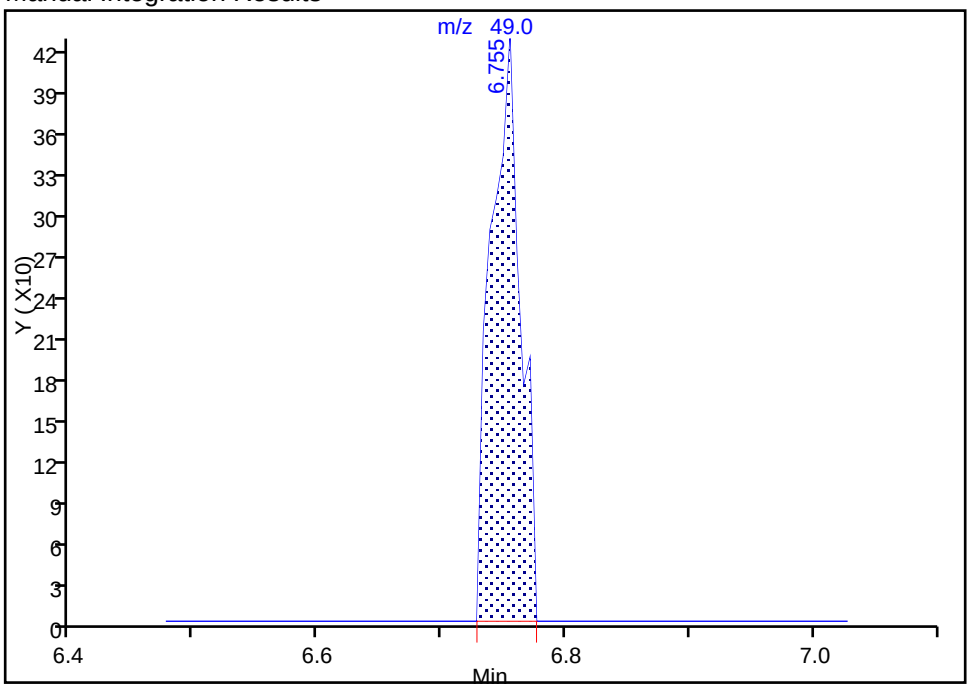
Processing Integration Results

RT: 6.75
Area: 705
Amount: 0.029076
Amount Units: ppb v/v



Manual Integration Results

RT: 6.75
Area: 705
Amount: 0.029076
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:51:01
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

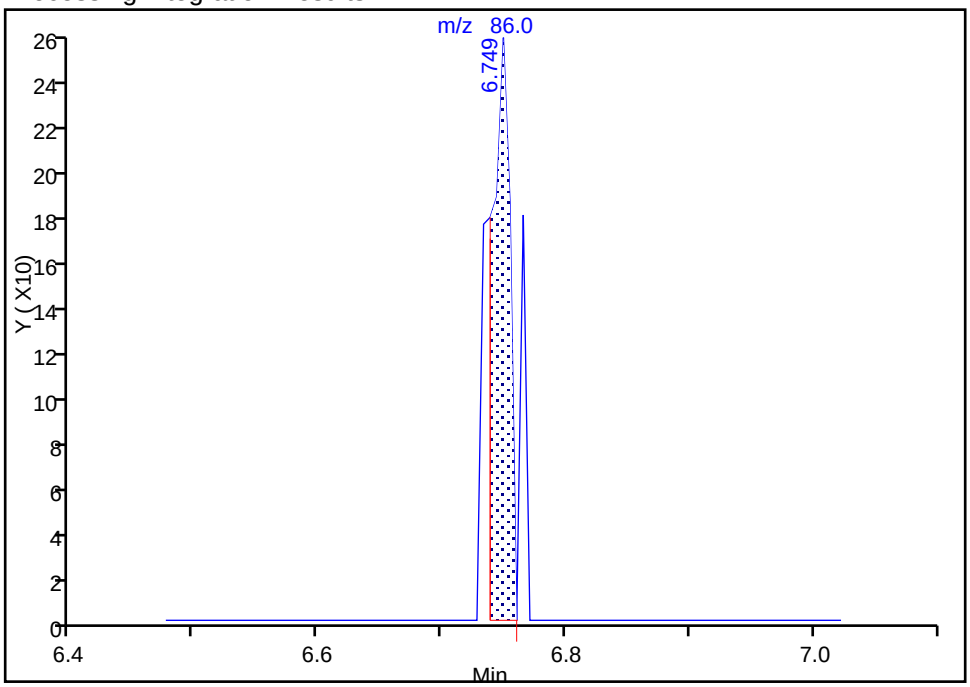
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Injection Date: 15-Nov-2017 13:36:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: vtp ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

27 Methylene Chloride, CAS: 75-09-2

Signal: 3

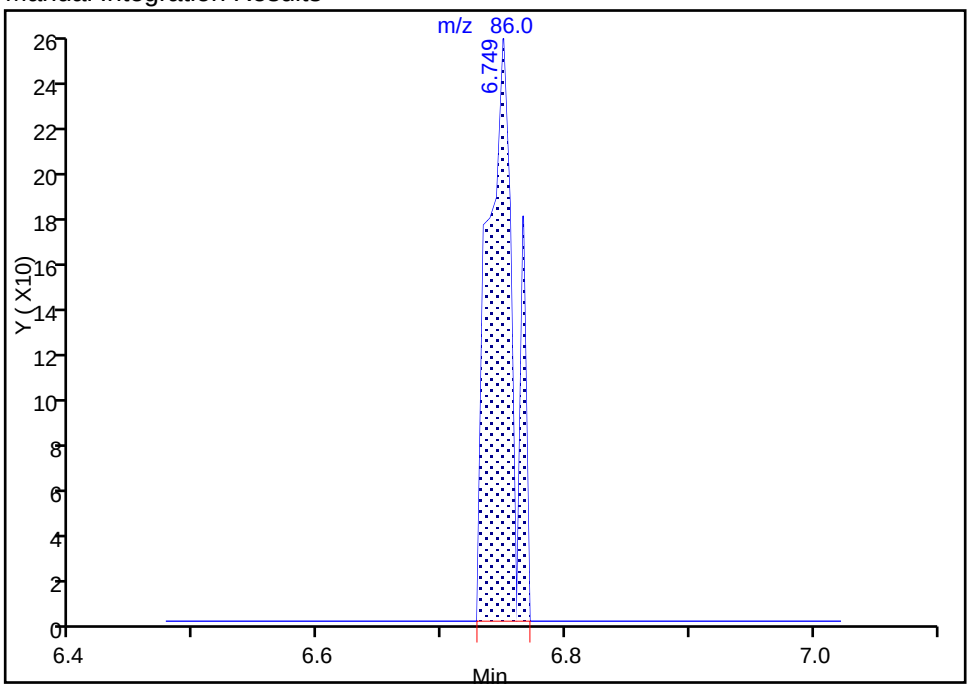
Processing Integration Results

RT: 6.75
Area: 255
Amount: 0.029076
Amount Units: ppb v/v



Manual Integration Results

RT: 6.75
Area: 366
Amount: 0.029076
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:51:16
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

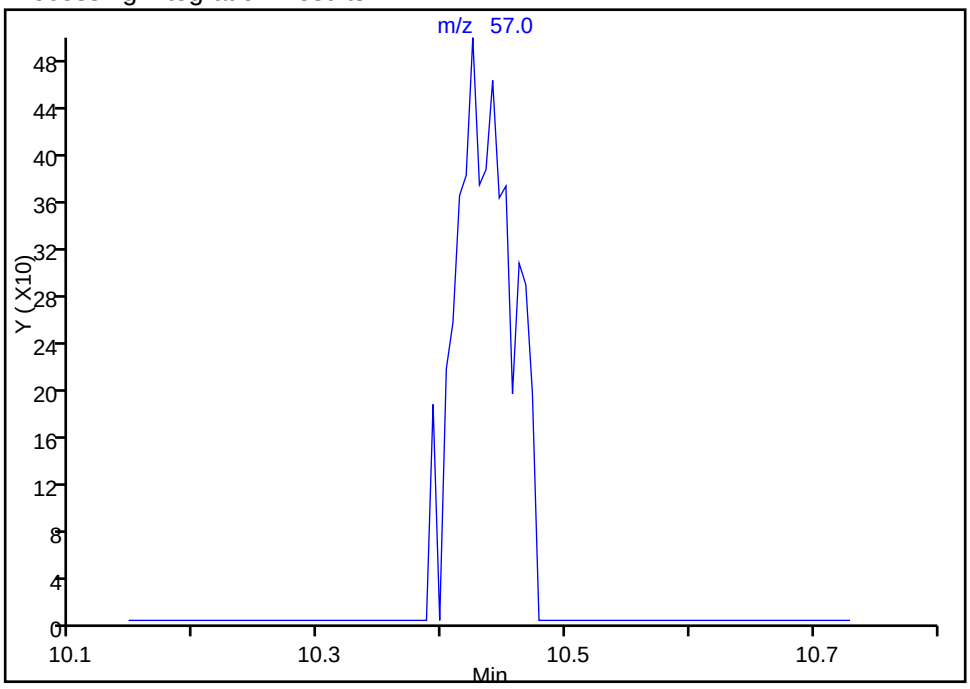
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D				
Injection Date:	15-Nov-2017 13:36:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Isooctane, CAS: 540-84-1

Signal: 1

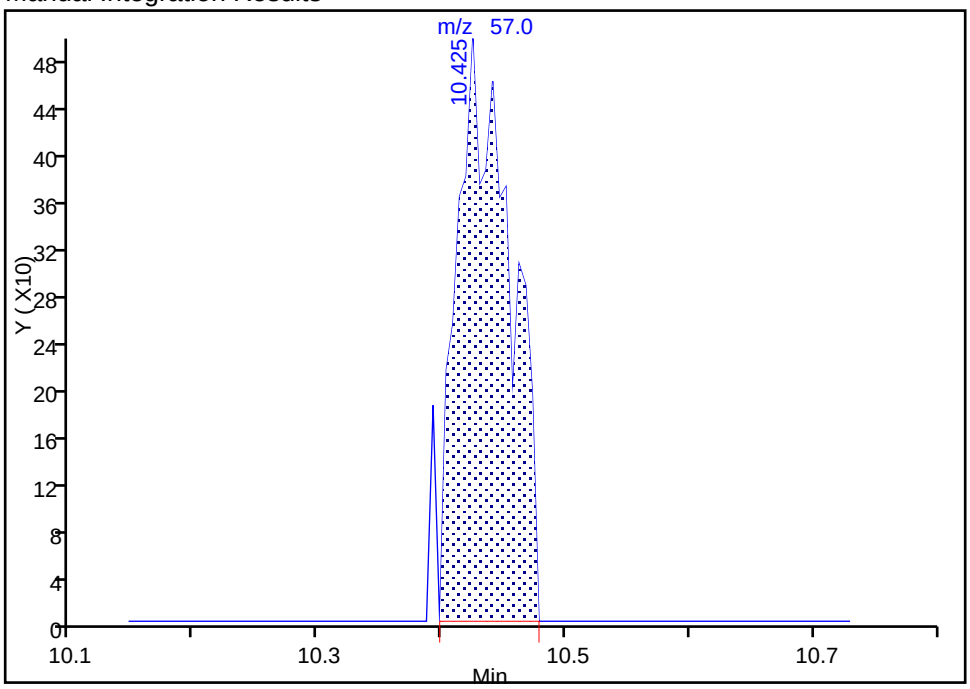
Not Detected
Expected RT: 10.44

Processing Integration Results



Manual Integration Results

RT: 10.42
Area: 1470
Amount: 0.011443
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:52:01
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D

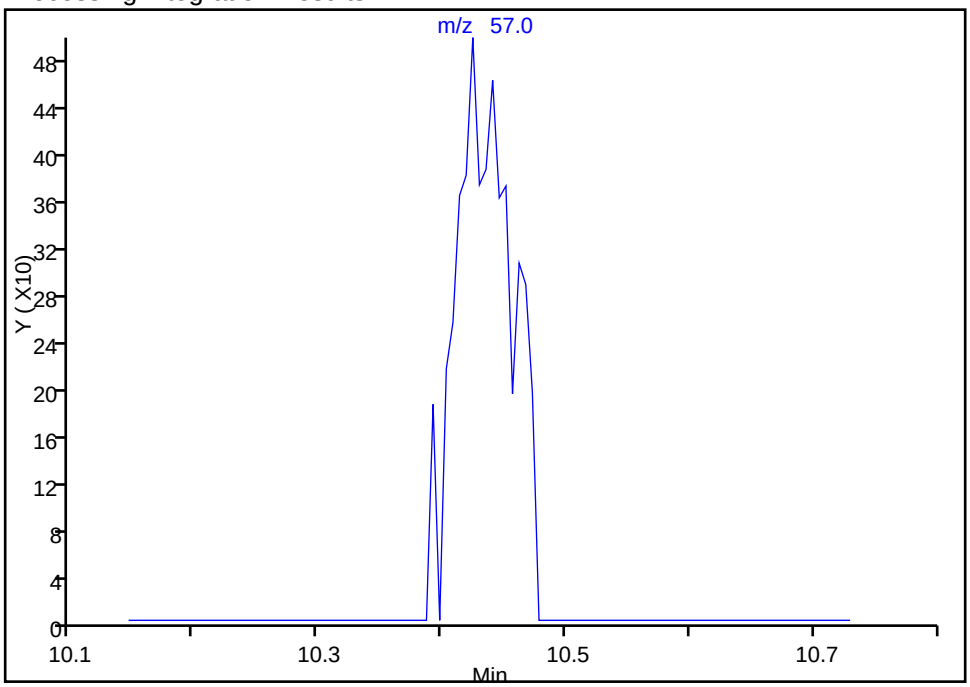
Injection Date:	15-Nov-2017 13:36:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

46 Isooctane, CAS: 540-84-1

Signal: 1

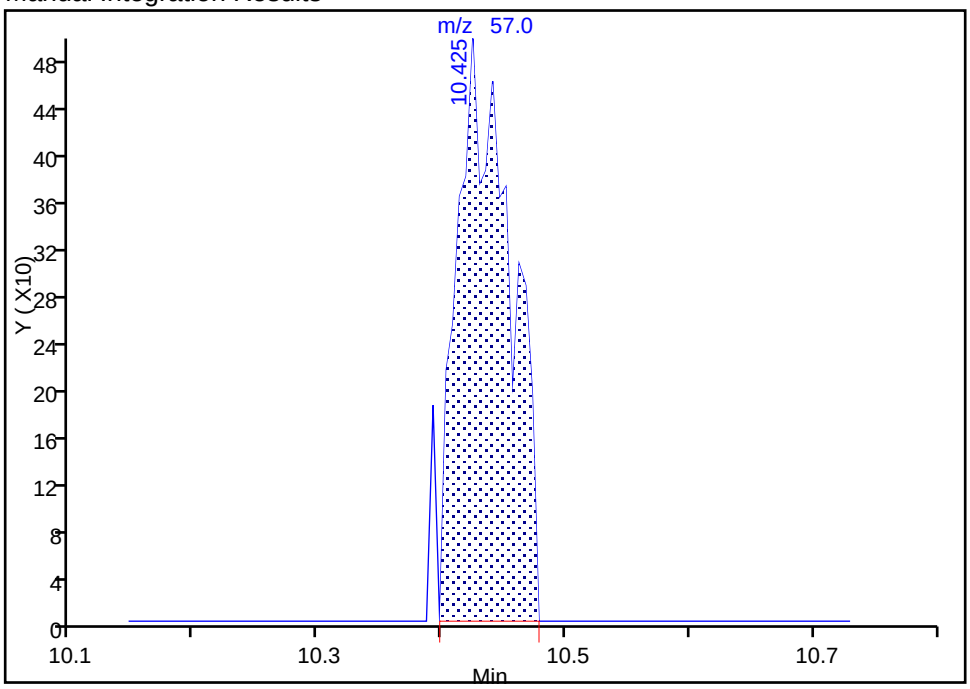
Processing Integration Results

Not Detected
Expected RT: 10.44



Manual Integration Results

RT: 10.42
Area: 1470
Amount: 0.011443
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:52:09
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

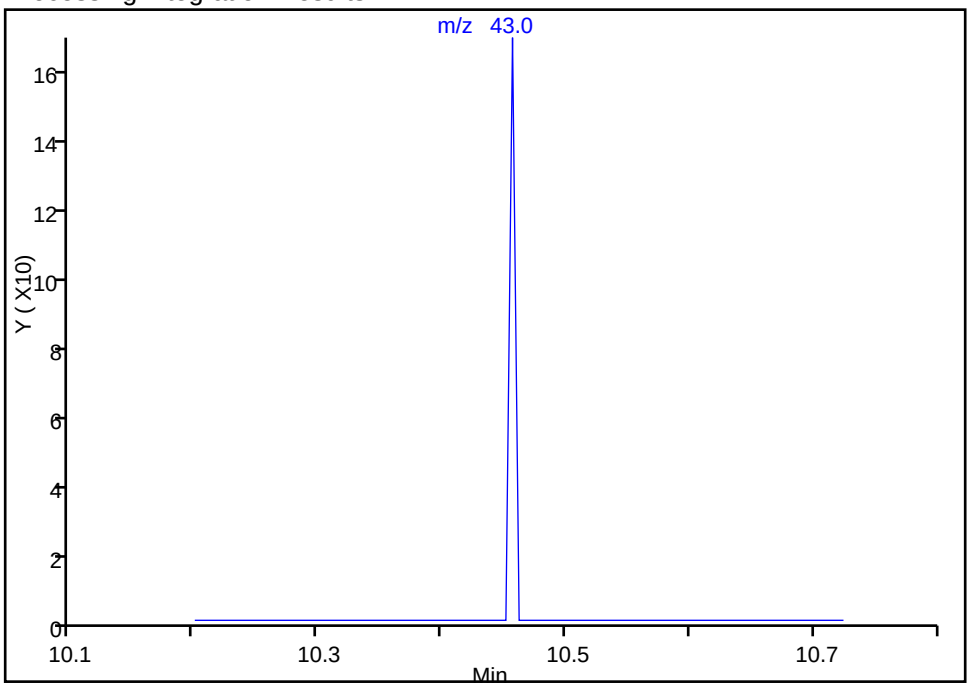
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Injection Date: 15-Nov-2017 13:36:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: vtp ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

46 Isooctane, CAS: 540-84-1

Signal: 3

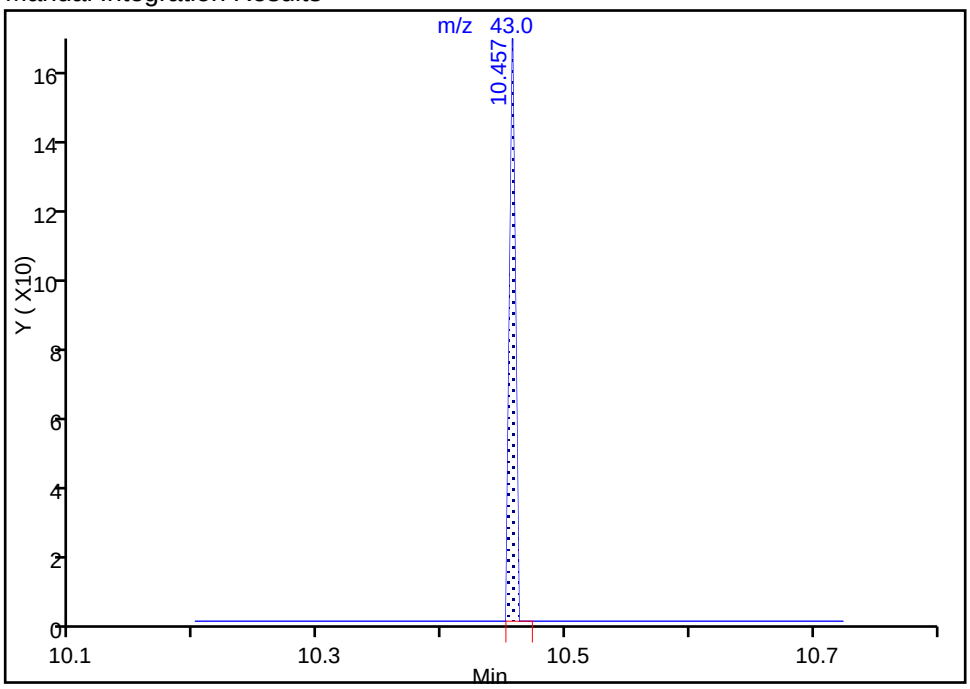
Not Detected
Expected RT: 10.44

Processing Integration Results



Manual Integration Results

RT: 10.46
Area: 52
Amount: 0.011443
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:52:25
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

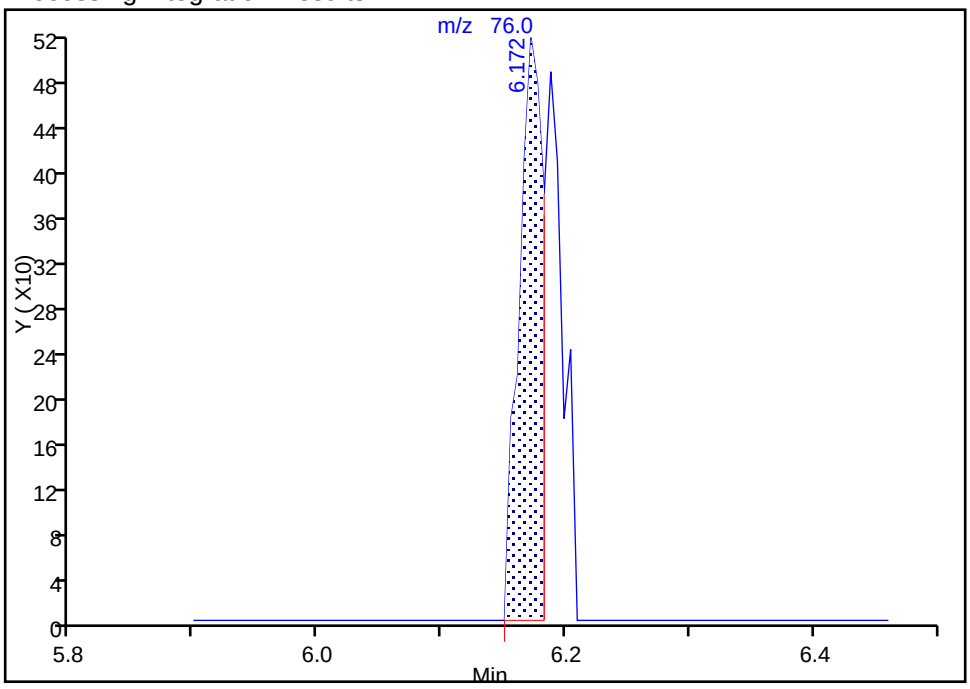
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Injection Date: 15-Nov-2017 13:36:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: vtp ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

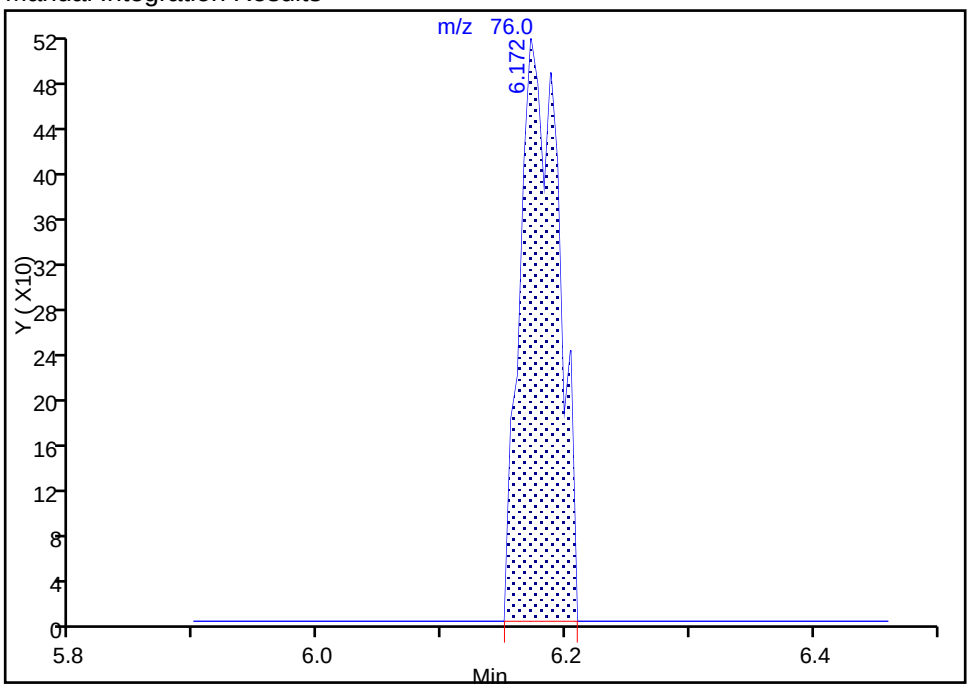
Processing Integration Results

RT: 6.17
Area: 696
Amount: 0.010440
Amount Units: ppb v/v



Manual Integration Results

RT: 6.17
Area: 1115
Amount: 0.016726
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:50:25
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

TestAmerica Burlington

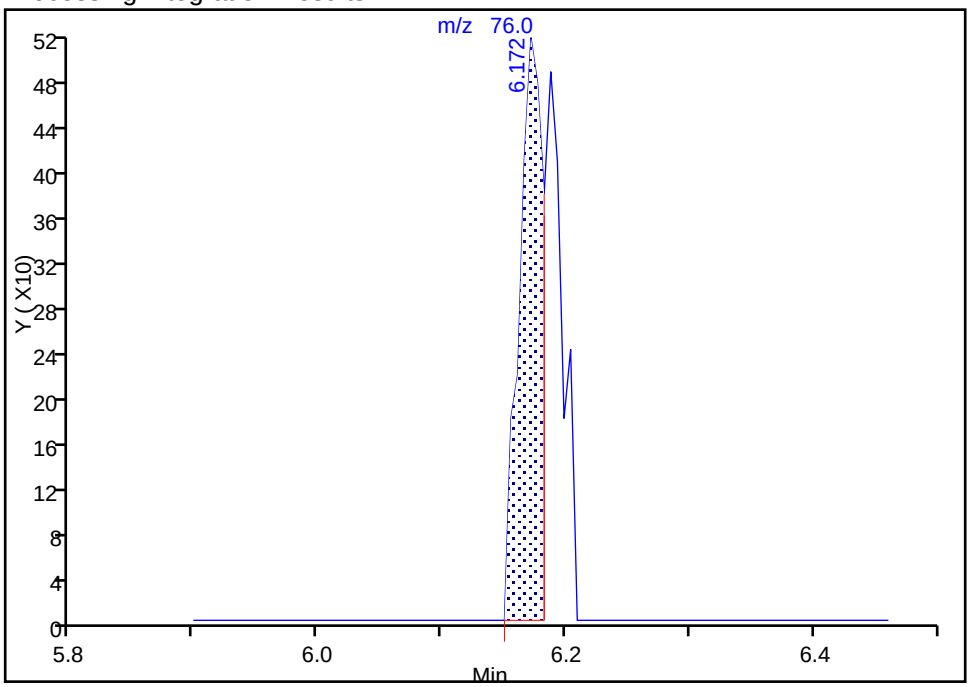
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Injection Date: 15-Nov-2017 13:36:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: vtp ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

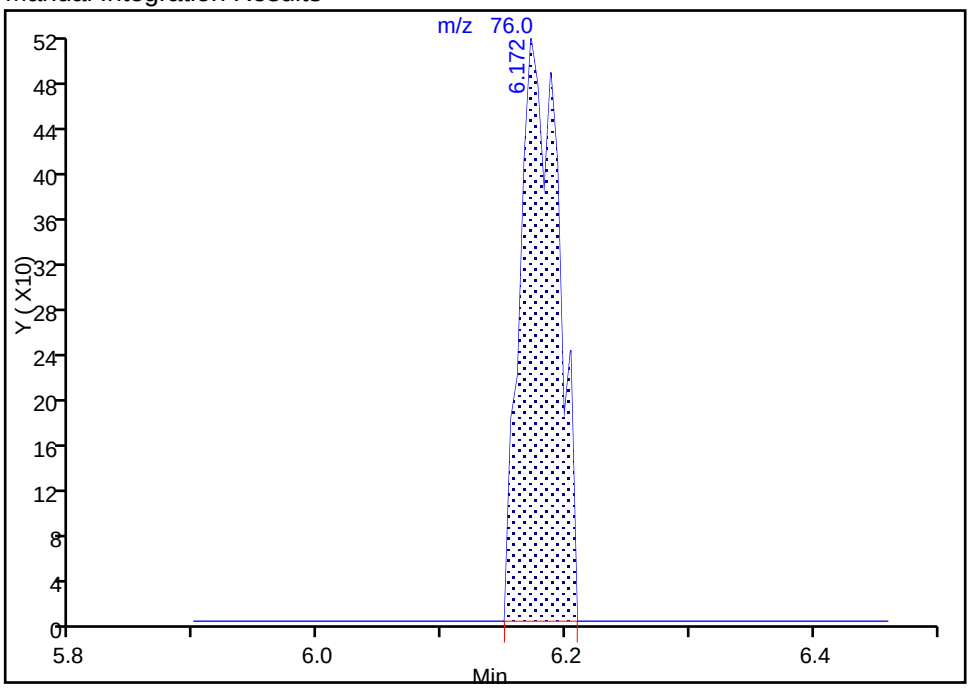
Processing Integration Results

RT: 6.17
Area: 696
Amount: 0.010440
Amount Units: ppb v/v



Manual Integration Results

RT: 6.17
Area: 1115
Amount: 0.016726
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:50:37
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

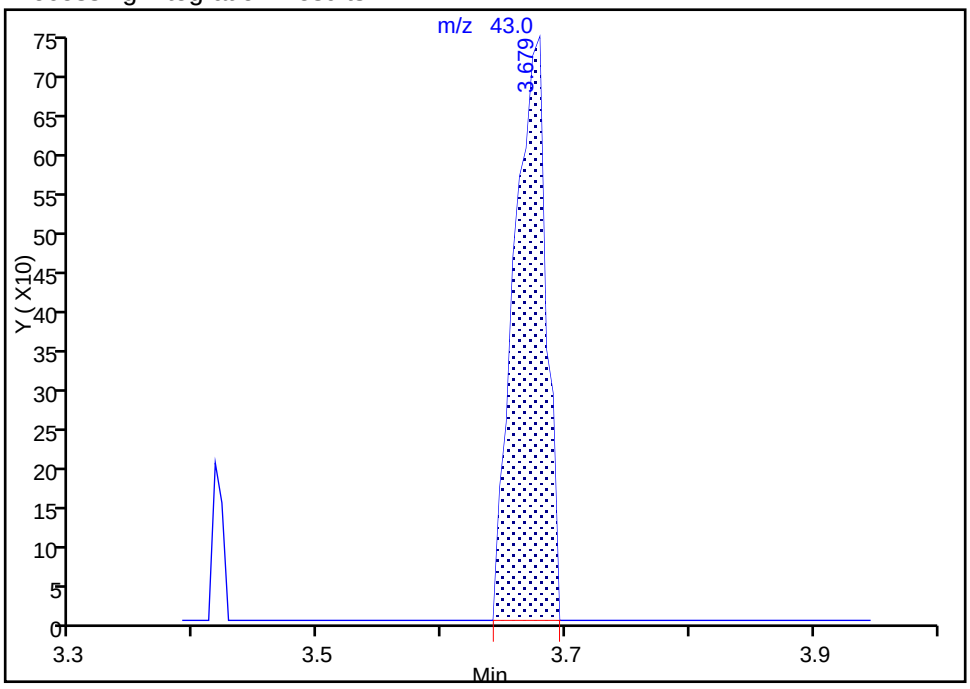
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Injection Date: 15-Nov-2017 13:36:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: vtp ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

6 Butane, CAS: 106-97-8

Signal: 1

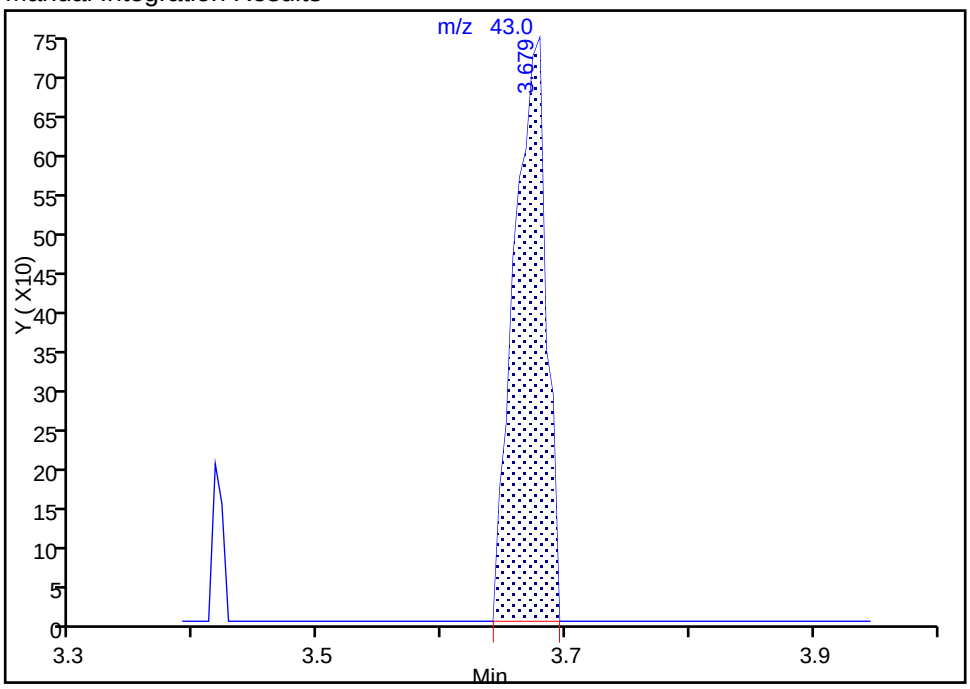
Processing Integration Results

RT: 3.68
Area: 1335
Amount: 0.045204
Amount Units: ppb v/v



Manual Integration Results

RT: 3.68
Area: 1335
Amount: 0.045204
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:49:13
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

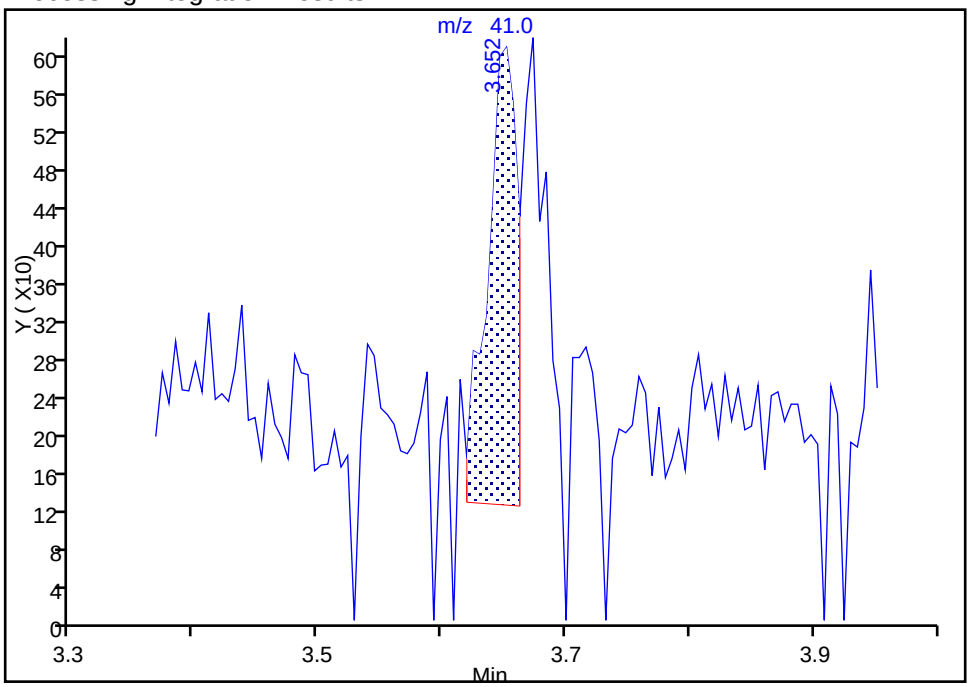
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-004.D
Injection Date: 15-Nov-2017 13:36:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: vtp ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

6 Butane, CAS: 106-97-8

Signal: 2

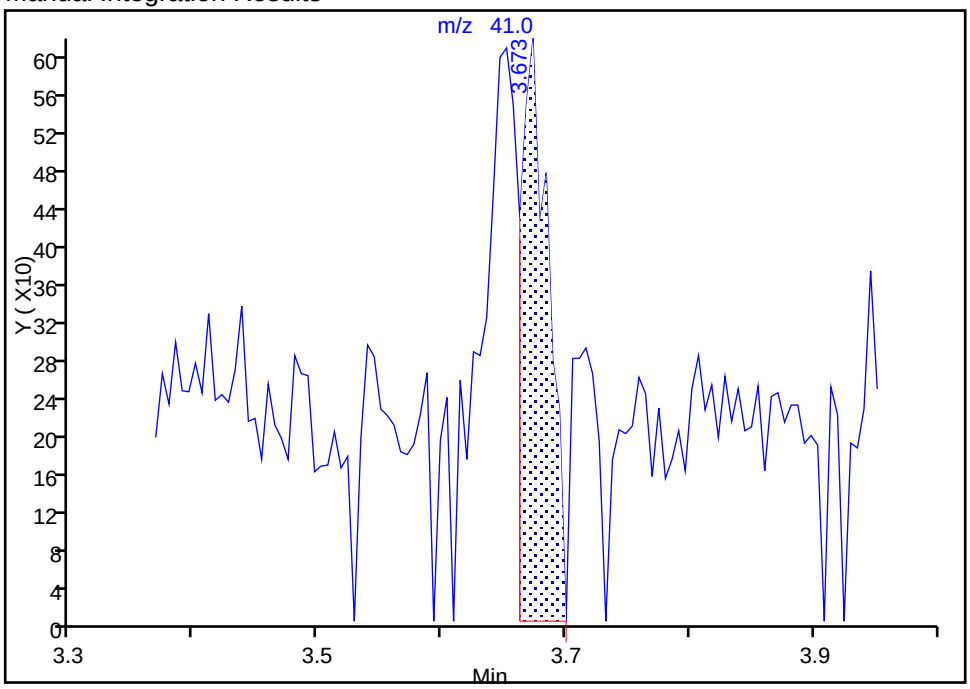
Processing Integration Results

RT: 3.65
Area: 823
Amount: 0.045204
Amount Units: ppb v/v



Manual Integration Results

RT: 3.67
Area: 951
Amount: 0.045204
Amount Units: ppb v/v



Reviewer: bunmaa, 16-Nov-2017 12:49:33
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: Lab Sample ID: LCS 200-123310/4

Matrix: Air Lab File ID: 27883-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 11/14/2017 12:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123310 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	8.92		0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	8.84		0.035	0.035
127-18-4	Tetrachloroethene	165.83	8.73		0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	10.4		0.20	0.050
79-01-6	Trichloroethene	131.39	8.83		0.035	0.0091
75-01-4	Vinyl chloride	62.50	9.18		0.035	0.018

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-04.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 14-Nov-2017 12:07:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027883-004
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 15-Nov-2017 08:19:55 Calib Date: 09-Nov-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20171108-27803.b\27803-13.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: puangmaleek Date: 15-Nov-2017 08:21:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	5.069	5.069	0.000	98	242056	10.0	9.37	
2 Dichlorodifluoromethane	85	5.181	5.181	0.000	99	871533	10.0	9.45	
3 Chlorodifluoromethane	51	5.267	5.261	0.006	97	491712	10.0	9.53	
4 1,2-Dichloro-1,1,2,2-tetra	85	5.582	5.582	0.000	94	1006723	10.0	10.4	
5 Chloromethane	50	5.780	5.775	0.005	99	284442	10.0	9.34	
6 Butane	43	6.048	6.048	0.000	99	566450	10.0	9.69	
7 Vinyl chloride	62	6.107	6.101	0.006	98	371756	10.0	9.18	
8 Butadiene	54	6.203	6.198	0.005	96	283625	10.0	8.82	
9 BFB									
10 Bromomethane	94	6.995	6.995	0.000	98	313763	10.0	9.39	
11 Chloroethane	64	7.246	7.246	0.000	99	193176	10.0	9.64	
12 2-Methylbutane	43	7.321	7.316	0.005	94	465492	10.0	10.2	
13 Vinyl bromide	106	7.653	7.653	0.000	99	322887	10.0	9.24	
14 Trichlorofluoromethane	101	7.744	7.744	0.000	98	827338	10.0	9.19	
16 Pentane	43	7.877	7.877	0.000	97	731155	10.0	11.0	
17 Ethanol	45	8.252	8.252	0.000	98	227118	15.0	15.7	
18 Ethyl ether	59	8.353	8.359	-0.006	95	281040	10.0	10.4	
19 Acrolein	56	8.739	8.739	0.000	96	140551	10.0	12.7	
20 1,1,2-Trichloro-1,2,2-trif	101	8.749	8.749	0.000	98	648148	10.0	9.30	
21 1,1-Dichloroethene	96	8.813	8.814	-0.001	96	314060	10.0	8.84	
22 Acetone	43	9.011	9.011	0.000	97	554359	10.0	10.5	
23 Carbon disulfide	76	9.204	9.204	0.000	99	1009941	10.0	11.4	
24 Isopropyl alcohol	45	9.215	9.215	0.000	99	613095	10.0	10.2	
25 3-Chloro-1-propene	41	9.509	9.509	0.000	93	468777	10.0	10.4	
26 Acetonitrile	41	9.632	9.627	0.005	100	273499	10.0	12.0	
27 Methylene Chloride	49	9.771	9.771	0.000	96	385138	10.0	9.83	
28 2-Methyl-2-propanol	59	9.899	9.894	0.005	93	785078	10.0	10.6	
29 Methyl tert-butyl ether	73	10.108	10.103	0.005	98	1030199	10.0	9.45	
31 trans-1,2-Dichloroethene	61	10.167	10.167	0.000	97	520633	10.0	10.4	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.3	
32 Acrylonitrile	53	10.301	10.301	0.000	95	245011	10.0	10.8	
33 Hexane	57	10.493	10.488	0.005	95	630311	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	10.959	10.959	0.000	99	663320	10.0	9.24	
35 Vinyl acetate	43	10.985	10.985	0.000	100	994673	10.0	10.9	
37 cis-1,2-Dichloroethene	96	11.959	11.959	0.000	96	347018	10.0	8.92	
38 2-Butanone (MEK)	72	11.981	11.981	-0.001	96	191747	10.0	10.2	
39 Ethyl acetate	88	11.986	11.986	0.000	96	31888	10.0	10.7	
41 Tetrahydrofuran	42	12.382	12.382	0.000	96	489084	10.0	10.7	
* 40 Chlorobromomethane	128	12.387	12.387	0.000	98	238087	10.0	10.0	
42 Chloroform	83	12.478	12.478	0.000	95	704931	10.0	9.44	
43 Cyclohexane	84	12.740	12.740	0.000	97	509480	10.0	9.42	
44 1,1,1-Trichloroethane	97	12.756	12.756	0.000	95	705070	10.0	9.32	
45 Carbon tetrachloride	117	12.981	12.981	0.000	98	705905	10.0	9.13	
46 Isooctane	57	13.334	13.329	0.005	99	2026433	10.0	9.41	
47 Benzene	78	13.393	13.393	0.000	96	1150754	10.0	9.22	
48 1,2-Dichloroethane	62	13.543	13.543	0.000	97	444337	10.0	9.62	
49 n-Heptane	43	13.644	13.650	-0.006	95	777069	10.0	9.53	
* 50 1,4-Difluorobenzene	114	14.088	14.088	0.000	95	1277266	10.0	10.0	
52 n-Butanol	56	14.350	14.350	0.000	89	288965	10.0	12.5	
53 Trichloroethene	95	14.516	14.516	0.000	99	463715	10.0	8.83	
A 51 GRO	1	14.741	(7.306-22.176)		0	148964959	10.0	0	
54 1,2-Dichloropropane	63	15.008	15.008	0.000	92	442744	10.0	9.18	
55 Methyl methacrylate	69	15.094	15.094	0.000	94	438631	10.0	10.2	
56 1,4-Dioxane	88	15.174	15.174	0.000	97	233123	10.0	10.2	
57 Dibromomethane	174	15.238	15.233	0.005	96	411675	10.0	9.13	
58 Dichlorobromomethane	83	15.469	15.469	-0.001	97	789202	10.0	9.47	
60 cis-1,3-Dichloropropene	75	16.292	16.292	0.000	93	616191	10.0	9.75	
A 59 TVOC as Toluene	92	16.418	(5.059-27.778)		0	240512082	10.0	2452.3	
61 4-Methyl-2-pentanone (MIBK	43	16.528	16.528	0.000	97	998879	10.0	10.5	
65 Toluene	92	16.838	16.838	0.000	92	826139	10.0	9.15	
64 n-Octane	43	16.838	16.838	0.000	88	1111138	10.0	9.59	
66 trans-1,3-Dichloropropene	75	17.362	17.362	0.000	97	586203	10.0	10.0	
67 1,1,2-Trichloroethane	83	17.715	17.715	0.000	97	407408	10.0	9.26	
68 Tetrachloroethene	166	17.833	17.833	0.000	97	673269	10.0	8.73	
69 2-Hexanone	43	18.106	18.106	0.000	93	930747	10.0	11.0	
71 Chlorodibromomethane	129	18.443	18.438	0.005	99	775070	10.0	9.42	
72 Ethylene Dibromide	107	18.716	18.716	0.000	98	687224	10.0	9.59	
* 74 Chlorobenzene-d5	117	19.556	19.550	0.006	86	1175386	10.0	10.0	
75 Chlorobenzene	112	19.609	19.609	0.000	94	1058082	10.0	9.13	
76 Ethylbenzene	91	19.743	19.743	0.000	98	1865013	10.0	9.25	
77 n-Nonane	57	19.818	19.818	0.000	94	990571	10.0	9.16	
78 m-Xylene & p-Xylene	106	19.978	19.978	0.000	0	1435291	20.0	18.2	
S 73 Xylenes, Total	106				0		30.0	27.1	
79 o-Xylene	106	20.749	20.749	0.000	99	694558	10.0	8.86	
80 Styrene	104	20.797	20.797	0.000	99	1066389	10.0	9.30	
81 Bromoform	173	21.182	21.187	-0.005	98	770895	10.0	10.3	
82 Isopropylbenzene	105	21.353	21.359	-0.006	96	2078049	10.0	9.06	
84 1,1,2,2-Tetrachloroethane	83	21.952	21.952	0.000	97	1113919	10.0	9.50	
85 N-Propylbenzene	91	22.027	22.027	0.000	99	2583435	10.0	9.38	
86 1,2,3-Trichloropropane	75	22.054	22.054	0.000	98	825169	10.0	9.37	
87 n-Decane	57	22.166	22.166	0.000	89	1284508	10.0	9.60	
88 4-Ethyltoluene	105	22.204	22.204	0.000	99	2153831	10.0	9.66	
89 2-Chlorotoluene	91	22.225	22.225	0.000	96	1745344	10.0	9.21	
90 1,3,5-Trimethylbenzene	105	22.305	22.300	0.005	93	1760509	10.0	9.18	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.659	22.659	-0.001	89	859897	10.0	9.83	
92 tert-Butylbenzene	119	22.782	22.776	0.006	94	1677935	10.0	9.01	
93 1,2,4-Trimethylbenzene	105	22.873	22.873	-0.001	98	1767159	10.0	9.39	
94 sec-Butylbenzene	105	23.097	23.097	0.000	99	2614960	10.0	9.33	
95 4-Isopropyltoluene	119	23.295	23.295	0.000	98	2183507	10.0	9.55	
96 1,3-Dichlorobenzene	146	23.338	23.338	0.000	97	1132364	10.0	9.86	
97 1,4-Dichlorobenzene	146	23.477	23.477	0.000	96	1068751	10.0	9.86	
98 Benzyl chloride	91	23.680	23.680	0.000	99	1363634	10.0	10.7	
100 n-Butylbenzene	91	23.889	23.889	0.000	98	2017163	10.0	10.3	
99 Undecane	57	23.894	23.894	0.000	96	1141942	10.0	10.0	
101 1,2-Dichlorobenzene	146	24.044	24.044	0.000	97	1072402	10.0	9.68	
102 Dodecane	57	25.579	25.579	0.000	97	874711	10.0	10.2	
103 1,2,4-Trichlorobenzene	180	26.719	26.719	0.000	94	469098	10.0	9.36	
104 Hexachlorobutadiene	225	26.912	26.912	0.000	97	650631	10.0	9.18	
105 Naphthalene	128	27.254	27.254	0.000	100	905855	10.0	8.84	
106 1,2,3-Trichlorobenzene	180	27.767	27.768	-0.001	96	396896	10.0	9.45	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00725	Amount Added: 200.00	Units: mL	
ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

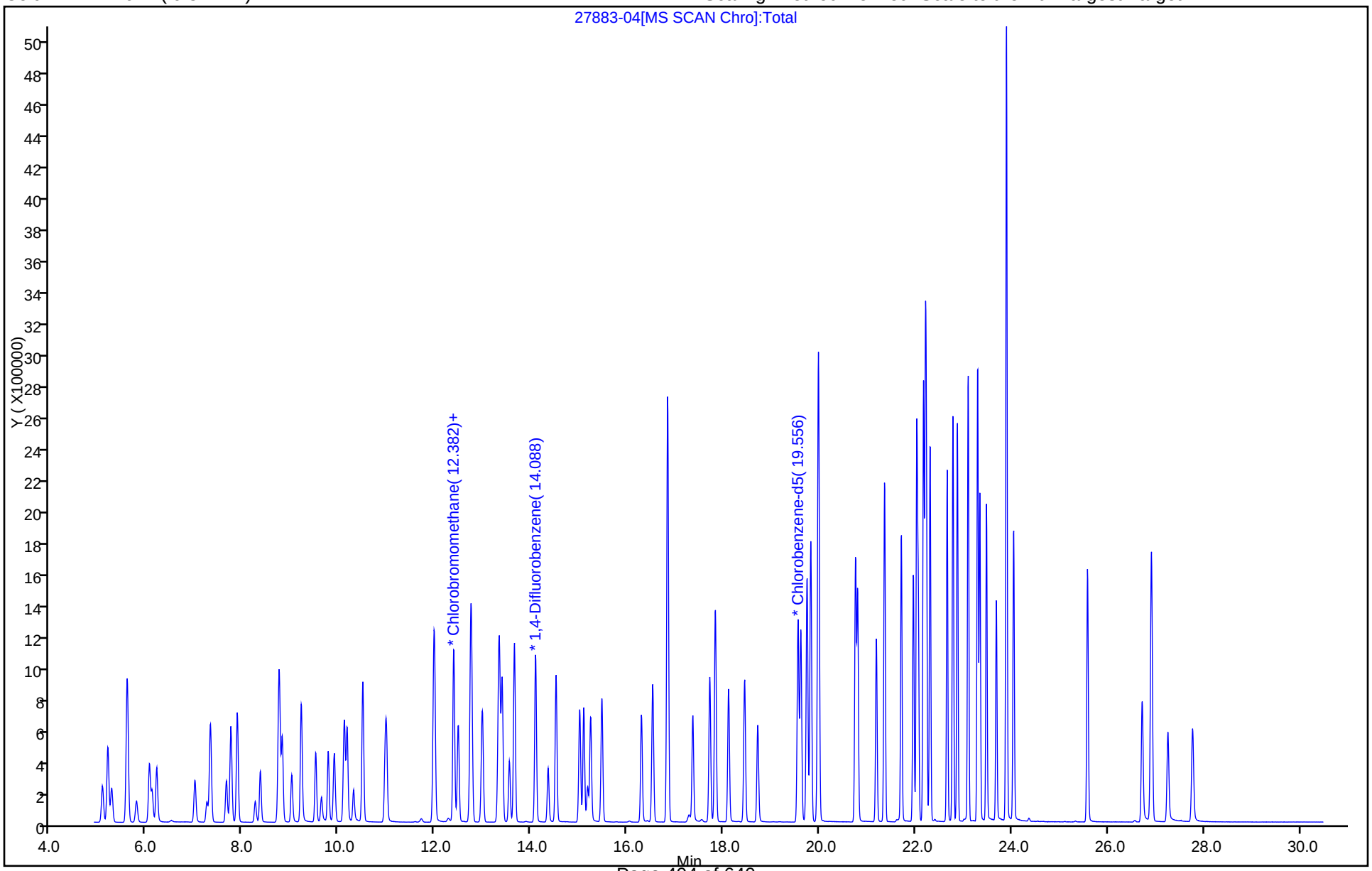
Report Date: 15-Nov-2017 08:21:25 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20171114-27883.b\27883-04.d

Injection Date:	14-Nov-2017 12:07:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Client Sample ID: Lab Sample ID: LCS 200-123382/3

Matrix: Air Lab File ID: 200-27906-003.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 11/15/2017 12:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123382 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	96.94	9.89		0.035	0.029
75-35-4	1,1-Dichloroethene	96.94	9.99		0.035	0.035
127-18-4	Tetrachloroethene	165.83	9.63		0.035	0.0098
156-60-5	trans-1,2-Dichloroethene	96.94	11.3		0.20	0.050
79-01-6	Trichloroethene	131.39	10.4		0.035	0.0091
75-01-4	Vinyl chloride	62.50	10.0		0.035	0.018

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-003.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 15-Nov-2017 12:45:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027906-003
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 16-Nov-2017 12:45:35 Calib Date: 01-Nov-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20171031-27684.b\200-27684-012.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bunmaa Date: 16-Nov-2017 12:47:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.117	3.128	-0.011	95	167623	10.0	10.4	
2 Dichlorodifluoromethane	85	3.176	3.181	-0.005	99	1072166	10.0	10.4	
3 Chlorodifluoromethane	51	3.213	3.219	-0.006	96	479757	10.0	10.6	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.385	3.390	-0.005	92	921760	10.0	11.3	
5 Chloromethane	50	3.502	3.508	-0.006	98	209687	10.0	9.87	
6 Butane	43	3.658	3.663	-0.005	96	306459	10.0	10.5	
7 Vinyl chloride	62	3.695	3.700	-0.005	98	253774	10.0	10.0	
8 Butadiene	54	3.748	3.759	-0.011	96	160536	10.0	10.0	
10 Bromomethane	94	4.299	4.305	-0.006	98	304415	10.0	9.95	
11 Chloroethane	64	4.481	4.487	-0.006	98	96021	10.0	10.0	
12 2-Methylbutane	43	4.524	4.535	-0.011	89	196559	10.0	10.8	
13 Vinyl bromide	106	4.797	4.802	-0.005	98	304152	10.0	9.75	
14 Trichlorofluoromethane	101	4.867	4.872	-0.005	98	886424	10.0	9.70	
16 Pentane	43	4.974	4.984	-0.010	97	300923	10.0	11.3	
17 Ethanol	45	5.337	5.343	-0.006	97	92133	15.0	13.3	
18 Ethyl ether	59	5.407	5.418	-0.011	97	138708	10.0	12.2	
20 1,1,2-Trichloro-1,2,2-trif	101	5.744	5.749	-0.005	97	610821	10.0	10.1	
19 Acrolein	56	5.755	5.760	-0.005	93	58640	10.0	15.9	
9 BFB									
21 1,1-Dichloroethene	96	5.803	5.808	-0.005	98	262286	10.0	9.99	
22 Acetone	43	6.022	6.027	-0.005	100	300235	10.0	11.6	
23 Carbon disulfide	76	6.167	6.172	-0.005	100	781528	10.0	11.9	
24 Isopropyl alcohol	45	6.257	6.263	-0.006	100	262867	10.0	10.5	
25 3-Chloro-1-propene	41	6.477	6.482	-0.005	94	226455	10.0	10.5	
26 Acetonitrile	41	6.621	6.627	-0.006	97	114012	10.0	12.5	
27 Methylene Chloride	49	6.739	6.744	-0.005	89	252588	10.0	10.6	
28 2-Methyl-2-propanol	59	6.953	6.953	0.000	94	423862	10.0	10.6	
29 Methyl tert-butyl ether	73	7.119	7.119	0.000	95	670784	10.0	11.1	
31 trans-1,2-Dichloroethene	61	7.129	7.135	-0.006	95	367413	10.0	11.3	
32 Acrylonitrile	53	7.290	7.295	-0.005	93	120905	10.0	12.2	
33 Hexane	57	7.467	7.466	0.000	89	295089	10.0	11.3	
34 1,1-Dichloroethane	63	7.937	7.937	0.000	99	467651	10.0	10.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.001	8.001	0.000	100	473348	10.0	12.3	
37 cis-1,2-Dichloroethene	96	8.959	8.964	-0.005	90	322854	10.0	9.89	
38 2-Butanone (MEK)	72	9.034	9.034	0.000	99	103955	10.0	11.3	
39 Ethyl acetate	88	9.055	9.061	-0.006	98	16541	10.0	12.2	
* 40 Chlorobromomethane	128	9.403	9.403	0.000	78	386228	10.0	10.0	
41 Tetrahydrofuran	42	9.441	9.446	-0.005	84	217282	10.0	11.8	
42 Chloroform	83	9.515	9.515	0.000	96	772162	10.0	10.5	
S 30 1,2-Dichloroethene, Total	61				0		20.0	21.2	
43 Cyclohexane	84	9.756	9.756	0.000	94	370214	10.0	10.7	
44 1,1,1-Trichloroethane	97	9.788	9.788	0.000	94	884263	10.0	10.6	
45 Carbon tetrachloride	117	10.018	10.024	-0.006	98	1007594	10.0	11.1	
46 Isooctane	57	10.430	10.436	-0.006	98	1258600	10.0	10.4	
47 Benzene	78	10.484	10.484	0.000	96	951328	10.0	9.91	
48 1,2-Dichloroethane	62	10.660	10.666	-0.006	99	594416	10.0	10.7	
49 n-Heptane	43	10.805	10.810	-0.005	91	483887	10.0	10.4	
* 50 1,4-Difluorobenzene	114	11.297	11.302	-0.005	94	1907284	10.0	10.0	
52 n-Butanol	56	11.730	11.736	-0.006	91	170406	10.0	12.7	
53 Trichloroethene	95	11.757	11.757	0.000	97	586653	10.0	10.4	
54 1,2-Dichloropropane	63	12.313	12.313	0.000	85	401868	10.0	10.1	
A 51 GRO	1	12.410	(4.525-20.294)		0	137132231	10.0	0	
55 Methyl methacrylate	69	12.490	12.490	0.000	93	328525	10.0	11.8	
57 Dibromomethane	174	12.565	12.565	0.000	97	544279	10.0	9.60	
56 1,4-Dioxane	88	12.565	12.570	-0.005	91	187442	10.0	10.6	
58 Dichlorobromomethane	83	12.848	12.848	0.000	98	1031642	10.0	10.6	
60 cis-1,3-Dichloropropene	75	13.768	13.768	0.000	95	669335	10.0	10.7	
61 4-Methyl-2-pentanone (MIBK	43	14.089	14.089	0.000	98	668880	10.0	11.7	
A 59 TVOC as Toluene	92	14.327	(3.118-25.537)		0	208703575	10.0	0	
65 Toluene	92	14.346	14.352	-0.006	95	790581	10.0	10.1	
A 63 Toluene Range	92	14.352	(14.312-14.392)		0	3326442	NC	NC	
A 62 C8 Range	1	14.422	(14.355-14.455)		0	2955087	NC	NC	
64 n-Octane	43	14.405	14.405	0.000	91	737743	10.0	10.6	
66 trans-1,3-Dichloropropene	75	14.951	14.951	0.000	97	712138	10.0	10.8	
67 1,1,2-Trichloroethane	83	15.325	15.325	0.000	98	447618	10.0	10.3	
68 Tetrachloroethene	166	15.416	15.416	0.000	96	814569	10.0	9.63	
69 2-Hexanone	43	15.807	15.807	0.000	94	644812	10.0	11.5	
71 Chlorodibromomethane	129	16.085	16.079	0.006	97	1075036	10.0	10.3	
72 Ethylene Dibromide	107	16.352	16.352	0.000	99	861132	10.0	10.5	
* 74 Chlorobenzene-d5	117	17.256	17.256	0.000	86	1739738	10.0	10.0	
75 Chlorobenzene	112	17.315	17.315	0.000	95	1087517	10.0	10.0	
76 Ethylbenzene	91	17.476	17.470	0.006	98	1673804	10.0	10.5	
77 n-Nonane	57	17.610	17.610	0.000	88	661658	10.0	10.3	
78 m-Xylene & p-Xylene	106	17.727	17.727	0.000	0	1325238	20.0	20.8	
79 o-Xylene	106	18.583	18.583	0.000	99	670038	10.0	10.2	
80 Styrene	104	18.642	18.642	0.000	98	962540	10.0	11.1	
81 Bromoform	173	19.086	19.086	0.000	96	1033928	10.0	11.1	
82 Isopropylbenzene	105	19.321	19.321	0.000	96	1808025	10.0	10.3	
S 73 Xylenes, Total	106				0		30.0	31.0	
* 83 4-Bromofluorobenzene	95	19.712	19.712	0.000	96	1247221	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.022	20.022	0.000	99	1039709	10.0	10.8	
85 N-Propylbenzene	91	20.086	20.086	0.000	99	2121865	10.0	10.7	
86 1,2,3-Trichloropropane	75	20.124	20.119	0.006	98	778088	10.0	10.4	
87 n-Decane	57	20.290	20.284	0.006	84	679762	10.0	11.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.290	20.290	0.000	91	1779268	10.0	11.7	
89 2-Chlorotoluene	91	20.290	20.290	0.000	90	1527569	10.0	10.8	
90 1,3,5-Trimethylbenzene	105	20.407	20.407	0.000	93	1471088	10.0	10.6	
91 Alpha Methyl Styrene	118	20.787	20.787	0.000	90	744977	10.0	11.6	
92 tert-Butylbenzene	119	20.910	20.910	0.000	92	1371421	10.0	10.4	
93 1,2,4-Trimethylbenzene	105	21.012	21.012	0.000	98	1462979	10.0	10.9	
94 sec-Butylbenzene	105	21.253	21.253	0.000	98	2030098	10.0	10.7	
95 4-Isopropyltoluene	119	21.467	21.467	0.000	98	1714082	10.0	11.2	
96 1,3-Dichlorobenzene	146	21.483	21.483	0.000	97	1143205	10.0	11.0	
97 1,4-Dichlorobenzene	146	21.622	21.622	0.000	95	1116753	10.0	10.8	
98 Benzyl chloride	91	21.830	21.830	0.000	98	1333109	10.0	11.9	
100 n-Butylbenzene	91	22.044	22.044	0.000	99	1527765	10.0	11.4	
99 Undecane	57	22.082	22.082	0.000	94	657995	10.0	10.1	
101 1,2-Dichlorobenzene	146	22.157	22.157	0.000	96	1033674	10.0	10.7	
102 Dodecane	57	23.639	23.639	0.000	96	509398	10.0	11.0	
103 1,2,4-Trichlorobenzene	180	24.602	24.602	0.000	94	558719	10.0	9.71	
104 Hexachlorobutadiene	225	24.783	24.783	0.000	93	608317	10.0	10.2	
105 Naphthalene	128	25.072	25.067	0.005	99	1018264	10.0	9.64	
106 1,2,3-Trichlorobenzene	180	25.527	25.527	0.000	95	464719	10.0	9.79	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00721	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

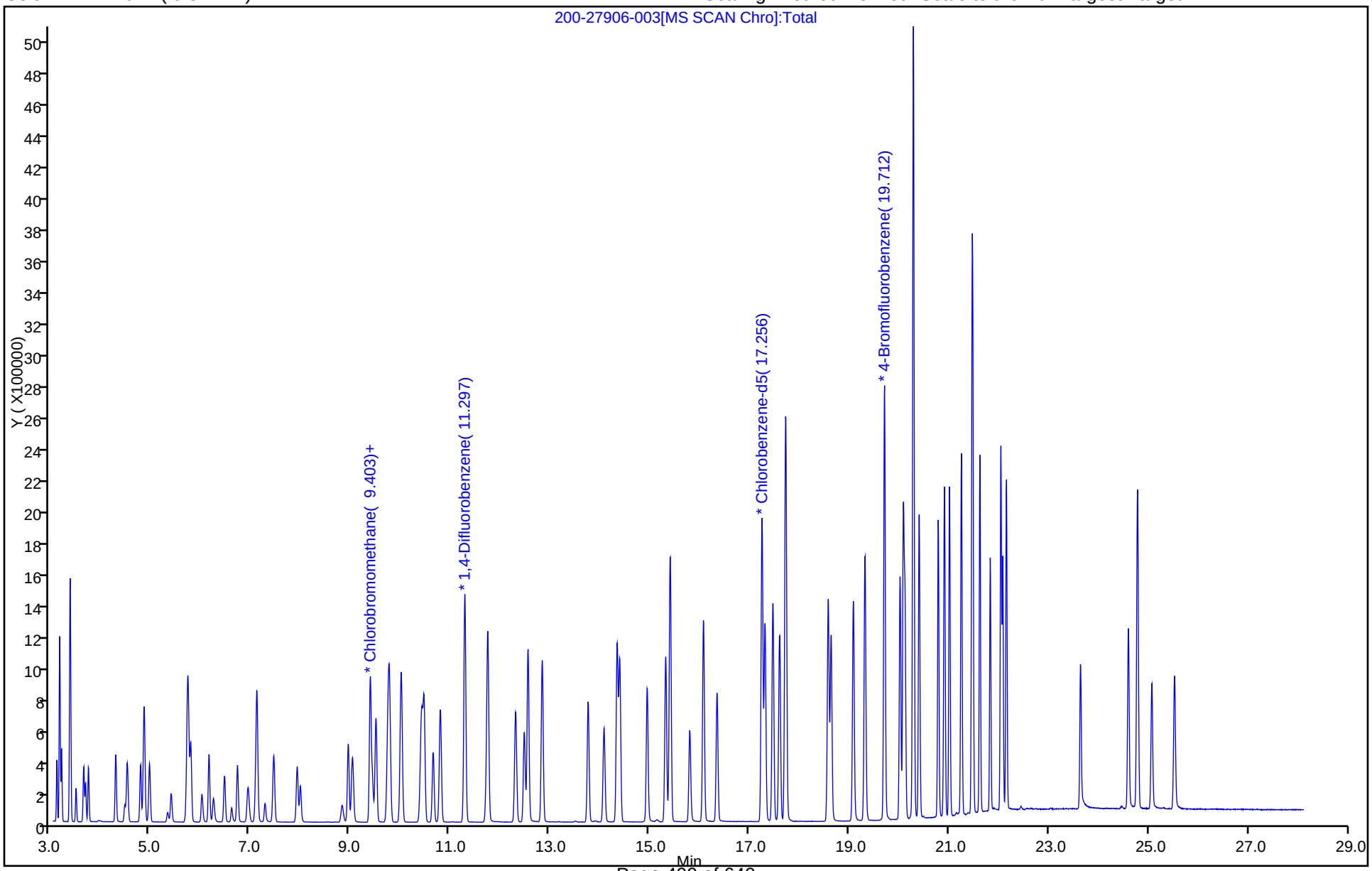
Report Date: 16-Nov-2017 12:47:49 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171115-27906.b\200-27906-003.D

Injection Date:	15-Nov-2017 12:45:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHG.i Start Date: 10/31/2017 16:32

Analysis Batch Number: 122801 End Date: 11/01/2017 06:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122801/1		10/31/2017 16:32	1	200-27684-001.D	RTX-624 0.32(mm)
VIBLK 200-122801/2		10/31/2017 17:21	1		RTX-624 0.32(mm)
IC 200-122801/3		10/31/2017 18:11	1	200-27684-003.D	RTX-624 0.32(mm)
IC 200-122801/4		10/31/2017 19:01	1	200-27684-004.D	RTX-624 0.32(mm)
ZZZZZ		10/31/2017 19:51	1		RTX-624 0.32(mm)
IC 200-122801/6		10/31/2017 20:42	1	200-27684-006.D	RTX-624 0.32(mm)
ZZZZZ		10/31/2017 21:33	1		RTX-624 0.32(mm)
IC 200-122801/8		10/31/2017 22:23	1	200-27684-008.D	RTX-624 0.32(mm)
ICIS 200-122801/9		10/31/2017 23:14	1	200-27684-009.D	RTX-624 0.32(mm)
IC 200-122801/10		11/01/2017 00:04	1	200-27684-010.D	RTX-624 0.32(mm)
IC 200-122801/11		11/01/2017 00:55	1	200-27684-011.D	RTX-624 0.32(mm)
IC 200-122801/12		11/01/2017 01:45	1	200-27684-012.D	RTX-624 0.32(mm)
VIBLK 200-122801/13		11/01/2017 02:36	1		RTX-624 0.32(mm)
VIBLK 200-122801/14		11/01/2017 03:27	1		RTX-624 0.32(mm)
ZZZZZ		11/01/2017 04:17	1		RTX-624 0.32(mm)
ICV 200-122801/16		11/01/2017 05:07	1	200-27684-016.D	RTX-624 0.32(mm)
ZZZZZ		11/01/2017 05:57	1		RTX-624 0.32(mm)
VIBLK 200-122801/18		11/01/2017 06:48	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHW.i Start Date: 11/08/2017 14:54

Analysis Batch Number: 123127 End Date: 11/09/2017 07:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-123127/1		11/08/2017 14:54	1		RTX-624 0.32(mm)
VIBLK 200-123127/2		11/08/2017 15:47	1		RTX-624 0.32(mm)
VIBLK 200-123127/3		11/08/2017 16:39	1		RTX-624 0.32(mm)
IC 200-123127/4		11/08/2017 17:28	1	27803-04.d	RTX-624 0.32(mm)
IC 200-123127/5		11/08/2017 18:20	1	27803-05.d	RTX-624 0.32(mm)
ZZZZZ		11/08/2017 19:13	1		RTX-624 0.32(mm)
ZZZZZ		11/08/2017 20:06	1		RTX-624 0.32(mm)
IC 200-123127/8		11/08/2017 20:59	1	27803-08.d	RTX-624 0.32(mm)
IC 200-123127/9		11/08/2017 21:52	1	27803-09.d	RTX-624 0.32(mm)
ICIS 200-123127/10		11/08/2017 22:44	1	27803-10.d	RTX-624 0.32(mm)
IC 200-123127/11		11/08/2017 23:37	1	27803-11.d	RTX-624 0.32(mm)
IC 200-123127/12		11/09/2017 00:30	1	27803-12.d	RTX-624 0.32(mm)
IC 200-123127/13		11/09/2017 01:23	1	27803-13.d	RTX-624 0.32(mm)
VIBLK 200-123127/14		11/09/2017 02:16	1		RTX-624 0.32(mm)
VIBLK 200-123127/15		11/09/2017 03:09	1		RTX-624 0.32(mm)
VIBLK 200-123127/16		11/09/2017 04:01	1		RTX-624 0.32(mm)
ICV 200-123127/17		11/09/2017 04:54	1	27803-17.d	RTX-624 0.32(mm)
ZZZZZ		11/09/2017 05:47	1		RTX-624 0.32(mm)
ZZZZZ		11/09/2017 06:40	1		RTX-624 0.32(mm)
VIBLK 200-123127/20		11/09/2017 07:32	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHW.i Start Date: 11/14/2017 09:29

Analysis Batch Number: 123310 End Date: 11/15/2017 00:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-123310/1		11/14/2017 09:29	1	27883-01.d	RTX-624 0.32(mm)
CCVIS 200-123310/3		11/14/2017 11:14	1	27883-03.d	RTX-624 0.32(mm)
LCS 200-123310/4		11/14/2017 12:07	1	27883-04.d	RTX-624 0.32(mm)
MB 200-123310/5		11/14/2017 13:00	1	27883-05.d	RTX-624 0.32(mm)
ZZZZZ		11/14/2017 13:49	21.1		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 14:39	12		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 15:28	10		RTX-624 0.32(mm)
200-40953-5		11/14/2017 16:21	1	27883-09.d	RTX-624 0.32(mm)
ZZZZZ		11/14/2017 17:12	2.5		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 18:01	10		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 18:50	10		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 19:39	10		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 20:29	30.5		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 21:18	5820		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 22:08	10		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 22:57	10		RTX-624 0.32(mm)
ZZZZZ		11/14/2017 23:46	10		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 00:36	10		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40953-1

SDG No.: 200-40953-1

Instrument ID: CHG.i Start Date: 11/15/2017 11:02

Analysis Batch Number: 123382 End Date: 11/16/2017 08:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-123382/1		11/15/2017 11:02	1	200-27906-001.D	RTX-624 0.32(mm)
CCVIS 200-123382/2		11/15/2017 11:54	1	200-27906-002.D	RTX-624 0.32(mm)
LCS 200-123382/3		11/15/2017 12:45	1	200-27906-003.D	RTX-624 0.32(mm)
MB 200-123382/4		11/15/2017 13:36	1	200-27906-004.D	RTX-624 0.32(mm)
ZZZZZ		11/15/2017 14:26	1		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 15:16	1		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 16:07	10		RTX-624 0.32(mm)
200-40953-1		11/15/2017 16:58	1	200-27906-008.D	RTX-624 0.32(mm)
200-40953-3		11/15/2017 17:48	1	200-27906-009.D	RTX-624 0.32(mm)
ZZZZZ		11/15/2017 18:39	3		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 19:29	15.92		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 20:19	15.92		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 21:09	2		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 22:00	10		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 22:50	2		RTX-624 0.32(mm)
ZZZZZ		11/15/2017 23:41	10		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 00:32	1		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 01:22	2.98		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 02:12	1		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 03:03	2.98		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 03:53	9.99		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 04:44	98.58		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 05:34	1		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 06:25	1		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 07:15	1		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 08:06	1		RTX-624 0.32(mm)
ZZZZZ		11/16/2017 08:58	0.2		RTX-624 0.32(mm)

Flow Controller (FC) Set Flow Rate and Pressure Gauge Leak Check Record

Date	Canister Size	Temp (°C)	BP ("Hg)	FM ID
11/5/17	5L	22	30.0	F7

Pre-Sampling Check (PSC)
PSC is performed when pressure of a canister is not within criteria and the FC used for sampling was returned with the canister (in same shipment).

FC ID	Sampling Time	Flow Rate	Control Gauge		FC Gauge		Flow Rate	Control Gauge		FC Gauge		PSC Code	Shipping Order
			Initial ("Hg)	Final ("Hg)	Initial ("Hg)	Final ("Hg)		Initial ("Hg)	Final ("Hg)	Initial ("Hg)	Final ("Hg)		
5343	8hr	9.9	27	27	26	26							
2821		10.0	27	27	28	28							
3480		10.2	27	27	27	27							
7041		9.9	27	27	27	27							
3119		10.0	27	27	28	28							
4941		10.0	27	27	25	25							
5243		9.9	27	27	26	26							
3786		10.1	27	27	26	26							
5170		10.0	27	27	25	25							
5155		10.2	27	27	26	26							
4537		9.8	27	27	27	27							
5168		10.1	27	27	26	26							
2761		10.1	27	27	28	28							
3719		9.9	27	27	27	27							
5219		10.0	27	27	26	26							
3734		9.9	27	27	28	28							
3735		10.2	27	27	26	26							
5521	VG	VG	27	27	28	28	10.3	27	27	28	28	1	
6136	↓	↓	27	27	25	25							

Pre-Shipment Criteria:

The pre-shipment flow rate must be within the range specified in the set flow rate table for the sampling time requested.

The difference between initial and final pressure readings for the control gauge and the FC gauge must be zero.

6L Canister: Set Flow Rates for Various Sampling Times (mL/min)

Time	30 min	60 min	1 hour	2 hour	4 hour	6 hour	8 hour	10-hour	12 hour	16 hour	24 hour	24 hour (W)
Flow Rate	150-195	95-105	78-81	39.5-40.5	19.5-20.5	13.3-13.7	9.9-10.2	7.8-8.2	6.5-6.9	4.9-5.1	3.7-3.4	2.7-2.9

NA = Sampling Time is not applicable to canister size. W=Winter Setting

1L Canister: Set Flow Rates for Various Sampling Times (mL/min)

Time	5 min*	10 min*	20 min*	40 min*	1 hour*	2 hour*	4 hour*
Flow Rate	150-195	95-105	39.5-40.5	19.5-20.5	13.3-13.7	6.5-6.9	3.2-3.4
*6L equivalent	*30 min*	*50 min*	*2 hour*	*4 hour*	*6 hour*	*12 hour*	*24 hour*

Post Sampling Check Supporting Information:

Code	Date	Analyst	Temp (°C)	BP ("Hg)	FM ID	Code	Date	Analyst	Temp (°C)	BP ("Hg)	FM ID
1	11/14/2017	VLH	22	30.2	F7	5					
2						6					
3						7					
4						8					

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (℃)	Pressure Gauge ID	Analyst
200-40953	11/14/17	11:54	30.2	22	G16	VLH

Sampling Information and Return Equipment Check	Yes	N o	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	Yes		
(2) Is the flow controller ID used for each canister recorded?	Yes		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		N o	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		N o	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-40953-A-1	2511	-2.5	N	5185	78/36	Y	2511-27580	
200-40953-A-2	2536	-5.6	N	3719	78/36	Y	2536-27498	
200-40953-A-3	5465	0.0	Y	3735	78/36	Y	5465-27236	
200-40953-A-4	2595	-3.5	N	5168	78/36	Y	2595-27370	
200-40953-A-5	4095	-3.3	N	2761	78/36	Y	4095-27603	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10"Hg, but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type
Top Rack	20	10/3/2017	EJF	1L	Individual

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3196	.05	.05	0	-29.4	G25	10-4-17	1030	EE	23	G25	10/9/17	1620	EE	23
2	4288	"	.07	.02	-29.4	G25	"	"	"	"	G25	"	"	"	"
3	2730	"	.23	.18	-29.4	G25	"	"	"	"	G25	"	"	"	"
4	3020	"	.04	0	-29.4	G25	"	"	"	"	G25	"	"	"	"
5	3219	"	.05	0	-29.4	G25	"	"	"	"	G25	"	"	"	"
6	3666	"	.04	-.01	-29.5	G25	"	"	"	"	G25	"	"	"	"
7	4341	"	.05	0	-29.4	G25	"	"	"	"	G25	"	"	"	"
8	3140	"	.14	.09	-29.4	G25	"	"	"	"	G25	"	"	"	"
10	4082	.05	.06	.01	-29.5	G25	10-4-17	1030	EE	23	G25	"	1620	"	"
11	4155	"	.05	0	-29.4	G25	"	"	"	"	G25	"	"	"	"
12	4779	"	.05	0	-29.4	G25	"	"	"	"	G25	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure , Acceptance Criteria (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart

If time frame was not met, the PM must authorize shipment of canister PM Authorization Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: TO15 Routine TO15 LL NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
5465	10/4/17	27236	BK		XXXX				10/5/17	EJF

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LL/NJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

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TestAmerica Burlington

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Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Top Rack	20	10/11/2017	EJE	1L	6L	Individual	Batch[1]

Port	Can ID	Initial (psia)	Final (psia)	Diff[2]	Final ("Hg)	Initial Reading Gauge:	Date	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5122	.05	.09	.04	-29.2	G25	10-12-17	11:00	EK	22	G25	10-24-17	15:00	EK	23
2	6165		.08	.03		G25					G25				
3	4354		.07	.02		G25					G25				
4	5690		.09	.04		G25					G25				
5	5594		.06	.01		G25					G25				
6	2596	.05	.08	.03	-29.2	G25	10-12-17	11:00	EK	22	G25	10-24-17	15:00	EK	23
7	3146	.05	.06	.01		G25					G25				
8	5614		.06	.01		G25					G25				
9	5611		.06	.01		G25					G25				
10	5709		.05	.00		G25					G25				
11	4278		.05	.00		G25					G25				
12	4313		.06	.01		G25					G25				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure ; Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: Date:

Clean Canister Certification Analyses & Authorization of Release to Inventory

Test Method: TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
2595	10/13/17	273740	EJE		XXXX				10/13/17	UTP

Inventory Level 1: Individual Canister Certification (TO-15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO-15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO-15LLNJ 0.03 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

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40420
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Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type	
Rotron Rack	25	10/19/2017	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading					Final Reading				
						Gauge:	Date:	Time:	Tech:	Temp:	Gauge:	Date:	Time:	Tech:	Temp:
1	2510	-.05	-.05	0	-30.2	G25	10.20.17	10:20	GG	23	G25	10.31.17	13:39	GG	22
2	4357		-.06	-.01	-29.7	G25					G25				
3	5147		-.18	-.13	-29.7	G25					G25				
4	5408		-.05	0	-29.7	G25					G25				
5	2536	-.05	-.18	-.13	-29.2	G25	10.25.17	13:30	GG	23	G25	10.31.17	14:50	GG	21
6	3273	-.05	-.05	0	-29.7	G25	10.20.17	10:20	GG	23	G25	10.31.17	13:39	GG	22
7	2022		-.05	0		G25					G25				
8	4048		-.05	0		G25					G25				
9	3593		-.05	0		G25					G25				
10	4362		-.05	0		G25					G25				
11	2791		-.13	-.08		G25					G25				
12	2538		-.05	0		G25					G25				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to 1.0 25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine < TO15 LL < NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level				Secondary Review		
				1	2	3	4	Limited	Review Date	Reviewer
2538	10/20/17	27498	BK		XXXX				10/23/17	ERT

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments: _____

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TestAmerica Burlington

200-40531-A-5

Loc: 200
40531
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Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type:
Top Rack	20	10/20/2017	CJE	1L	Individual

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4085	.05	.05	0	-30.0	G25	10.20.17	10:15	CK	23	G25	11.2.17	13:00	CK	22
2	2848	0.05	.06	.01		G25					G25				
3	2686		.05	0		G25					G25				
4	3927		.05	0		G25					G25				
5	4057		.05	0		G25					G25				
[redacted]															
7	4249	.05	.05	0	-30.0	G25	10.2.17	10.25	CK	23	G25	11.2.17	13:00	CK	22
8	5184		.05	0		G25					G25				
9	5403		.05	0		G25					G25				
10	5526		.05	0		G25					G25				
11	6256		.05	0		G25					G25				
12	6261		.05	0		G25					G25				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi; (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☐ TO15 Routine ☐ TO15 LL ☐ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
2511	10/25/17	27580	AB		XXXX				10/26/17	RMD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

FA023:04.26.17 (1)
TestAmerica Burlington

200-40547 4-6
Log: 200
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Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type:
Dollar Rack	1	10/20/2017	EJC	1L	Individual / Batch

Port	Can ID	Initial (psia)	Final (psia)	Diff	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp	Final Reading Gauge:	Date:	Time:	Tech:	Temp
1	2727	30.5	30.5	0	-30.2	G25	10-24-17	10:44	EE	23	G25	11-1-17	11:05	EE	22
2	4885	30.5	30.7	.2	-30.0	G25	10-24-17	10:44	EE	23	G25	[illegible]	[illegible]	[illegible]	[illegible]
3	3456	30.5	30.5	0	-30.2	G25	10-24-17	10:44	EE	23	G25	11-1-17	11:06	EE	22
4	4792		30.5	0		G25					G25				
5	5017		30.5	0		G25					G25				
6	5023		30.5	0		G25					G25				
7	4328		30.5	0		G25					G25				
8	3844		30.5	0		G25					G25				
9	3762		30.5	0		G25					G25				
10	5093		30.5	0		G25					G25				
11	3149		30.5	0		G25					G25				
12	4156		30.5	0		G25					G25				

Batch Certification: The reading is taken on the "batch" canister and the value is used as the initial pressure for all canisters in the batch.

Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The Difference must be less than or equal to +0.25psi. (2) Pressure readings must be taken after 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: TO15 Routine TO15 LL NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
4015	10/26/17	27602	KP		XXXXX				10/27/17	CAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLN2 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments: _____

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TestAmerica Burlington

200-40548-A-2
Loc: 200
40548
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FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27236_03.D

Lab ID: LCS 200-121739/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	11.1	111	58-129	
Dichlorodifluoromethane	10.0	11.6	116	68-128	
Freon 22	10.0	11.4	114	64-128	
1,2-Dichlorotetrafluoroethane	10.0	13.2	132	78-138	
Chloromethane	10.0	10.9	109	57-126	
n-Butane	10.0	11.1	111	56-130	
Vinyl chloride	10.0	11.8	118	62-125	
1,3-Butadiene	10.0	11.3	113	59-125	
Bromomethane	10.0	11.9	119	68-128	
Chloroethane	10.0	11.2	113	65-125	
Bromoethene(Vinyl Bromide)	10.0	11.3	113	67-127	
Trichlorofluoromethane	10.0	11.5	115	67-127	
Ethanol	15.0	15.9	106	28-168	
Freon TF	10.0	11.7	117	68-128	
1,1-Dichloroethene	10.0	11.5	115	67-127	
Acetone	10.0	12.3	123	64-136	
Isopropyl alcohol	10.0	10.5	105	55-124	
Carbon disulfide	10.0	13.2	132	81-141	
3-Chloropropene	10.0	8.64	86	53-133	
Methylene Chloride	10.0	11.4	114	62-122	
tert-Butyl alcohol	10.0	11.0	110	64-124	
Methyl tert-butyl ether	10.0	11.4	115	67-127	
trans-1,2-Dichloroethene	10.0	12.4	124	72-132	
n-Hexane	10.0	12.2	122	71-131	
1,1-Dichloroethane	10.0	11.8	118	66-126	
Vinyl acetate	10.0	12.0	120	62-130	
Ethyl acetate	10.0	12.0	120	75-135	
Methyl Ethyl Ketone	10.0	11.0	111	62-122	
cis-1,2-Dichloroethene	10.0	10.9	109	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	12.7	127	61-136	
1,1,1-Trichloroethane	10.0	12.1	121	70-130	
Cyclohexane	10.0	12.2	122	69-129	
Carbon tetrachloride	10.0	12.6	126	62-143	
2,2,4-Trimethylpentane	10.0	11.9	119	67-127	
Benzene	10.0	11.8	118	67-127	
1,2-Dichloroethane	10.0	11.7	117	67-132	
n-Heptane	10.0	11.5	115	62-130	
Trichloroethene	10.0	11.7	117	68-128	
Methyl methacrylate	10.0	11.2	112	70-130	
1,2-Dichloropropane	10.0	11.4	114	67-127	
1,4-Dioxane	10.0	11.3	113	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27236_03.D

Lab ID: LCS 200-121739/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.3	113	69-129	
cis-1,3-Dichloropropene	10.0	11.5	115	70-130	
methyl isobutyl ketone	10.0	10.8	108	62-130	
Toluene	10.0	11.0	110	67-127	
trans-1,3-Dichloropropene	10.0	10.6	106	69-129	
1,1,2-Trichloroethane	10.0	11.4	114	69-129	
Tetrachloroethene	10.0	10.7	107	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.0	100	61-127	
Dibromochloromethane	10.0	10.2	102	66-130	
1,2-Dibromoethane	10.0	11.2	112	70-130	
Chlorobenzene	10.0	10.9	109	68-128	
Ethylbenzene	10.0	11.1	111	68-128	
m,p-Xylene	20.0	22.4	112	68-128	
Xylene, o-	10.0	10.7	107	67-127	
Styrene	10.0	11.0	110	68-128	
Bromoform	10.0	9.36	94	34-170	
Cumene	10.0	11.0	110	67-127	
1,1,2,2-Tetrachloroethane	10.0	11.6	116	69-129	
n-Propylbenzene	10.0	11.2	112	67-127	
4-Ethyltoluene	10.0	12.3	123	69-129	
1,3,5-Trimethylbenzene	10.0	11.5	115	65-125	
2-Chlorotoluene	10.0	11.8	118	67-127	
tert-Butylbenzene	10.0	11.4	114	63-125	
1,2,4-Trimethylbenzene	10.0	11.7	117	65-125	
sec-Butylbenzene	10.0	11.8	118	66-126	
4-Isopropyltoluene	10.0	12.0	120	67-129	
1,3-Dichlorobenzene	10.0	11.8	118	67-127	
1,4-Dichlorobenzene	10.0	11.6	116	66-126	
Benzyl chloride	10.0	11.8	118	54-135	
n-Butylbenzene	10.0	12.3	123	67-127	
1,2-Dichlorobenzene	10.0	11.8	118	67-127	
1,2,4-Trichlorobenzene	10.0	8.79	88	59-126	
Hexachlorobutadiene	10.0	9.71	97	62-130	
Naphthalene	10.0	8.33	83	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-27370-003.D

Lab ID: LCS 200-122057/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	9.99	100	58-129	
Dichlorodifluoromethane	10.0	10.6	106	68-128	
Freon 22	10.0	10.3	103	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.5	115	78-138	
Chloromethane	10.0	9.53	95	57-126	
n-Butane	10.0	9.68	97	56-130	
Vinyl chloride	10.0	9.65	97	62-125	
1,3-Butadiene	10.0	9.47	95	59-125	
Bromomethane	10.0	10.5	105	68-128	
Chloroethane	10.0	10.1	101	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.6	106	67-127	
Trichlorofluoromethane	10.0	10.7	107	67-127	
Ethanol	15.0	12.5	83	28-168	
Freon TF	10.0	10.3	103	68-128	
1,1-Dichloroethene	10.0	9.74	97	67-127	
Acetone	10.0	9.69	97	64-136	
Isopropyl alcohol	10.0	8.23	82	55-124	
Carbon disulfide	10.0	11.4	114	81-141	
3-Chloropropene	10.0	7.38	74	53-133	
Methylene Chloride	10.0	9.74	97	62-122	
tert-Butyl alcohol	10.0	8.88	89	64-124	
Methyl tert-butyl ether	10.0	9.08	91	67-127	
trans-1,2-Dichloroethene	10.0	10.3	103	72-132	
n-Hexane	10.0	9.97	100	71-131	
1,1-Dichloroethane	10.0	9.77	98	66-126	
Vinyl acetate	10.0	9.74	97	62-130	
Ethyl acetate	10.0	10.2	102	75-135	
Methyl Ethyl Ketone	10.0	8.83	88	62-122	
cis-1,2-Dichloroethene	10.0	9.73	97	67-127	
Chloroform	10.0	10.0	100	69-129	
Tetrahydrofuran	10.0	9.16	92	61-136	
1,1,1-Trichloroethane	10.0	10.1	101	70-130	
Cyclohexane	10.0	9.73	97	69-129	
Carbon tetrachloride	10.0	10.7	107	62-143	
2,2,4-Trimethylpentane	10.0	9.20	92	67-127	
Benzene	10.0	9.57	96	67-127	
1,2-Dichloroethane	10.0	10.2	102	67-132	
n-Heptane	10.0	9.19	92	62-130	
Trichloroethene	10.0	9.52	95	68-128	
Methyl methacrylate	10.0	9.20	92	70-130	
1,2-Dichloropropane	10.0	9.72	97	67-127	
1,4-Dioxane	10.0	8.86	89	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-27370-003.D

Lab ID: LCS 200-122057/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.97	100	69-129	
cis-1,3-Dichloropropene	10.0	10.2	102	70-130	
methyl isobutyl ketone	10.0	8.76	88	62-130	
Toluene	10.0	9.69	97	67-127	
trans-1,3-Dichloropropene	10.0	9.61	96	69-129	
1,1,2-Trichloroethane	10.0	10.2	102	69-129	
Tetrachloroethene	10.0	10.5	105	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	8.52	85	61-127	
Dibromochloromethane	10.0	10.1	101	66-130	
1,2-Dibromoethane	10.0	10.6	106	70-130	
Chlorobenzene	10.0	10.2	102	68-128	
Ethylbenzene	10.0	9.68	97	68-128	
m,p-Xylene	20.0	19.0	95	68-128	
Xylene, o-	10.0	9.44	94	67-127	
Styrene	10.0	9.74	97	68-128	
Bromoform	10.0	9.35	93	34-170	
Cumene	10.0	9.53	95	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.83	98	69-129	
n-Propylbenzene	10.0	9.63	96	67-127	
4-Ethyltoluene	10.0	10.2	102	69-129	
1,3,5-Trimethylbenzene	10.0	9.77	98	65-125	
2-Chlorotoluene	10.0	9.85	99	67-127	
tert-Butylbenzene	10.0	9.64	96	63-125	
1,2,4-Trimethylbenzene	10.0	9.87	99	65-125	
sec-Butylbenzene	10.0	9.75	97	66-126	
4-Isopropyltoluene	10.0	10.1	101	67-129	
1,3-Dichlorobenzene	10.0	10.7	107	67-127	
1,4-Dichlorobenzene	10.0	10.6	106	66-126	
Benzyl chloride	10.0	10.0	100	54-135	
n-Butylbenzene	10.0	10.4	104	67-127	
1,2-Dichlorobenzene	10.0	10.5	105	67-127	
1,2,4-Trichlorobenzene	10.0	9.16	92	59-126	
Hexachlorobutadiene	10.0	10.2	102	62-130	
Naphthalene	10.0	8.43	84	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27498-03.D

Lab ID: LCS 200-122350/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	10.1	101	58-129	
Dichlorodifluoromethane	10.0	10.5	105	68-128	
Freon 22	10.0	10.5	105	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.9	119	78-138	
Chloromethane	10.0	9.84	98	57-126	
n-Butane	10.0	9.78	98	56-130	
Vinyl chloride	10.0	10.4	104	62-125	
1,3-Butadiene	10.0	9.84	98	59-125	
Bromomethane	10.0	10.2	102	68-128	
Chloroethane	10.0	10.0	100	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.81	98	67-127	
Trichlorofluoromethane	10.0	10.1	101	67-127	
Ethanol	15.0	13.7	91	28-168	
Freon TF	10.0	9.97	100	68-128	
1,1-Dichloroethene	10.0	9.57	96	67-127	
Acetone	10.0	10.8	108	64-136	
Isopropyl alcohol	10.0	10.1	101	55-124	
Carbon disulfide	10.0	11.2	112	81-141	
3-Chloropropene	10.0	6.79	68	53-133	
Methylene Chloride	10.0	10.1	101	62-122	
tert-Butyl alcohol	10.0	10.2	102	64-124	
Methyl tert-butyl ether	10.0	9.92	99	67-127	
trans-1,2-Dichloroethene	10.0	10.7	107	72-132	
n-Hexane	10.0	10.2	102	71-131	
1,1-Dichloroethane	10.0	10.2	102	66-126	
Vinyl acetate	10.0	10.8	108	62-130	
Ethyl acetate	10.0	10.4	104	75-135	
Methyl Ethyl Ketone	10.0	9.82	98	62-122	
cis-1,2-Dichloroethene	10.0	9.80	98	67-127	
Chloroform	10.0	10.2	102	69-129	
Tetrahydrofuran	10.0	10.6	106	61-136	
1,1,1-Trichloroethane	10.0	10.3	103	70-130	
Cyclohexane	10.0	10.3	103	69-129	
Carbon tetrachloride	10.0	10.7	107	62-143	
2,2,4-Trimethylpentane	10.0	10.1	101	67-127	
Benzene	10.0	10.0	100	67-127	
1,2-Dichloroethane	10.0	10.6	106	67-132	
n-Heptane	10.0	9.88	99	62-130	
Trichloroethene	10.0	10.3	103	68-128	
Methyl methacrylate	10.0	10.3	103	70-130	
1,2-Dichloropropane	10.0	10.3	103	67-127	
1,4-Dioxane	10.0	11.1	111	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27498-03.D

Lab ID: LCS 200-122350/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.1	101	69-129	
cis-1,3-Dichloropropene	10.0	10.5	105	70-130	
methyl isobutyl ketone	10.0	9.85	98	62-130	
Toluene	10.0	9.76	98	67-127	
trans-1,3-Dichloropropene	10.0	10.4	104	69-129	
1,1,2-Trichloroethane	10.0	10.2	102	69-129	
Tetrachloroethene	10.0	9.90	99	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.19	92	61-127	
Dibromochloromethane	10.0	8.87	89	66-130	
1,2-Dibromoethane	10.0	10.2	102	70-130	
Chlorobenzene	10.0	10.1	101	68-128	
Ethylbenzene	10.0	9.88	99	68-128	
m,p-Xylene	20.0	19.9	100	68-128	
Xylene, o-	10.0	9.67	97	67-127	
Styrene	10.0	10.0	100	68-128	
Bromoform	10.0	6.91	69	34-170	
Cumene	10.0	9.85	99	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	69-129	
n-Propylbenzene	10.0	10.2	102	67-127	
4-Ethyltoluene	10.0	10.4	104	69-129	
1,3,5-Trimethylbenzene	10.0	10.1	101	65-125	
2-Chlorotoluene	10.0	10.2	102	67-127	
tert-Butylbenzene	10.0	10.2	102	63-125	
1,2,4-Trimethylbenzene	10.0	10.3	103	65-125	
sec-Butylbenzene	10.0	10.2	102	66-126	
4-Isopropyltoluene	10.0	10.4	104	67-129	
1,3-Dichlorobenzene	10.0	10.5	105	67-127	
1,4-Dichlorobenzene	10.0	10.5	105	66-126	
Benzyl chloride	10.0	10.0	100	54-135	
n-Butylbenzene	10.0	10.7	107	67-127	
1,2-Dichlorobenzene	10.0	10.6	106	67-127	
1,2,4-Trichlorobenzene	10.0	11.3	113	59-126	
Hexachlorobutadiene	10.0	10.2	102	62-130	
Naphthalene	10.0	10.7	107	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27580_03.D

Lab ID: LCS 200-122537/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	10.4	104	58-129	
Dichlorodifluoromethane	10.0	10.9	109	68-128	
Freon 22	10.0	10.5	105	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.6	116	78-138	
Chloromethane	10.0	10.2	102	57-126	
n-Butane	10.0	10.4	104	56-130	
Vinyl chloride	10.0	10.7	107	62-125	
1,3-Butadiene	10.0	10.9	109	59-125	
Bromomethane	10.0	10.2	102	68-128	
Chloroethane	10.0	9.68	97	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.6	106	67-127	
Trichlorofluoromethane	10.0	11.4	114	67-127	
Ethanol	15.0	17.5	117	28-168	
Freon TF	10.0	10.5	105	68-128	
1,1-Dichloroethene	10.0	10.5	105	67-127	
Acetone	10.0	11.3	113	64-136	
Isopropyl alcohol	10.0	11.8	118	55-124	
Carbon disulfide	10.0	12.3	123	81-141	
3-Chloropropene	10.0	7.77	78	53-133	
Methylene Chloride	10.0	11.0	110	62-122	
tert-Butyl alcohol	10.0	11.4	114	64-124	
Methyl tert-butyl ether	10.0	10.8	108	67-127	
trans-1,2-Dichloroethene	10.0	11.5	115	72-132	
n-Hexane	10.0	11.5	115	71-131	
1,1-Dichloroethane	10.0	11.2	112	66-126	
Vinyl acetate	10.0	12.1	121	62-130	
Ethyl acetate	10.0	11.4	114	75-135	
Methyl Ethyl Ketone	10.0	10.4	104	62-122	
cis-1,2-Dichloroethene	10.0	10.6	106	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	11.6	116	61-136	
1,1,1-Trichloroethane	10.0	11.6	116	70-130	
Cyclohexane	10.0	11.4	114	69-129	
Carbon tetrachloride	10.0	12.1	121	62-143	
2,2,4-Trimethylpentane	10.0	11.3	113	67-127	
Benzene	10.0	11.1	111	67-127	
1,2-Dichloroethane	10.0	11.7	117	67-132	
n-Heptane	10.0	11.2	112	62-130	
Trichloroethene	10.0	11.0	110	68-128	
Methyl methacrylate	10.0	10.9	109	70-130	
1,2-Dichloropropane	10.0	11.1	111	67-127	
1,4-Dioxane	10.0	11.9	119	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27580_03.D

Lab ID: LCS 200-122537/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.9	109	69-129	
cis-1,3-Dichloropropene	10.0	10.9	109	70-130	
methyl isobutyl ketone	10.0	10.8	108	62-130	
Toluene	10.0	10.0	100	67-127	
trans-1,3-Dichloropropene	10.0	9.86	99	69-129	
1,1,2-Trichloroethane	10.0	10.8	108	69-129	
Tetrachloroethene	10.0	8.97	90	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.93	99	61-127	
Dibromochloromethane	10.0	9.16	92	66-130	
1,2-Dibromoethane	10.0	10.4	104	70-130	
Chlorobenzene	10.0	10.4	104	68-128	
Ethylbenzene	10.0	10.8	108	68-128	
m,p-Xylene	20.0	20.7	104	68-128	
Xylene, o-	10.0	10.2	102	67-127	
Styrene	10.0	10.3	103	68-128	
Bromoform	10.0	8.97	90	34-170	
Cumene	10.0	11.6	116	67-127	
1,1,2,2-Tetrachloroethane	10.0	11.3	113	69-129	
n-Propylbenzene	10.0	11.0	110	67-127	
4-Ethyltoluene	10.0	11.3	113	69-129	
1,3,5-Trimethylbenzene	10.0	11.4	114	65-125	
2-Chlorotoluene	10.0	10.6	106	67-127	
tert-Butylbenzene	10.0	11.7	117	63-125	
1,2,4-Trimethylbenzene	10.0	11.4	114	65-125	
sec-Butylbenzene	10.0	11.5	115	66-126	
4-Isopropyltoluene	10.0	11.9	119	67-129	
1,3-Dichlorobenzene	10.0	12.4	124	67-127	
1,4-Dichlorobenzene	10.0	11.7	117	66-126	
Benzyl chloride	10.0	10.6	106	54-135	
n-Butylbenzene	10.0	11.0	110	67-127	
1,2-Dichlorobenzene	10.0	10.8	108	67-127	
1,2,4-Trichlorobenzene	10.0	11.7	117	59-126	
Hexachlorobutadiene	10.0	11.6	116	62-130	
Naphthalene	10.0	11.4	114	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27603_03.D

Lab ID: LCS 200-122611/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	12.4	124	58-129	
Dichlorodifluoromethane	10.0	11.9	119	68-128	
Freon 22	10.0	11.9	119	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.0	110	78-138	
Chloromethane	10.0	11.6	116	57-126	
n-Butane	10.0	10.2	102	56-130	
Vinyl chloride	10.0	10.6	106	62-125	
1,3-Butadiene	10.0	10.7	107	59-125	
Bromomethane	10.0	10.5	105	68-128	
Chloroethane	10.0	10.3	103	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.4	104	67-127	
Trichlorofluoromethane	10.0	10.3	103	67-127	
Ethanol	15.0	13.8	92	28-168	
Freon TF	10.0	9.84	98	68-128	
1,1-Dichloroethene	10.0	9.91	99	67-127	
Acetone	10.0	9.86	99	64-136	
Isopropyl alcohol	10.0	10.4	104	55-124	
Carbon disulfide	10.0	9.50	95	81-141	
3-Chloropropene	10.0	9.85	99	53-133	
Methylene Chloride	10.0	9.59	96	62-122	
tert-Butyl alcohol	10.0	9.96	100	64-124	
Methyl tert-butyl ether	10.0	9.55	96	67-127	
trans-1,2-Dichloroethene	10.0	9.55	96	72-132	
n-Hexane	10.0	9.18	92	71-131	
1,1-Dichloroethane	10.0	9.79	98	66-126	
Vinyl acetate	10.0	10.2	102	62-130	
Ethyl acetate	10.0	10.4	104	75-135	
Methyl Ethyl Ketone	10.0	10.5	105	62-122	
cis-1,2-Dichloroethene	10.0	10.6	106	67-127	
Chloroform	10.0	11.4	114	69-129	
Tetrahydrofuran	10.0	12.8	128	61-136	
1,1,1-Trichloroethane	10.0	11.9	119	70-130	
Cyclohexane	10.0	11.3	114	69-129	
Carbon tetrachloride	10.0	12.3	123	62-143	
2,2,4-Trimethylpentane	10.0	12.0	121	67-127	
Benzene	10.0	11.2	112	67-127	
1,2-Dichloroethane	10.0	12.5	125	67-132	
n-Heptane	10.0	12.2	122	62-130	
Trichloroethene	10.0	10.7	107	68-128	
Methyl methacrylate	10.0	10.7	107	70-130	
1,2-Dichloropropane	10.0	11.2	113	67-127	
1,4-Dioxane	10.0	10.8	108	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 27603_03.D

Lab ID: LCS 200-122611/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	11.2	112	69-129	
cis-1,3-Dichloropropene	10.0	10.7	107	70-130	
methyl isobutyl ketone	10.0	11.8	118	62-130	
Toluene	10.0	9.81	98	67-127	
trans-1,3-Dichloropropene	10.0	9.96	100	69-129	
1,1,2-Trichloroethane	10.0	10.7	107	69-129	
Tetrachloroethene	10.0	8.57	86	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	11.2	112	61-127	
Dibromochloromethane	10.0	10.4	104	66-130	
1,2-Dibromoethane	10.0	10.3	103	70-130	
Chlorobenzene	10.0	10.1	101	68-128	
Ethylbenzene	10.0	10.7	107	68-128	
m,p-Xylene	20.0	20.8	104	68-128	
Xylene, o-	10.0	10.2	102	67-127	
Styrene	10.0	10.3	103	68-128	
Bromoform	10.0	11.3	113	34-170	
Cumene	10.0	10.8	108	67-127	
1,1,2,2-Tetrachloroethane	10.0	11.2	112	69-129	
n-Propylbenzene	10.0	11.2	112	67-127	
4-Ethyltoluene	10.0	11.1	111	69-129	
1,3,5-Trimethylbenzene	10.0	10.9	109	65-125	
2-Chlorotoluene	10.0	11.5	115	67-127	
tert-Butylbenzene	10.0	10.7	107	63-125	
1,2,4-Trimethylbenzene	10.0	10.9	109	65-125	
sec-Butylbenzene	10.0	11.0	110	66-126	
4-Isopropyltoluene	10.0	10.9	109	67-129	
1,3-Dichlorobenzene	10.0	10.6	106	67-127	
1,4-Dichlorobenzene	10.0	10.5	105	66-126	
Benzyl chloride	10.0	12.1	121	54-135	
n-Butylbenzene	10.0	11.2	112	67-127	
1,2-Dichlorobenzene	10.0	10.5	105	67-127	
1,2,4-Trichlorobenzene	10.0	10.6	106	59-126	
Hexachlorobutadiene	10.0	10.3	103	62-130	
Naphthalene	10.0	11.3	113	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab File ID: 27236_04.D Lab Sample ID: MB 200-121739/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHX.i Date Analyzed: 10/04/2017 13:05

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-121739/3	27236_03.D	10/04/2017 12:15
5465	200-40322-9	27236_23.D	10/05/2017 05:46

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-121739/4

Matrix: Air | Lab File ID: 27236_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/04/2017 13:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 121739 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40322-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-121739/4

Matrix: Air | Lab File ID: 27236_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/04/2017 13:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 121739 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-121739/4

Matrix: Air Lab File ID: 27236_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/04/2017 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 121739 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-Oct-2017 13:05:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027236-004
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 05-Oct-2017 10:42:50 Calib Date: 29-Sep-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170928-27150.b\27150_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: bunmaa Date: 05-Oct-2017 10:42:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.055					ND	
2 Dichlorodifluoromethane	85		3.124					ND	
3 Chlorodifluoromethane	51		3.167					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.370					ND	
5 Chloromethane	50		3.504					ND	
6 Butane	43		3.686					ND	
7 Vinyl chloride	62		3.729					ND	
8 Butadiene	54		3.798					ND	
10 Bromomethane	94		4.440					ND	
11 Chloroethane	64		4.659					ND	
12 2-Methylbutane	43		4.724					ND	
13 Vinyl bromide	106		5.029					ND	
14 Trichlorofluoromethane	101		5.120					ND	
16 Pentane	43		5.248					ND	
17 Ethanol	45	5.735	5.735	0.054	51	1089		0.1445	M
18 Ethyl ether	59		5.756					ND	
19 Acrolein	56		6.147					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.147					ND	
21 1,1-Dichloroethene	96		6.195					ND	
22 Acetone	43		6.452					ND	
23 Carbon disulfide	76		6.585					ND	
24 Isopropyl alcohol	45		6.735					ND	
25 3-Chloro-1-propene	41		6.971					ND	
26 Acetonitrile	41		7.131					ND	
27 Methylene Chloride	49		7.270					ND	
28 2-Methyl-2-propanol	59		7.511					ND	
29 Methyl tert-butyl ether	73		7.677					ND	
31 trans-1,2-Dichloroethene	61		7.698					ND	
32 Acrylonitrile	53		7.880					ND	
33 Hexane	57		8.078					ND	
34 1,1-Dichloroethane	63		8.592					ND	
35 Vinyl acetate	43		8.672					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
37 cis-1,2-Dichloroethene	96		9.731					ND	
38 2-Butanone (MEK)	72		9.801					ND	
39 Ethyl acetate	88		9.838					ND	
* 40 Chlorobromomethane	128	10.212	10.218	-0.006	85	196301	10.0	10.0	
41 Tetrahydrofuran	42		10.239					ND	
42 Chloroform	83		10.352					ND	
43 Cyclohexane	84		10.592					ND	
44 1,1,1-Trichloroethane	97		10.635					ND	
45 Carbon tetrachloride	117		10.892					ND	
46 Isooctane	57		11.347					ND	
47 Benzene	78		11.395					ND	
48 1,2-Dichloroethane	62		11.603					ND	
49 n-Heptane	43		11.759					ND	
* 50 1,4-Difluorobenzene	114	12.299	12.299	0.000	94	905645	10.0	10.0	
52 n-Butanol	56		12.759					ND	
53 Trichloroethene	95		12.791					ND	
A 51 GRO	1	13.235	(4.714-21.756)		0	2862332		0	
54 1,2-Dichloropropane	63		13.396					ND	
55 Methyl methacrylate	69		13.583					ND	
56 1,4-Dioxane	88		13.652					ND	
57 Dibromomethane	174		13.663					ND	
58 Dichlorobromomethane	83		13.973					ND	
60 cis-1,3-Dichloropropene	75		14.952					ND	
A 59 TVOC as Toluene	92	15.142	(3.045-27.240)		0	2958263		0	
61 4-Methyl-2-pentanone (MIBK	43		15.279					ND	
65 Toluene	92		15.568					ND	
64 n-Octane	43		15.621					ND	
66 trans-1,3-Dichloropropene	75		16.209					ND	
67 1,1,2-Trichloroethane	83		16.605					ND	
68 Tetrachloroethene	166		16.691					ND	
69 2-Hexanone	43		17.092					ND	
71 Chlorodibromomethane	129		17.402					ND	
72 Ethylene Dibromide	107		17.686					ND	
* 74 Chlorobenzene-d5	117	18.627	18.633	-0.006	86	810048	10.0	10.0	
75 Chlorobenzene	112		18.697					ND	
76 Ethylbenzene	91		18.858					ND	
77 n-Nonane	57		18.986					ND	
78 m-Xylene & p-Xylene	106		19.125					ND	
S 73 Xylenes, Total	106		19.600					ND	
79 o-Xylene	106		20.018					ND	
80 Styrene	104		20.077					ND	
81 Bromoform	173		20.548					ND	
82 Isopropylbenzene	105		20.773					ND	
84 1,1,2,2-Tetrachloroethane	83		21.495					ND	
85 N-Propylbenzene	91		21.554					ND	
86 1,2,3-Trichloropropane	75		21.597					ND	
87 n-Decane	57		21.746					ND	
88 4-Ethyltoluene	105		21.757					ND	
89 2-Chlorotoluene	91		21.762					ND	
90 1,3,5-Trimethylbenzene	105		21.875					ND	
91 Alpha Methyl Styrene	118		22.265					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119		22.388					ND	
93 1,2,4-Trimethylbenzene	105		22.490					ND	
94 sec-Butylbenzene	105		22.736					ND	
95 4-Isopropyltoluene	119		22.950					ND	
96 1,3-Dichlorobenzene	146		22.972					ND	
97 1,4-Dichlorobenzene	146		23.116					ND	
98 Benzyl chloride	91		23.325					ND	
100 n-Butylbenzene	91		23.544					ND	
99 Undecane	57		23.571					ND	
101 1,2-Dichlorobenzene	146		23.667					ND	
102 Dodecane	57		25.202					ND	
103 1,2,4-Trichlorobenzene	180		26.246					ND	
104 Hexachlorobutadiene	225		26.438					ND	
105 Naphthalene	128		26.748					ND	
106 1,2,3-Trichlorobenzene	180		27.230					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 36 Methyl cyclohexane TIC	55		0.000					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

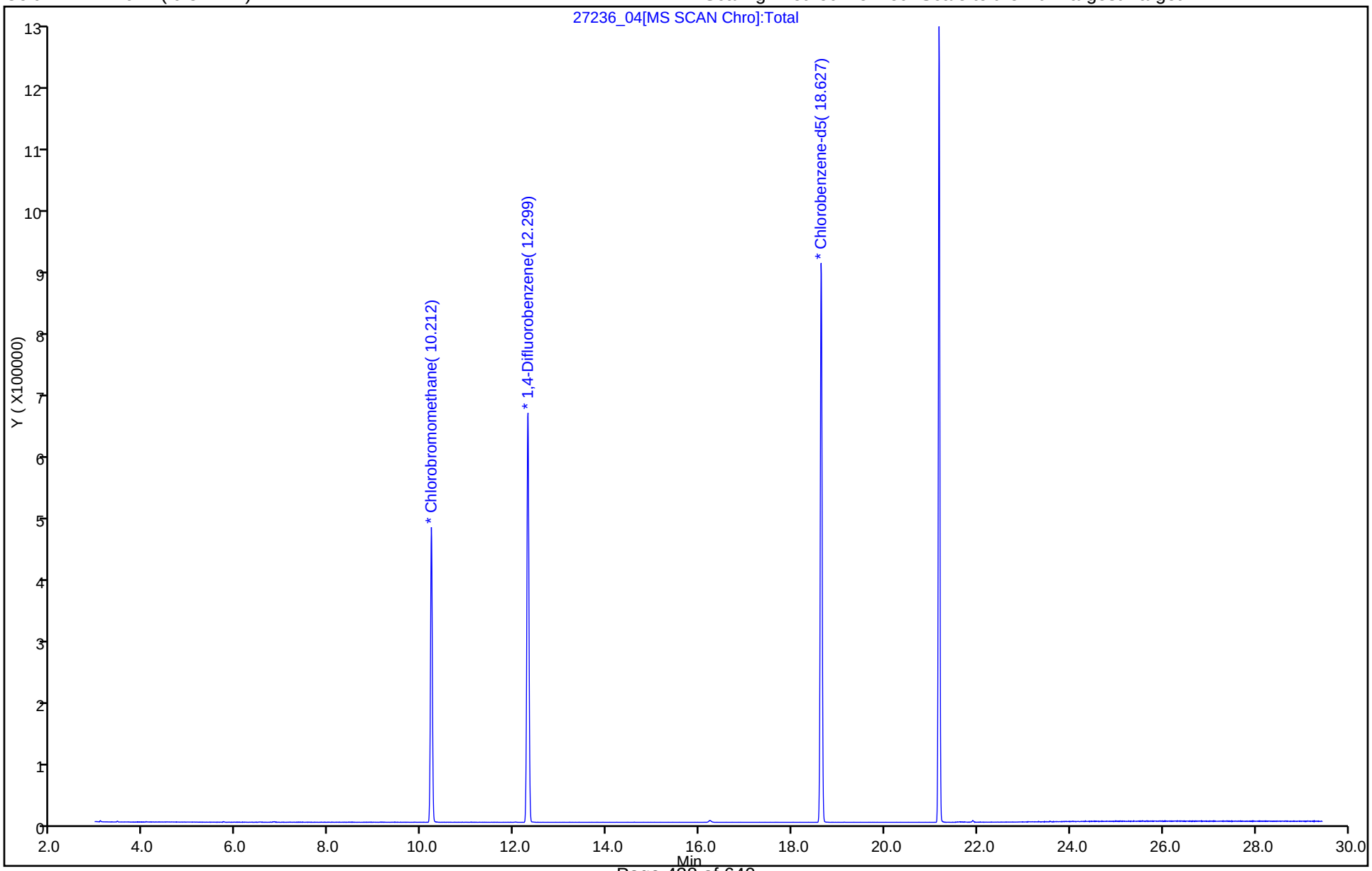
Report Date: 05-Oct-2017 10:42:52 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_04.D

Injection Date:	04-Oct-2017 13:05:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

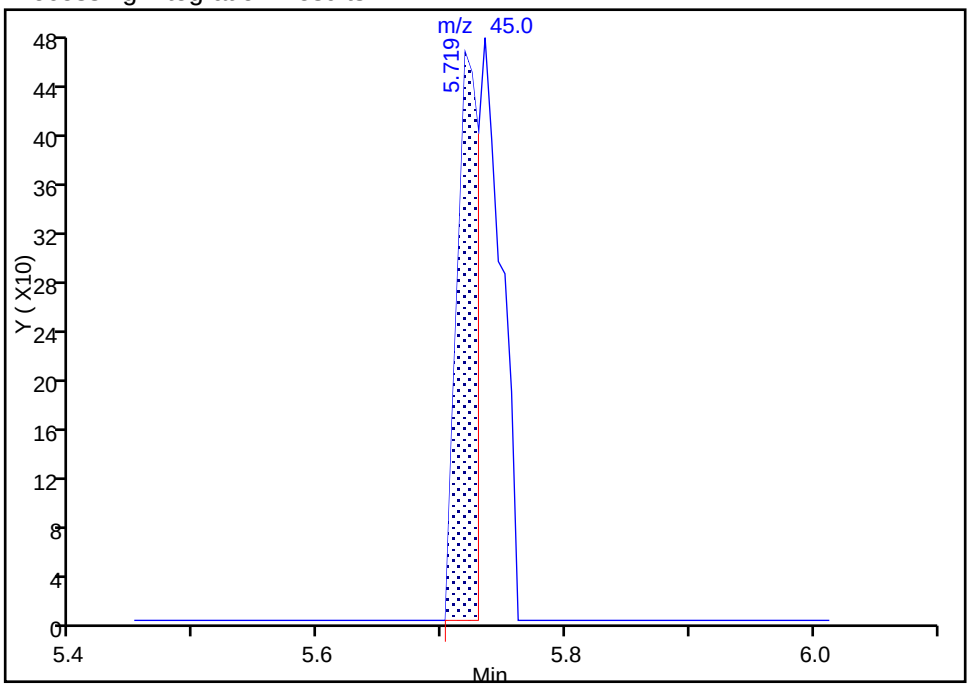
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_04.D				
Injection Date:	04-Oct-2017 13:05:30	Instrument ID:	CHX.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 1

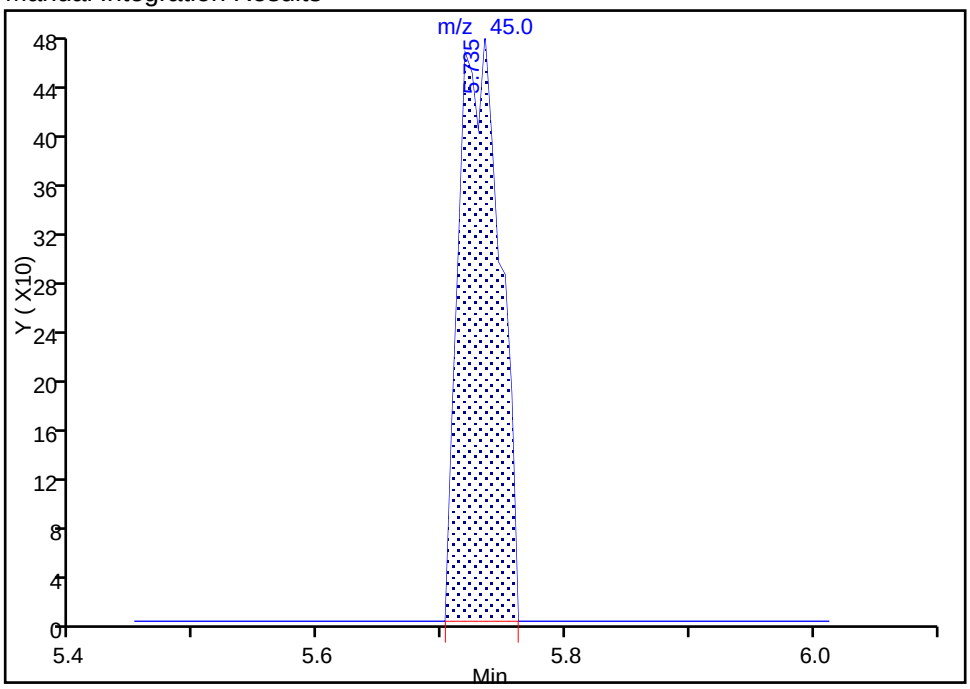
Processing Integration Results

RT: 5.72
Area: 567
Amount: 0.075212
Amount Units: ppb v/v



Manual Integration Results

RT: 5.73
Area: 1089
Amount: 0.144454
Amount Units: ppb v/v



Reviewer: tobere, 04-Oct-2017 14:07:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

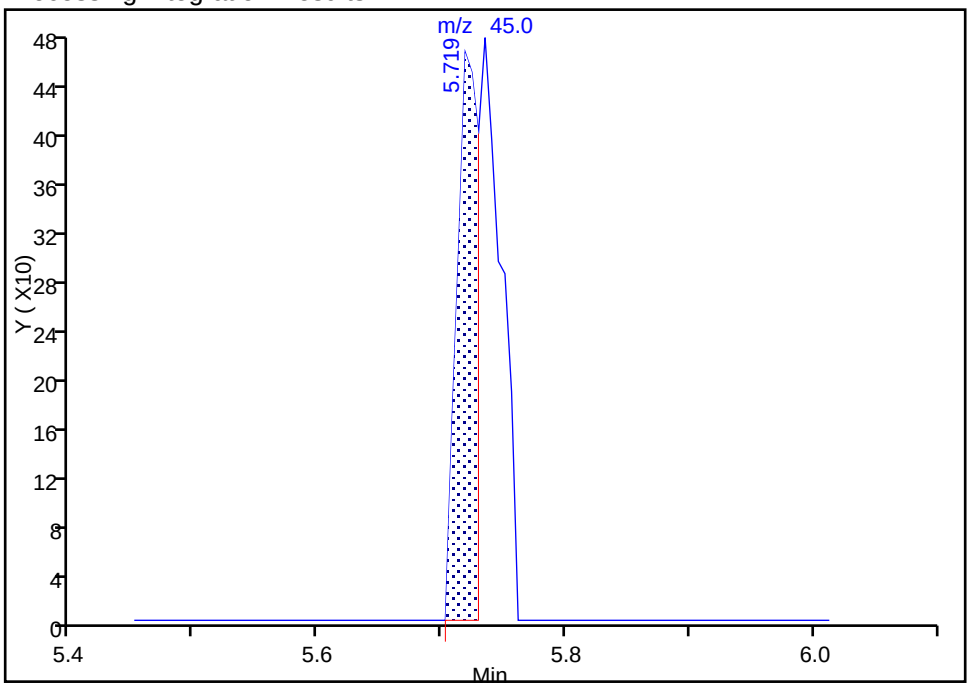
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_04.D				
Injection Date:	04-Oct-2017 13:05:30	Instrument ID:	CHX.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 1

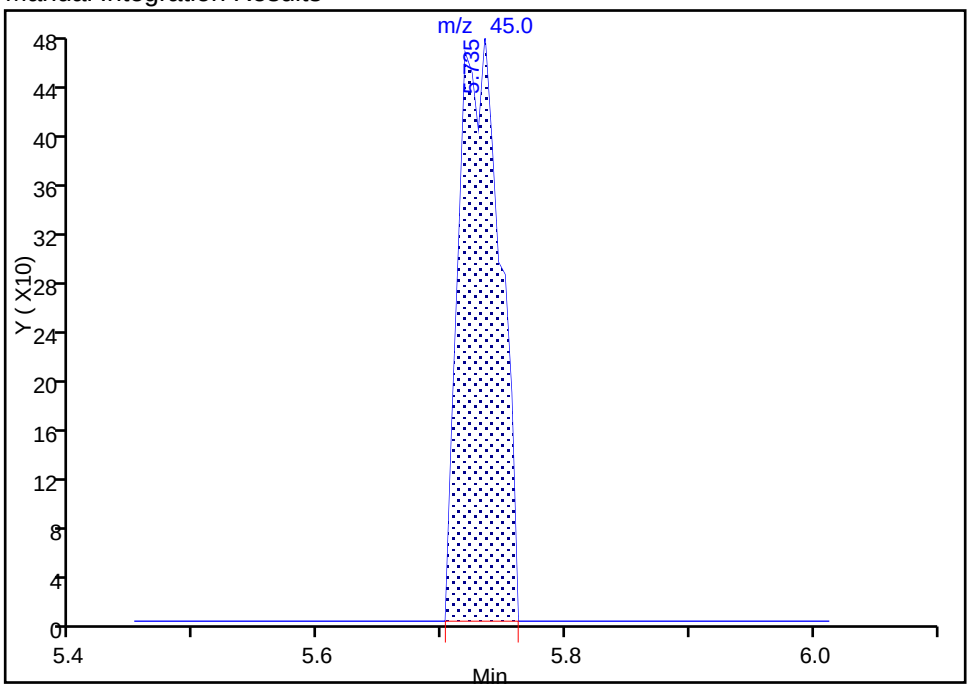
Processing Integration Results

RT: 5.72
Area: 567
Amount: 0.075212
Amount Units: ppb v/v



Manual Integration Results

RT: 5.73
Area: 1089
Amount: 0.144454
Amount Units: ppb v/v



Reviewer: bunmaa, 05-Oct-2017 10:39:22
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

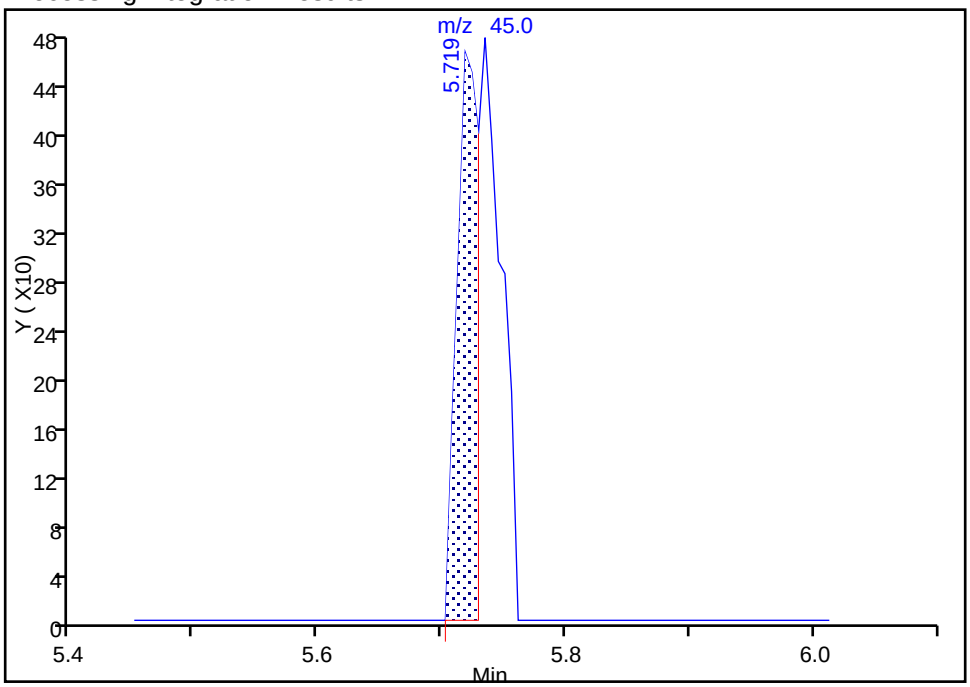
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_04.D
Injection Date: 04-Oct-2017 13:05:30 Instrument ID: CHX.i
Lims ID: mb
Client ID:
Operator ID: ert ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

17 Ethanol, CAS: 64-17-5

Signal: 1

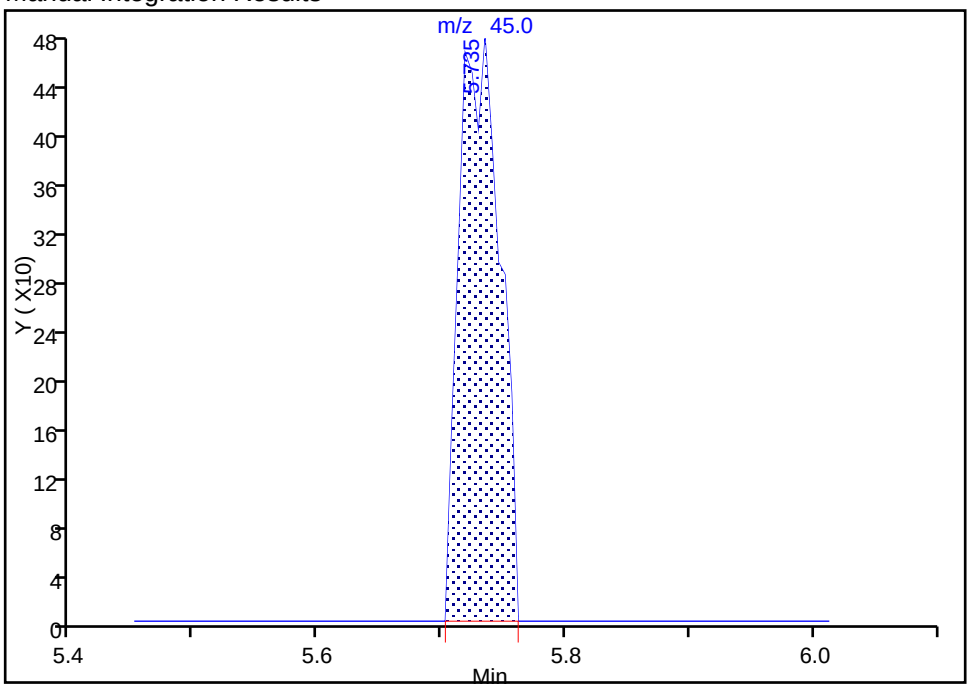
Processing Integration Results

RT: 5.72
Area: 567
Amount: 0.075212
Amount Units: ppb v/v



Manual Integration Results

RT: 5.73
Area: 1089
Amount: 0.144454
Amount Units: ppb v/v



Reviewer: bunmaa, 05-Oct-2017 10:39:37
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

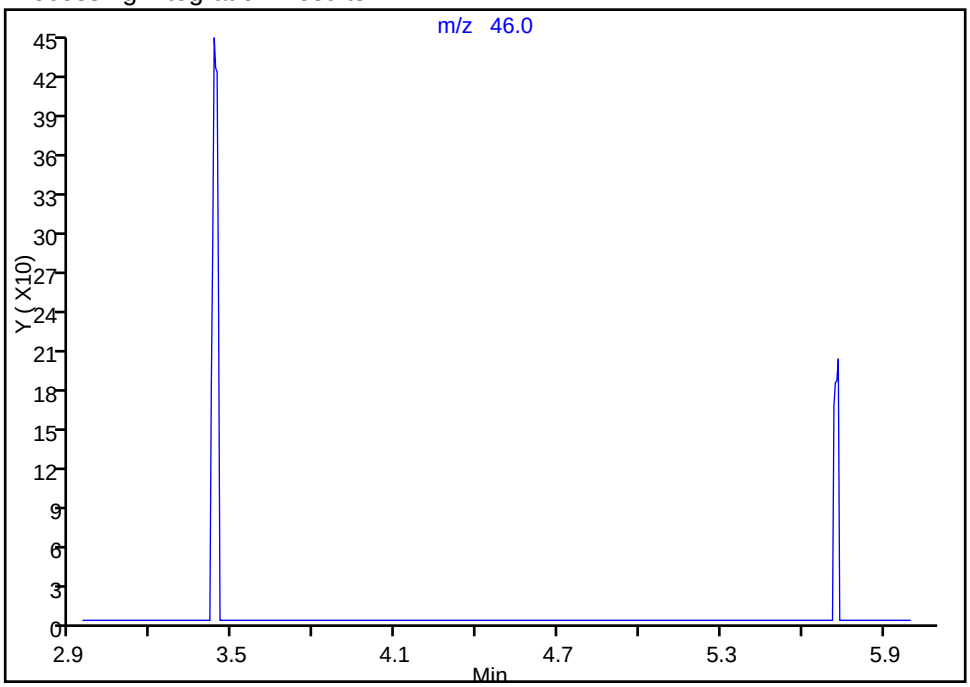
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_04.D
Injection Date: 04-Oct-2017 13:05:30 Instrument ID: CHX.i
Lims ID: mb
Client ID:
Operator ID: ert ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

17 Ethanol, CAS: 64-17-5

Signal: 2

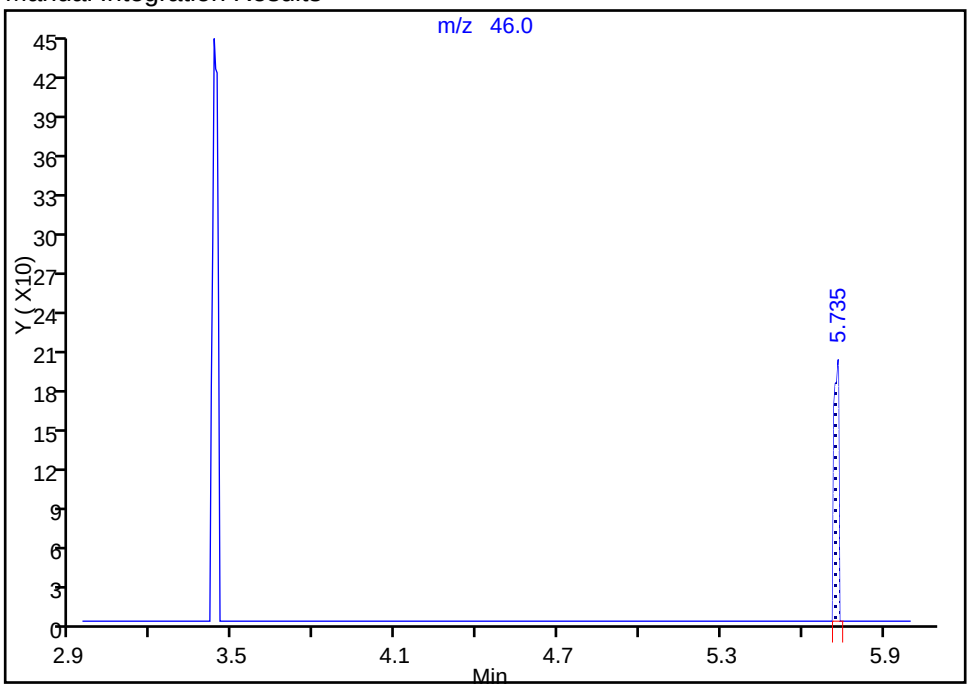
Processing Integration Results

RT: 5.68
Area: 0
Amount: 0.075212
Amount Units: ppb v/v



Manual Integration Results

RT: 5.73
Area: 232
Amount: 0.144454
Amount Units: ppb v/v



Reviewer: bunmaa, 05-Oct-2017 10:39:57
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab File ID: 200-27370-005.D Lab Sample ID: MB 200-122057/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 10/12/2017 13:05

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-122057/3	200-27370-003.D	10/12/2017 11:24
2595	200-40420-6	200-27370-027.D	10/13/2017 07:39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122057/5

Matrix: Air Lab File ID: 200-27370-005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/12/2017 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122057 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40420-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-122057/5

Matrix: Air | Lab File ID: 200-27370-005.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/12/2017 13:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122057 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122057/5

Matrix: Air Lab File ID: 200-27370-005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/12/2017 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122057 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-005.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 12-Oct-2017 13:05:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027370-005
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Oct-2017 10:51:25 Calib Date: 26-Sep-2017 03:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170925-27085.b\200-27085-015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: puangmaleek Date: 13-Oct-2017 10:51:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
2 Dichlorodifluoromethane	85	3.187	3.187	0.000	97	3040		0.0284	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.395					ND	
5 Chloromethane	50		3.518					ND	
7 Vinyl chloride	62		3.706					ND	
8 Butadiene	54		3.764					ND	
10 Bromomethane	94		4.315					ND	
11 Chloroethane	64		4.497					ND	
12 2-Methylbutane	43		4.545					ND	
13 Vinyl bromide	106		4.818					ND	
18 Ethyl ether	59		5.433					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.765					ND	
19 Acrolein	56		5.776					ND	
21 1,1-Dichloroethene	96		5.824					ND	
24 Isopropyl alcohol	45		6.289					ND	
28 2-Methyl-2-propanol	59		6.985					ND	
29 Methyl tert-butyl ether	73		7.145					ND	
31 trans-1,2-Dichloroethene	61		7.161					ND	
32 Acrylonitrile	53		7.322					ND	
34 1,1-Dichloroethane	63		7.964					ND	
35 Vinyl acetate	43		8.028					ND	
38 2-Butanone (MEK)	72		9.066					ND	
39 Ethyl acetate	88		9.082					ND	
* 40 Chlorobromomethane	128	9.430	9.435	-0.005	69	447721	10.0	10.0	
41 Tetrahydrofuran	42		9.478					ND	
42 Chloroform	83		9.547					ND	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84		9.783					ND	
44 1,1,1-Trichloroethane	97		9.820					ND	
45 Carbon tetrachloride	117		10.056					ND	
46 Isooctane	57		10.462					ND	
48 1,2-Dichloroethane	62		10.698					ND	
* 50 1,4-Difluorobenzene	114	11.329	11.334	-0.005	92	2596706	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
54 1,2-Dichloropropane	63		12.356					ND	
A 51 GRO	1	12.428	(4.535-20.321)		0	779657		0	
55 Methyl methacrylate	69		12.527					ND	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
57 Dibromomethane	174	12.591	12.602	-0.011	87	1598		0.0193	
58 Dichlorobromomethane	83		12.886					ND	
A 59 TVOC as Toluene	92	14.346	(3.118-25.574)		0	860721		0	
A 63 Toluene Range	92	14.384	(14.344-14.424)		0	12169		NC	
A 62 C8 Range	1	14.437	(14.387-14.487)		0	10207		NC	
67 1,1,2-Trichloroethane	83		15.363					ND	
* 74 Chlorobenzene-d5	117	17.288	17.288	0.000	82	2334120	10.0	10.0	
75 Chlorobenzene	112		17.353					ND	
78 m-Xylene & p-Xylene	106	17.754	17.754	-0.011	0	2033		0.0230	M
80 Styrene	104	18.674	18.674	0.000	82	1390		0.0109	
S 73 Xylenes, Total	106				0			0.0230	
* 83 4-Bromofluorobenzene	95	19.739	19.739	0.000	96	1420630	10.0	10.0	
87 n-Decane	57		20.311					ND	
91 Alpha Methyl Styrene	118		20.814					ND	
93 1,2,4-Trimethylbenzene	105	21.039	21.039	-0.001	91	3041		0.0159	
96 1,3-Dichlorobenzene	146	21.509	21.509	0.000	94	4376		0.0298	
97 1,4-Dichlorobenzene	146	21.643	21.648	-0.005	97	5972		0.0391	
98 Benzyl chloride	91		21.857					ND	
101 1,2-Dichlorobenzene	146	22.178	22.178	0.000	79	4577		0.0318	
103 1,2,4-Trichlorobenzene	180	24.634	24.628	0.006	91	6260		0.0686	
104 Hexachlorobutadiene	225	24.805	24.810	-0.005	86	2940		0.0317	
105 Naphthalene	128	25.104	25.104	0.000	98	13205		0.0777	
106 1,2,3-Trichlorobenzene	180	25.554	25.564	-0.010	88	5802		0.0754	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

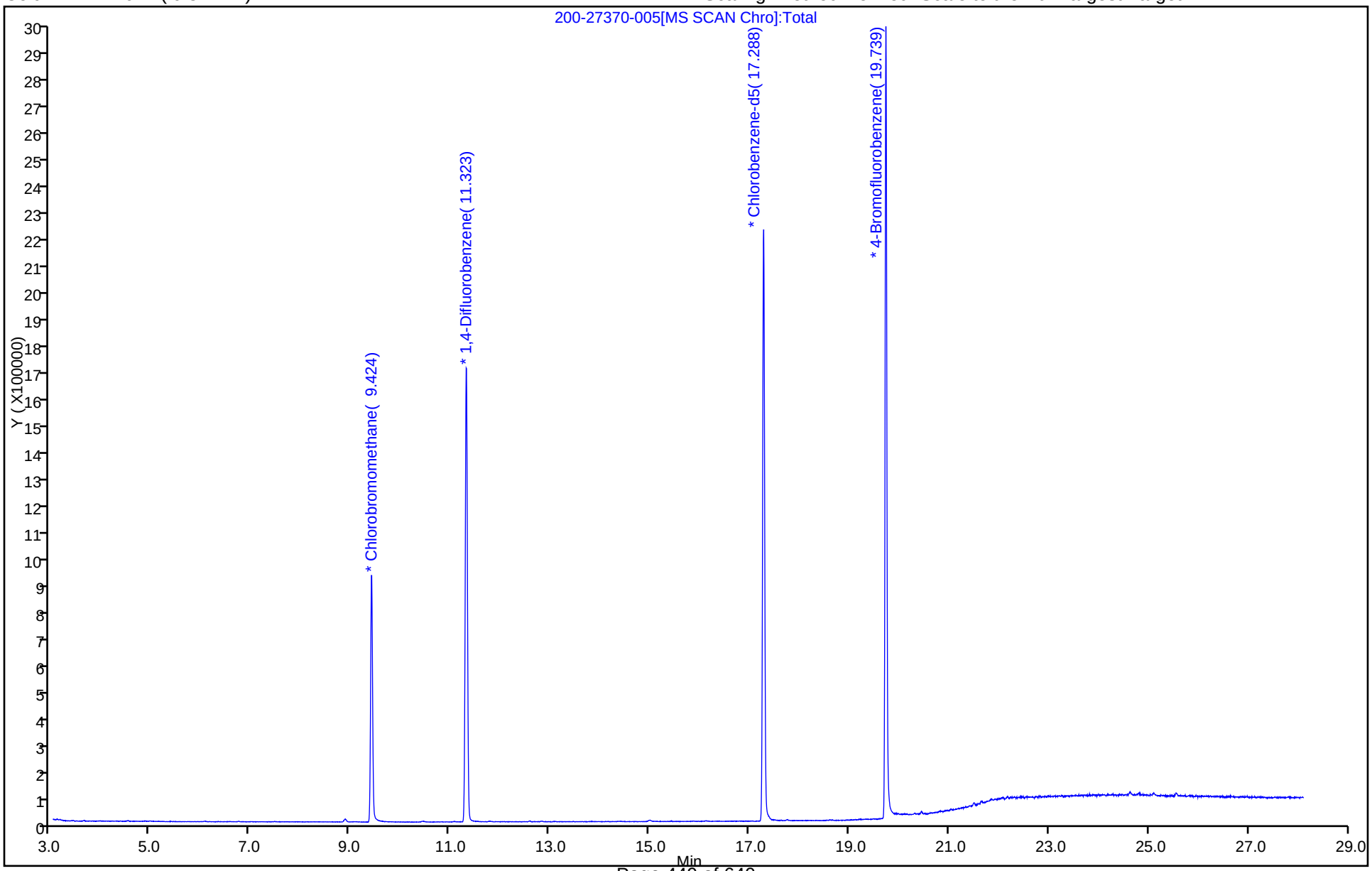
Report Date: 13-Oct-2017 10:51:25 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-005.D

Injection Date:	12-Oct-2017 13:05:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

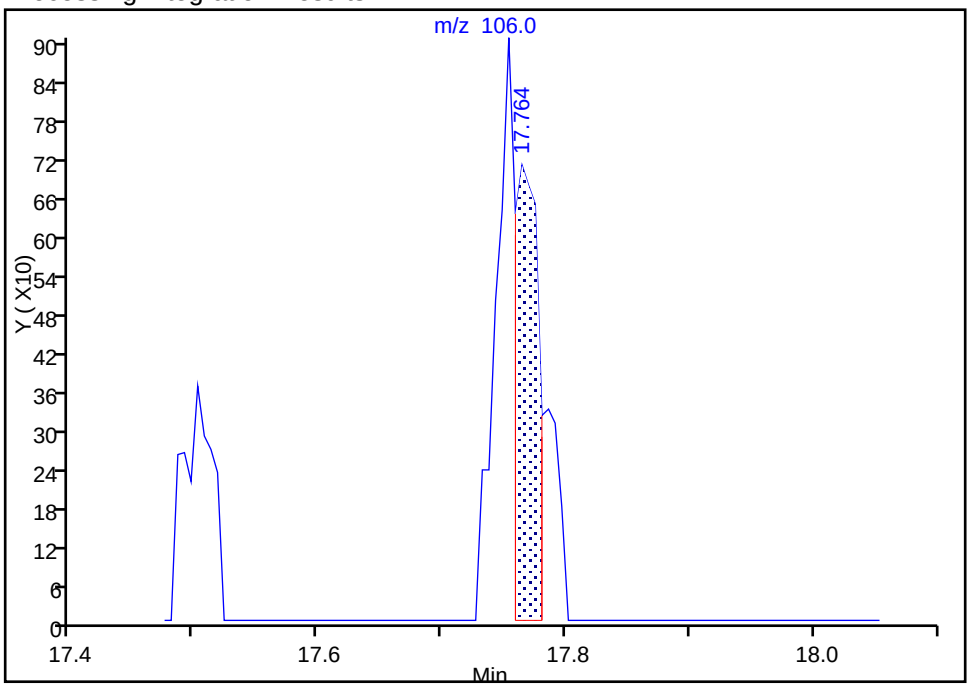
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-005.D				
Injection Date:	12-Oct-2017 13:05:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

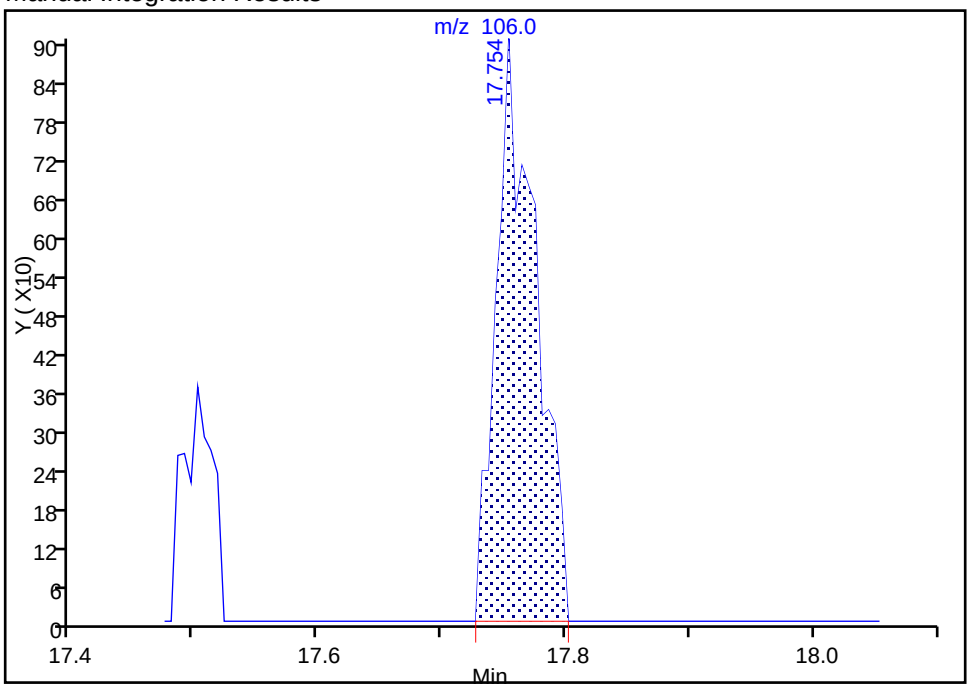
Processing Integration Results

RT: 17.76
Area: 961
Amount: 0.010853
Amount Units: ppb v/v



Manual Integration Results

RT: 17.75
Area: 2033
Amount: 0.022959
Amount Units: ppb v/v



Reviewer: puangmaleek, 13-Oct-2017 10:50:19

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

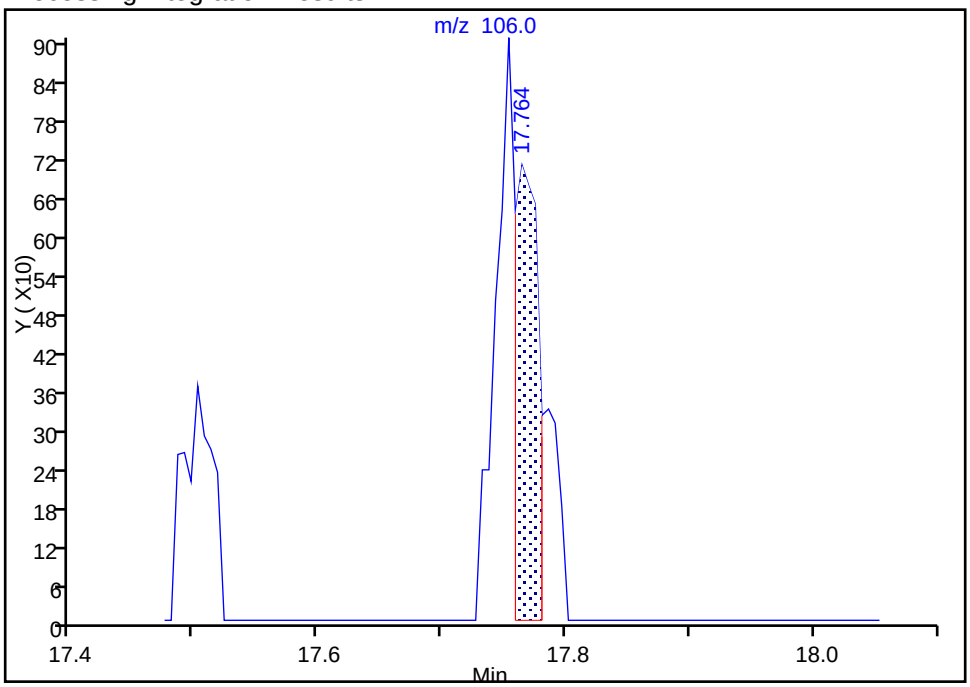
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-005.D				
Injection Date:	12-Oct-2017 13:05:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	vtp	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

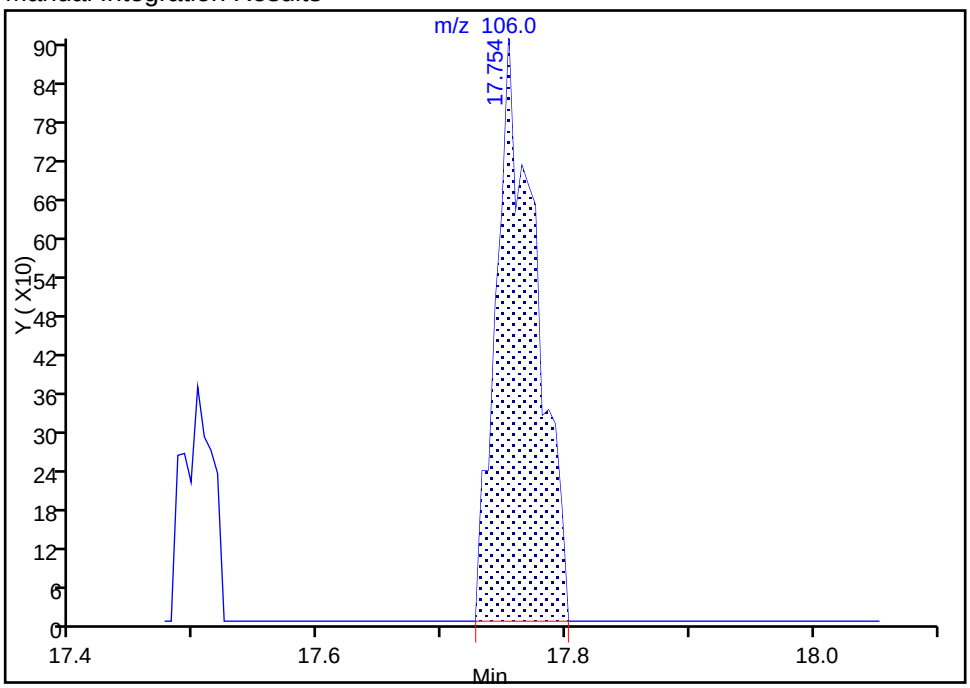
Processing Integration Results

RT: 17.76
Area: 961
Amount: 0.010853
Amount Units: ppb v/v



Manual Integration Results

RT: 17.75
Area: 2033
Amount: 0.022959
Amount Units: ppb v/v



Reviewer: puangmaleek, 13-Oct-2017 10:50:27

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab File ID: 27498-04.D Lab Sample ID: MB 200-122350/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHB.i Date Analyzed: 10/20/2017 11:36

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-122350/3	27498-03.D	10/20/2017 10:43
2536	200-40531-5	27498-19.D	10/21/2017 00:38

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40531-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-122350/4

Matrix: Air | Lab File ID: 27498-04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/20/2017 11:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122350 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122350/4

Matrix: Air Lab File ID: 27498-04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/20/2017 11:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122350 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122350/4

Matrix: Air Lab File ID: 27498-04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/20/2017 11:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122350 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Oct-2017 11:36:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027498-004
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 23-Oct-2017 09:46:51 Calib Date: 11-Oct-2017 02:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20171010-27339.b\27339-13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: bunmaa Date: 23-Oct-2017 09:46:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.129					ND	
2 Dichlorodifluoromethane	85		3.188					ND	
3 Chlorodifluoromethane	51		3.225					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.407					ND	
5 Chloromethane	50		3.535					ND	
6 Butane	43		3.711					ND	
7 Vinyl chloride	62		3.743					ND	
8 Butadiene	54		3.812					ND	
10 Bromomethane	94		4.474					ND	
11 Chloroethane	64		4.709					ND	
12 2-Methylbutane	43		4.789					ND	
13 Vinyl bromide	106		5.115					ND	
14 Trichlorofluoromethane	101		5.216					ND	
15 Pentane	43		5.355					ND	
16 Ethanol	45		5.675					ND	
17 Ethyl ether	59		5.830					ND	
18 Acrolein	56		6.193					ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.246					ND	
20 1,1-Dichloroethene	96		6.315					ND	
21 Acetone	43	6.523	6.523	0.053	16	1186		0.0335	7M
22 Isopropyl alcohol	45		6.684					ND	
23 Carbon disulfide	76		6.748					ND	
24 3-Chloro-1-propene	41		7.014					ND	
26 Acetonitrile	41		7.079					ND	
T 25 Methyl Acetate TIC	43		7.200					ND	
27 Methylene Chloride	49	7.292	7.276	0.016	1	880		0.0302	7M
28 2-Methyl-2-propanol	59		7.383					ND	
29 Methyl tert-butyl ether	73		7.628					ND	
30 trans-1,2-Dichloroethene	61		7.687					ND	
31 Acrylonitrile	53		7.756					ND	
32 Hexane	57	8.018	8.018	0.000	51	1499		0.0316	7M
33 1,1-Dichloroethane	63		8.429					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 Vinyl acetate	43		8.434					ND	
36 2-Butanone (MEK)	72		9.320					ND	
37 cis-1,2-Dichloroethene	96		9.331					ND	
35 Ethyl acetate	88		9.331					ND	
* 39 Chlorobromomethane	128	9.699	9.699	0.000	83	324208	10.0	10.0	
38 Tetrahydrofuran	42		9.710					ND	
40 Chloroform	83		9.774					ND	
S 41 1,2-Dichloroethene, Total	61		10.000					ND	
42 1,1,1-Trichloroethane	97		10.035					ND	
43 Cyclohexane	84		10.046					ND	
44 Carbon tetrachloride	117		10.238					ND	
45 Isooctane	57		10.521					ND	
46 Benzene	78		10.564					ND	
47 1,2-Dichloroethane	62		10.665					ND	
48 n-Heptane	43		10.777					ND	
A 49 GRO	1	10.865	(4.779-16.951)		0	2470874		0	
* 50 1,4-Difluorobenzene	114	11.108	11.108	0.000	92	1620257	10.0	10.0	
51 n-Butanol	56		11.289					ND	
53 Trichloroethene	95		11.476					ND	
T 52 Methyl cyclohexane TIC	55		11.500					ND	
54 1,2-Dichloropropane	63		11.844					ND	
55 Methyl methacrylate	69		11.882					ND	
56 1,4-Dioxane	88		11.972					ND	
57 Dibromomethane	174	12.036	12.026	0.005	1	567		0.0115	7M
58 Dichlorobromomethane	83		12.202					ND	
A 59 TVOC as Toluene	1	12.485	(3.119-21.850)		0	2683680		0	
60 cis-1,3-Dichloropropene	75		12.832					ND	
61 4-Methyl-2-pentanone (MIBK	43		12.976					ND	
63 n-Octane	43		13.248					ND	
64 Toluene	92	13.259	13.259	-0.005	25	1361		0.0194	7
66 trans-1,3-Dichloropropene	75		13.622					ND	
67 1,1,2-Trichloroethane	83		13.894					ND	
68 Tetrachloroethene	166		14.038					ND	
69 2-Hexanone	43		14.150					ND	
70 Chlorodibromomethane	129		14.449					ND	
71 Ethylene Dibromide	107		14.652					ND	
* 72 Chlorobenzene-d5	117	15.212	15.217	-0.005	82	1219459	10.0	10.0	
73 Chlorobenzene	112		15.255					ND	
74 Ethylbenzene	91	15.324	15.319	0.005	1	3117		0.0209	7M
75 n-Nonane	57		15.345					ND	
76 m-Xylene & p-Xylene	106	15.473	15.473	0.005	0	446		0.007312	7
78 o-Xylene	106	15.975	15.975	-0.005	1	1208		0.0198	7
S 77 Xylenes, Total	106				0			0.0271	7
79 Styrene	104		16.002					ND	
80 Bromoform	173		16.295					ND	
81 Isopropylbenzene	105		16.391					ND	
83 1,1,2,2-Tetrachloroethane	83		16.797					ND	M
84 N-Propylbenzene	91		16.872					ND	
85 1,2,3-Trichloropropane	75		16.882					ND	
86 n-Decane	57		16.941					ND	
87 4-Ethyltoluene	105		16.994					ND	
88 2-Chlorotoluene	91		17.037					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 1,3,5-Trimethylbenzene	105		17.064					ND	M
90 Alpha Methyl Styrene	118		17.336					ND	M
91 tert-Butylbenzene	119		17.437					ND	
92 1,2,4-Trimethylbenzene	105		17.507					ND	M
93 sec-Butylbenzene	105		17.694					ND	
94 4-Isopropyltoluene	119		17.848					ND	M
95 1,3-Dichlorobenzene	146		17.928					ND	
96 1,4-Dichlorobenzene	146		18.041					ND	
97 Benzyl chloride	91		18.185					ND	
98 Undecane	57		18.318					ND	
99 n-Butylbenzene	91		18.355					ND	
100 1,2-Dichlorobenzene	146		18.521					ND	
T 101 1,2-Dibromo-3-Chloropropan	75		19.300					ND	
102 Dodecane	57		19.775					ND	
103 1,2,4-Trichlorobenzene	180	20.890	20.890	0.005	1	1280		0.0317	7
104 Hexachlorobutadiene	225		21.051					ND	
105 Naphthalene	128	21.365	21.365	0.000	1	3456		0.0432	7
106 1,2,3-Trichlorobenzene	180		21.840					ND	
T 119 Freon 115 TIC	1		0.000					ND	
T 120 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 121 1,3-Dichloropropane TIC	1		0.000					ND	
T 118 Difluoroethane TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 117 Chlorotrifluoroethene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

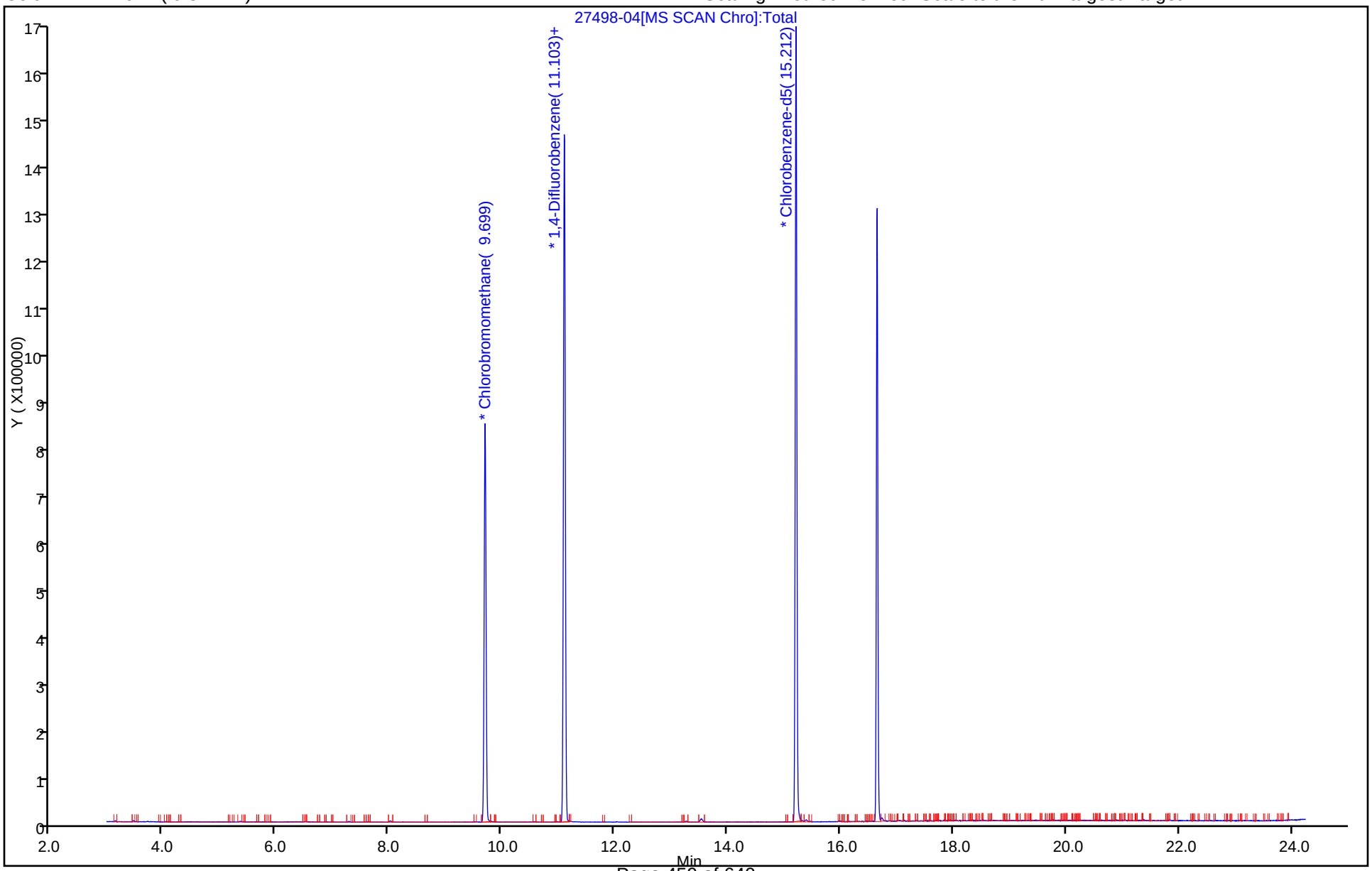
Report Date: 23-Oct-2017 09:46:52 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D

Injection Date:	20-Oct-2017 11:36:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

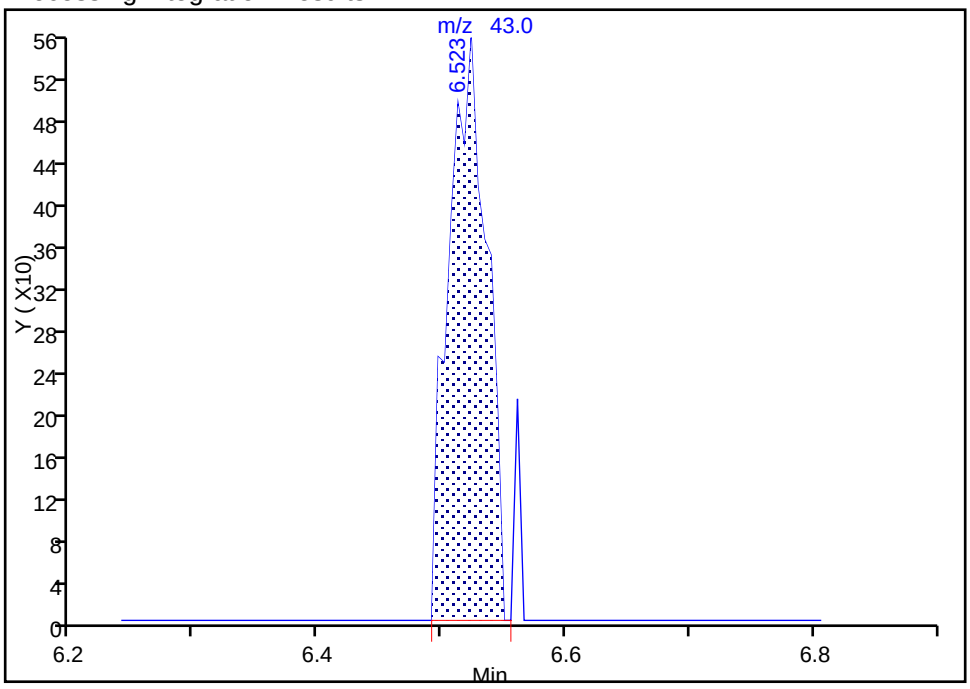
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D				
Injection Date:	20-Oct-2017 11:36:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

21 Acetone, CAS: 67-64-1

Signal: 1

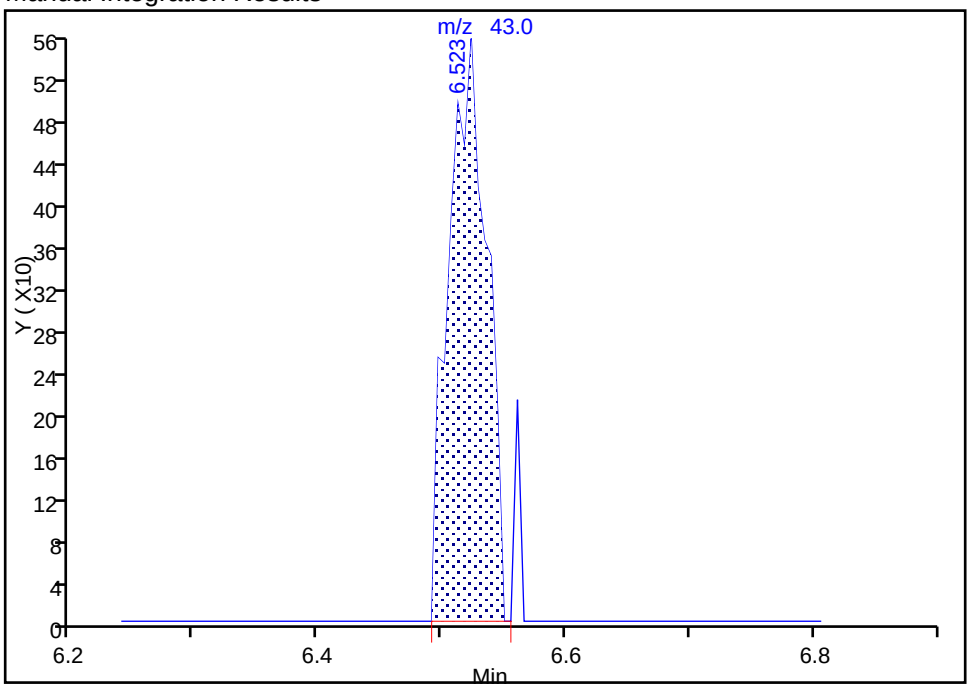
Processing Integration Results

RT: 6.52
Area: 1186
Amount: 0.033493
Amount Units: ppb v/v



Manual Integration Results

RT: 6.52
Area: 1186
Amount: 0.033493
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:36:02

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

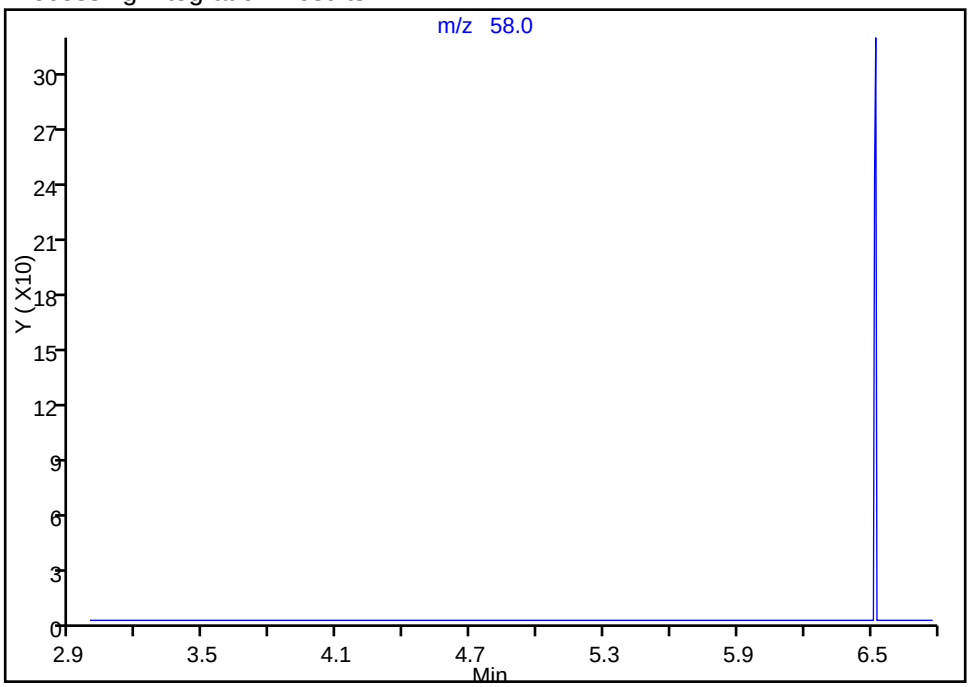
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D
Injection Date: 20-Oct-2017 11:36:30 Instrument ID: CHB.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

21 Acetone, CAS: 67-64-1

Signal: 2

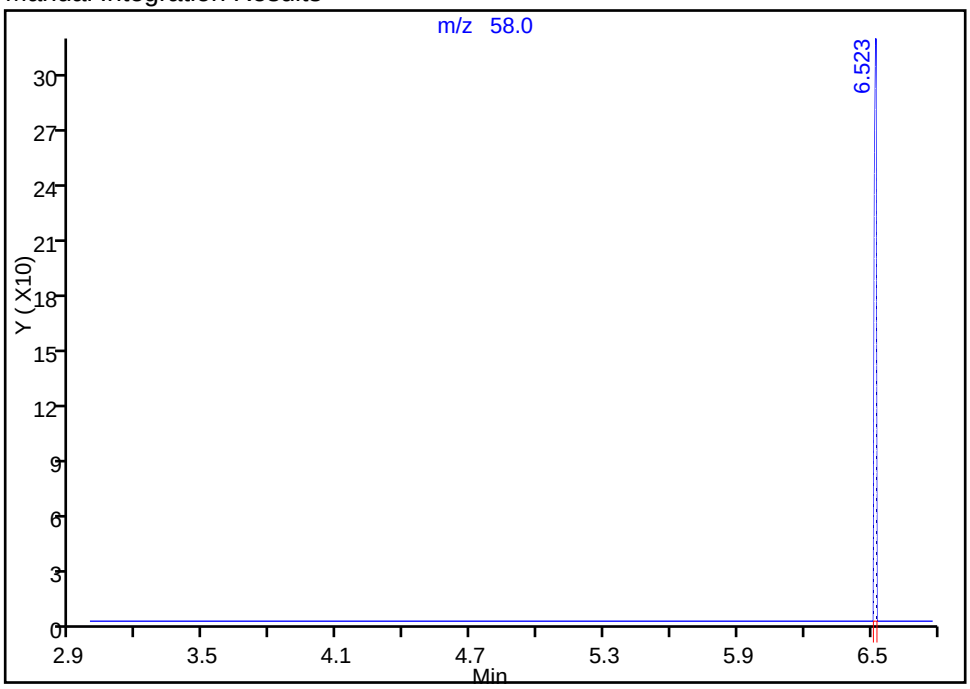
Processing Integration Results

RT: 6.53
Area: 0
Amount: 0.033493
Amount Units: ppb v/v



Manual Integration Results

RT: 6.52
Area: 181
Amount: 0.033493
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:36:21
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

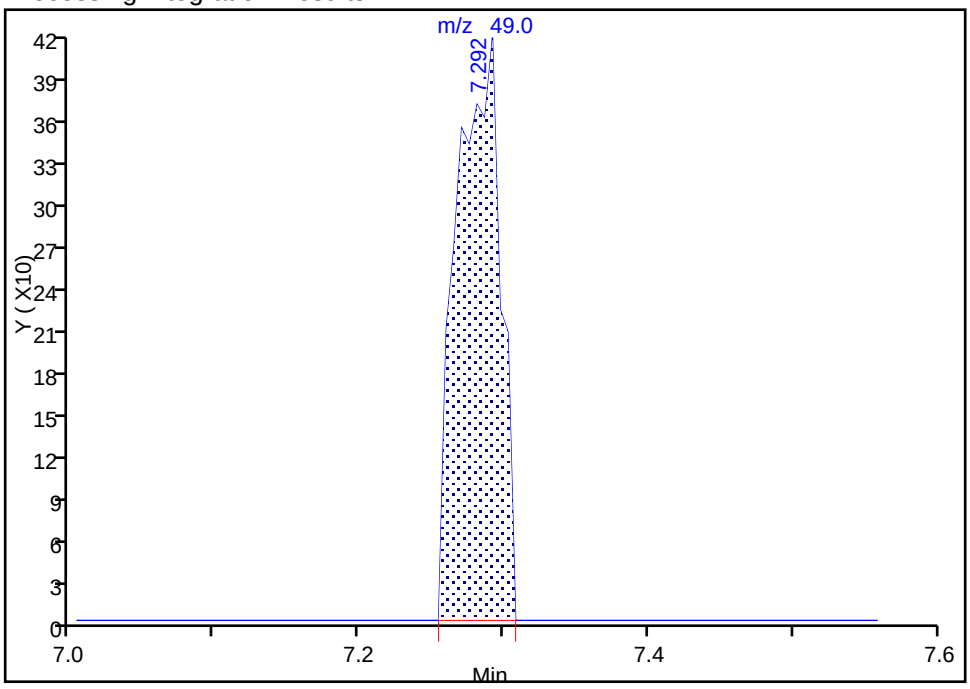
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D				
Injection Date:	20-Oct-2017 11:36:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

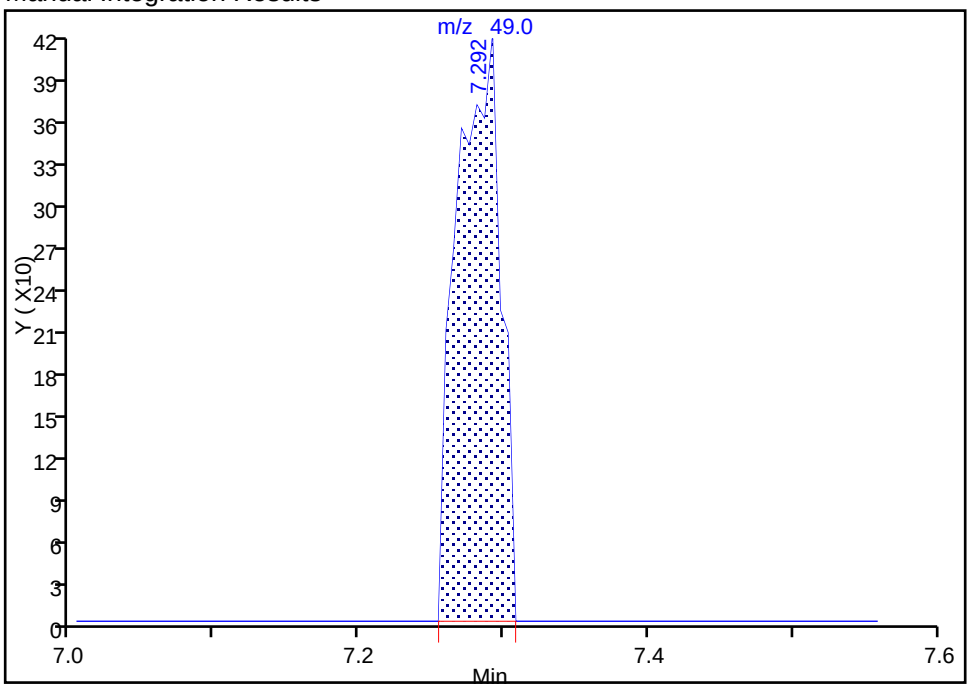
Processing Integration Results

RT: 7.29
Area: 880
Amount: 0.030166
Amount Units: ppb v/v



Manual Integration Results

RT: 7.29
Area: 880
Amount: 0.030166
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:36:50

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

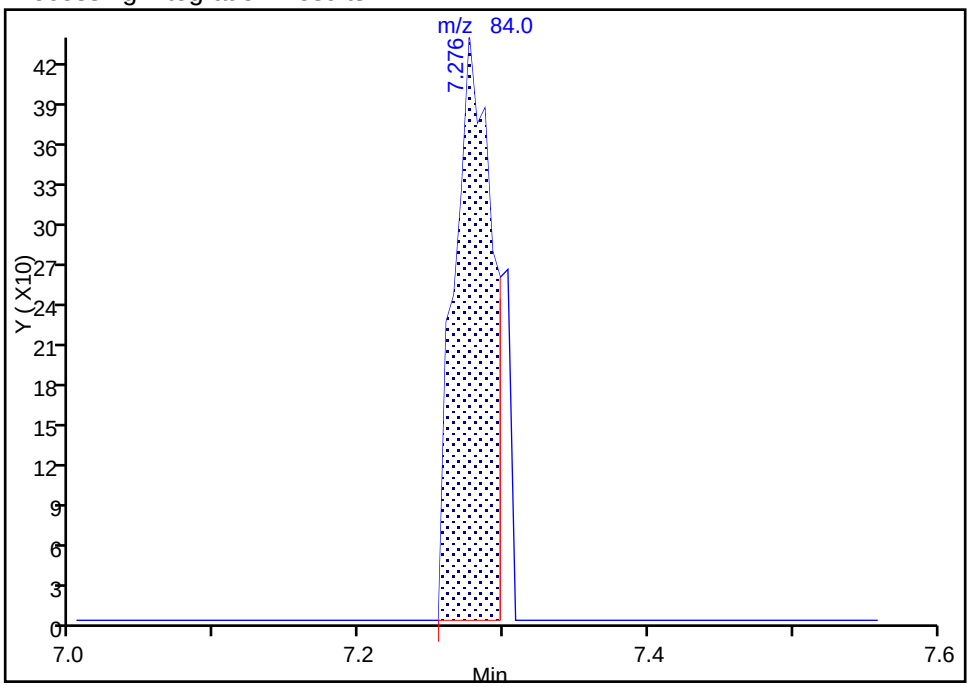
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D
Injection Date: 20-Oct-2017 11:36:30 Instrument ID: CHB.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

27 Methylene Chloride, CAS: 75-09-2

Signal: 2

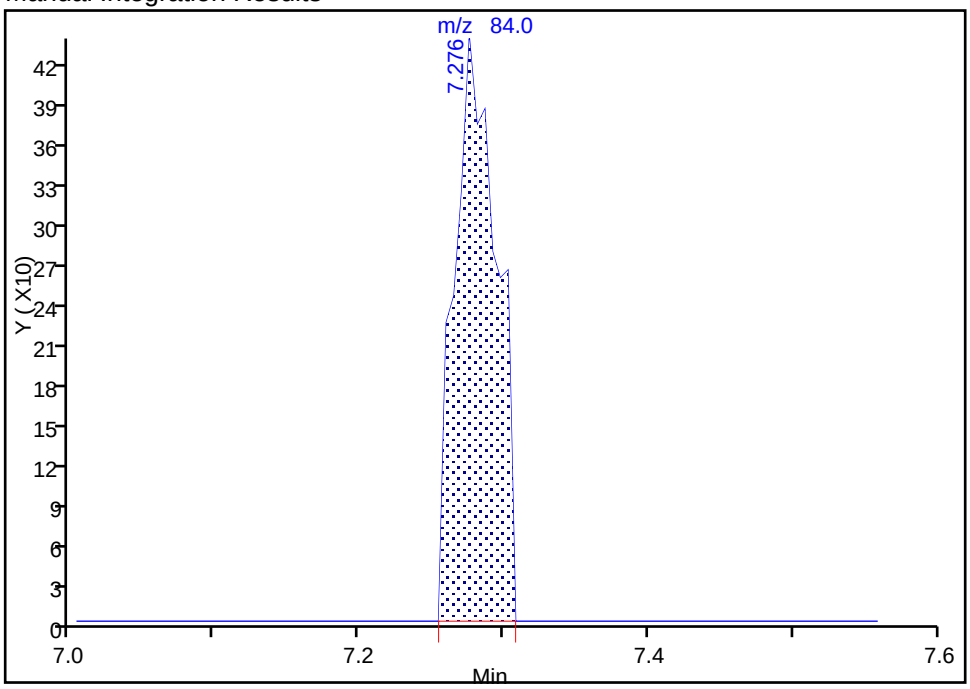
Processing Integration Results

RT: 7.28
Area: 802
Amount: 0.030166
Amount Units: ppb v/v



Manual Integration Results

RT: 7.28
Area: 886
Amount: 0.030166
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:37:20
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

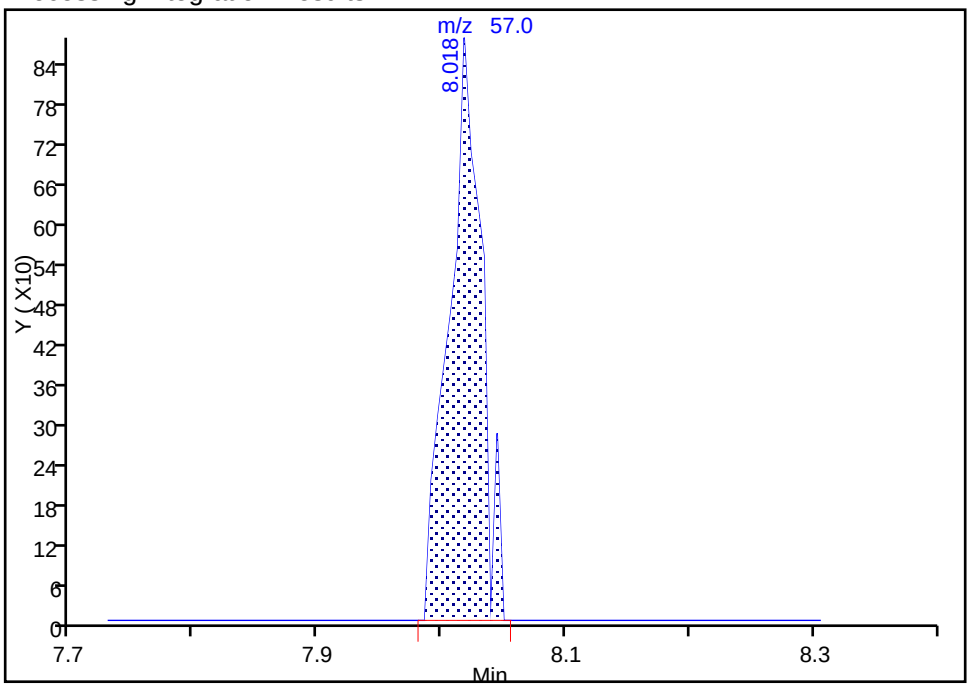
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D				
Injection Date:	20-Oct-2017 11:36:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

32 Hexane, CAS: 110-54-3

Signal: 1

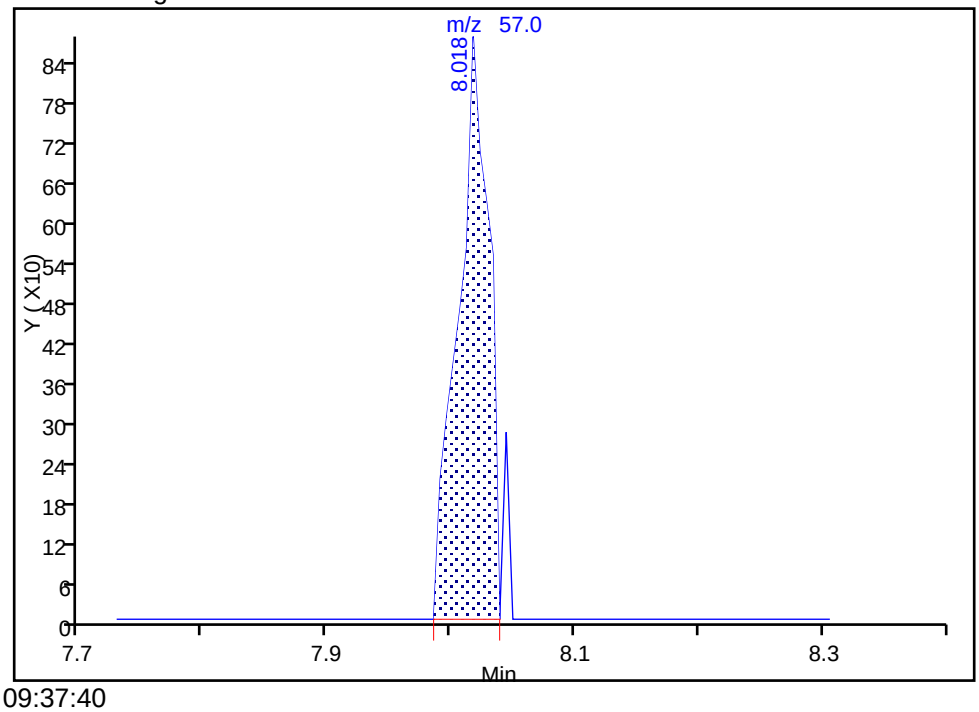
Processing Integration Results

RT: 8.02
Area: 1589
Amount: 0.033505
Amount Units: ppb v/v



Manual Integration Results

RT: 8.02
Area: 1499
Amount: 0.031607
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:37:40

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

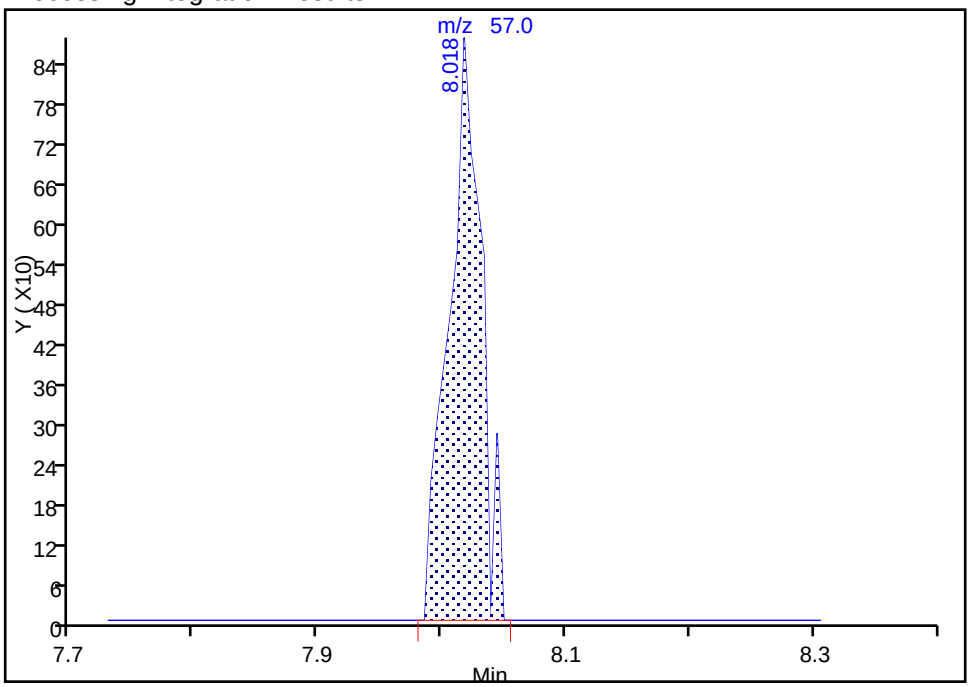
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D
Injection Date: 20-Oct-2017 11:36:30 Instrument ID: CHB.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

32 Hexane, CAS: 110-54-3

Signal: 1

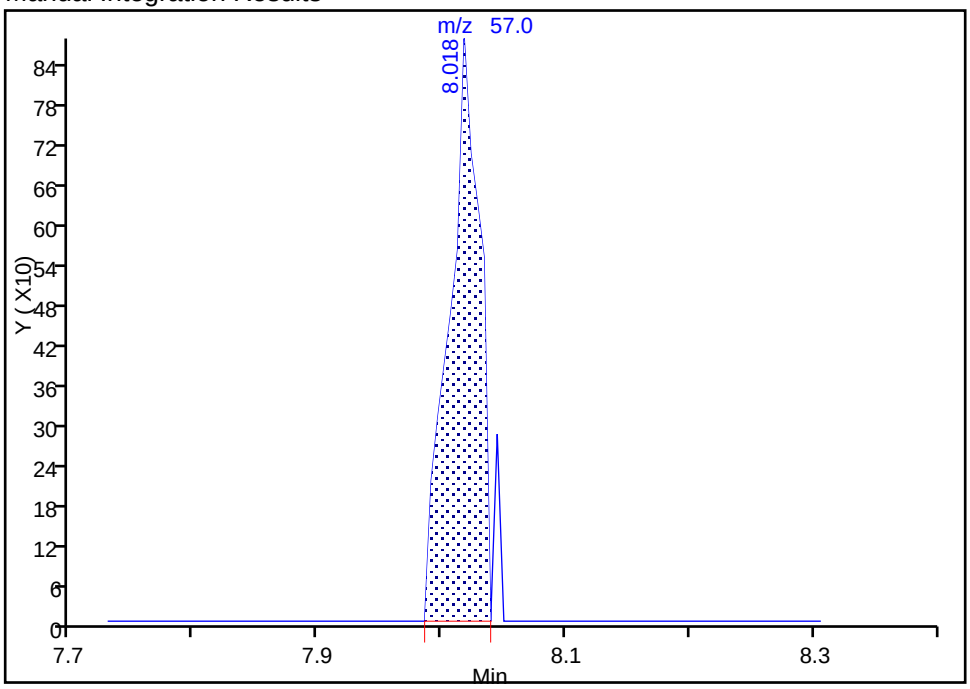
Processing Integration Results

RT: 8.02
Area: 1589
Amount: 0.033505
Amount Units: ppb v/v



Manual Integration Results

RT: 8.02
Area: 1499
Amount: 0.031607
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:37:50
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

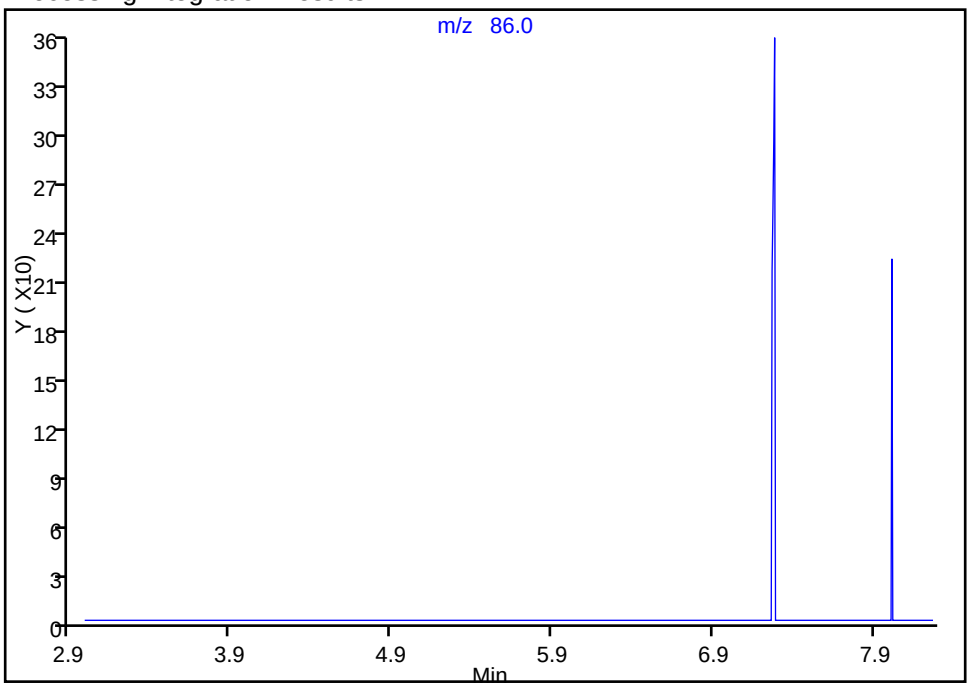
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D
Injection Date: 20-Oct-2017 11:36:30 Instrument ID: CHB.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

32 Hexane, CAS: 110-54-3

Signal: 2

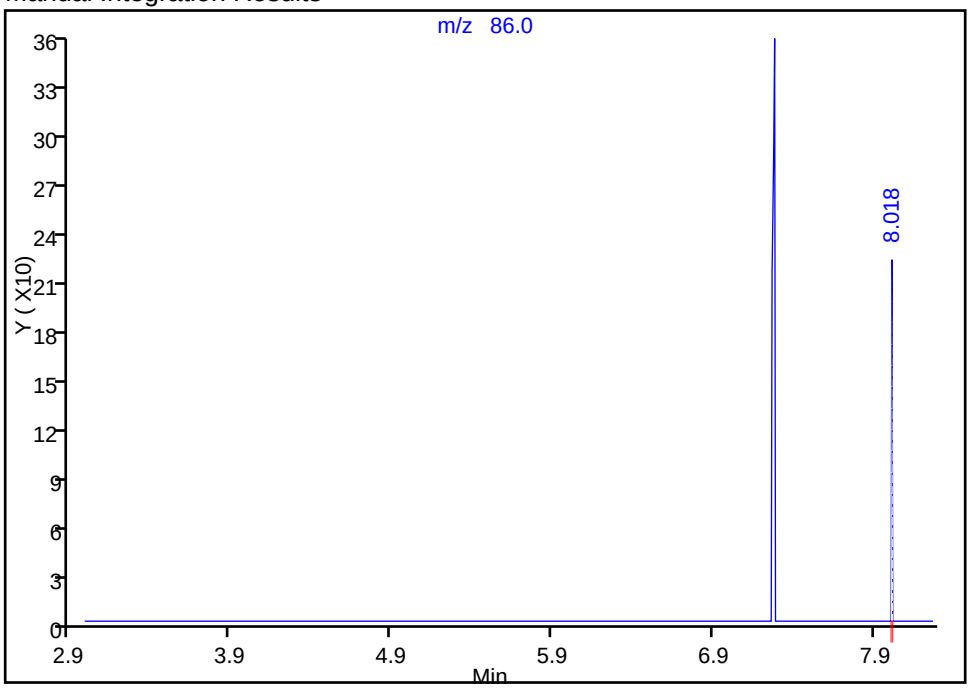
Processing Integration Results

RT: 8.02
Area: 0
Amount: 0.033505
Amount Units: ppb v/v



Manual Integration Results

RT: 8.02
Area: 70
Amount: 0.031607
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:37:59
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

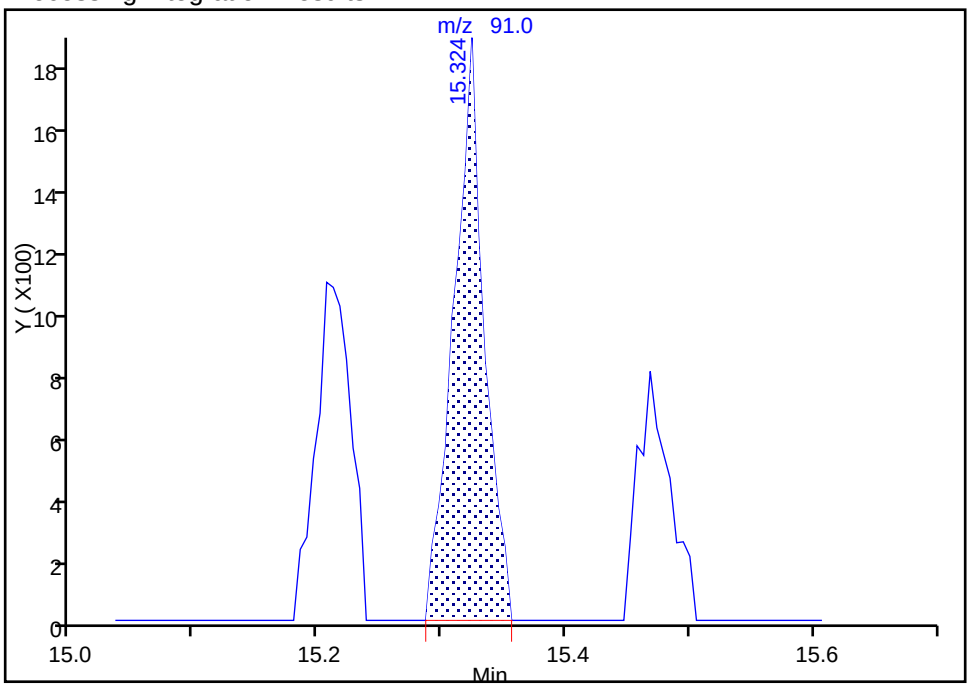
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D				
Injection Date:	20-Oct-2017 11:36:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Signal: 1

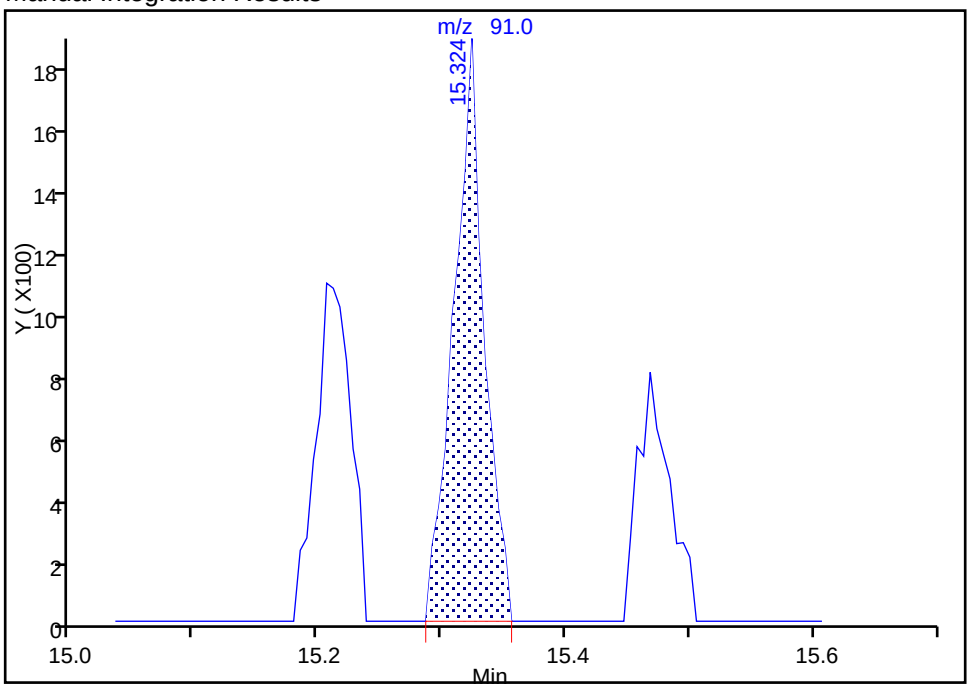
Processing Integration Results

RT: 15.32
Area: 3117
Amount: 0.020853
Amount Units: ppb v/v



Manual Integration Results

RT: 15.32
Area: 3117
Amount: 0.020853
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:40:27

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

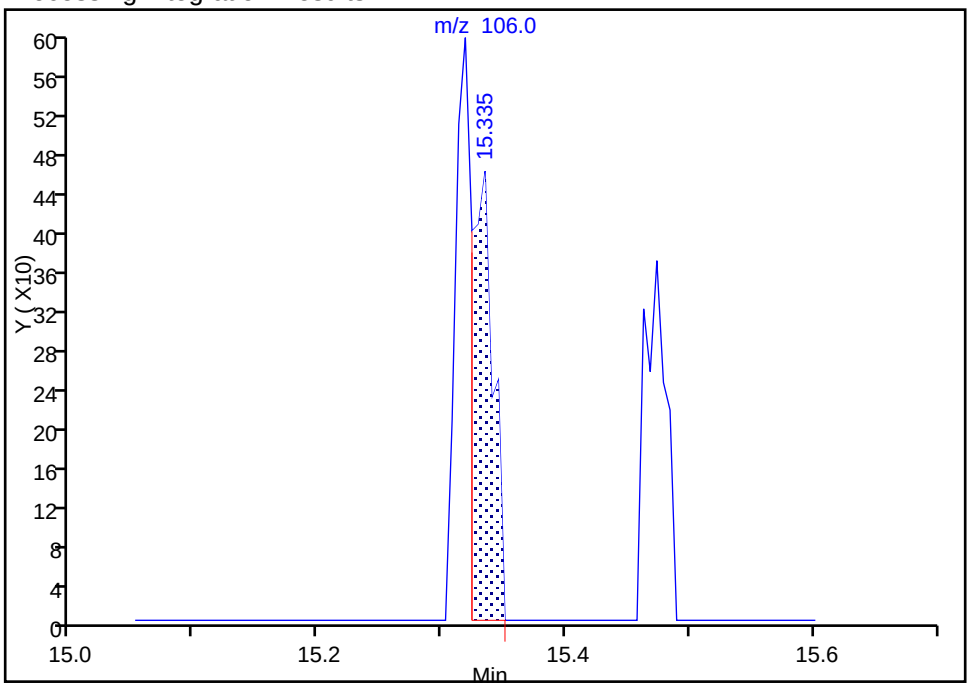
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-04.D
Injection Date: 20-Oct-2017 11:36:30 Instrument ID: CHB.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

74 Ethylbenzene, CAS: 100-41-4

Signal: 2

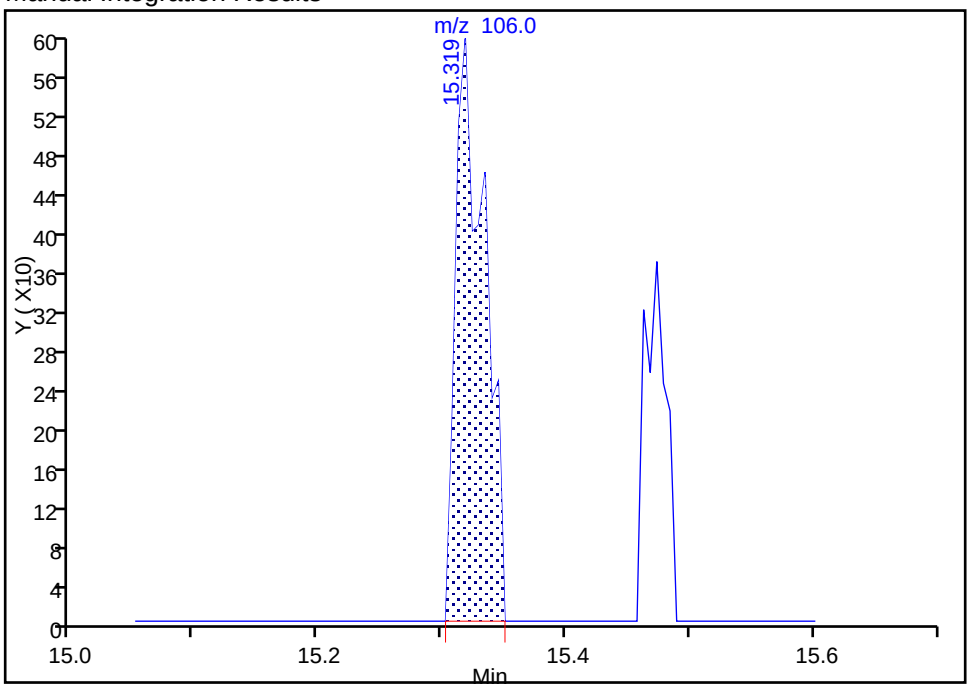
Processing Integration Results

RT: 15.33
Area: 552
Amount: 0.020853
Amount Units: ppb v/v



Manual Integration Results

RT: 15.32
Area: 969
Amount: 0.020853
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 09:40:45
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab File ID: 27580_04.D Lab Sample ID: MB 200-122537/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 10/25/2017 12:10

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-122537/3	27580_03.D	10/25/2017 11:17
2511	200-40547-6	27580_08.D	10/25/2017 15:55

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40547-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-122537/4

Matrix: Air | Lab File ID: 27580_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/25/2017 12:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122537 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40547-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-122537/4

Matrix: Air | Lab File ID: 27580_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/25/2017 12:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122537 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122537/4

Matrix: Air Lab File ID: 27580_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/25/2017 12:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171025-27580.b\27580_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 25-Oct-2017 12:10:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027580-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20171025-27580.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 26-Oct-2017 11:14:31 Calib Date: 14-Oct-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20171013-27408.b\27408_13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: daiglep Date: 26-Oct-2017 10:22:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967					ND	
2 Dichlorodifluoromethane	85		3.037					ND	
3 Chlorodifluoromethane	51		3.090					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298					ND	
5 Chloromethane	50		3.432					ND	
6 Butane	43		3.634					ND	
7 Vinyl chloride	62		3.672					ND	
8 Butadiene	54		3.752					ND	
10 Bromomethane	94		4.424					ND	
11 Chloroethane	64		4.665					ND	
12 2-Methylbutane	43		4.750					ND	
13 Vinyl bromide	106		5.059					ND	
14 Trichlorofluoromethane	101		5.172					ND	
16 Pentane	43		5.316					ND	
17 Ethanol	45		5.759					ND	
18 Ethyl ether	59		5.839					ND	
19 Acrolein	56		6.212					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.266					ND	
21 1,1-Dichloroethene	96		6.298					ND	
22 Acetone	43		6.527					ND	
23 Carbon disulfide	76		6.677					ND	
24 Isopropyl alcohol	45		6.853					ND	
25 3-Chloro-1-propene	41		7.093					ND	
26 Acetonitrile	41		7.205					ND	
T 15 Methyl Acetate TIC	43		7.237					ND	
27 Methylene Chloride	49		7.392					ND	
28 2-Methyl-2-propanol	59		7.632					ND	
29 Methyl tert-butyl ether	73		7.803					ND	
31 trans-1,2-Dichloroethene	61		7.840					ND	
32 Acrylonitrile	53		7.979					ND	
33 Hexane	57		8.240					ND	
34 1,1-Dichloroethane	63		8.715					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.801					ND	
37 cis-1,2-Dichloroethene	96		9.836					ND	
38 2-Butanone (MEK)	72		9.879					ND	
39 Ethyl acetate	88		9.943					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.300	10.300	0.000	94	361955	10.0	10.0	
41 Tetrahydrofuran	42		10.306					ND	
42 Chloroform	83		10.444					ND	
43 Cyclohexane	84		10.690					ND	
44 1,1,1-Trichloroethane	97		10.711					ND	
45 Carbon tetrachloride	117		10.967					ND	
46 Isooctane	57		11.416					ND	
47 Benzene	78		11.426					ND	
48 1,2-Dichloroethane	62		11.613					ND	
49 n-Heptane	43		11.821					ND	
* 50 1,4-Difluorobenzene	114	12.291	12.291	0.000	98	1836440	10.0	10.0	
52 n-Butanol	56		12.713					ND	
53 Trichloroethene	95		12.761					ND	
A 51 GRO	1	13.011	(4.740-21.283)		0	391180		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.310					ND	
55 Methyl methacrylate	69		13.502					ND	
56 1,4-Dioxane	88		13.550					ND	
57 Dibromomethane	174		13.572					ND	
58 Dichlorobromomethane	83		13.887					ND	
A 59 TVOC as Toluene	1	14.703	(2.957-26.449)		0	622407		0	
60 cis-1,3-Dichloropropene	75		14.837					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.120					ND	
65 Toluene	92		15.429					ND	
A 63 Toluene Range	1	15.429	(15.389-15.469)		0	3850		NC	
64 n-Octane	43		15.514					ND	
A 62 C8 Range	1		(15.464-15.564)					ND	
66 trans-1,3-Dichloropropene	75		16.037					ND	
67 1,1,2-Trichloroethane	83		16.406					ND	
68 Tetrachloroethene	166		16.523					ND	
69 2-Hexanone	43		16.854					ND	
71 Chlorodibromomethane	129		17.169					ND	
72 Ethylene Dibromide	107		17.430					ND	
* 74 Chlorobenzene-d5	117	18.332	18.332	0.000	89	1886831	10.0	10.0	
75 Chlorobenzene	112		18.391					ND	
76 Ethylbenzene	91		18.546					ND	
77 n-Nonane	57		18.701					ND	
78 m-Xylene & p-Xylene	106		18.802					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.823					ND	
79 o-Xylene	106		19.635					ND	
80 Styrene	104		19.688					ND	
S 73 Xylenes, Total	106		20.100					ND	
81 Bromoform	173		20.120					ND	
82 Isopropylbenzene	105		20.339					ND	
* 83 4-Bromofluorobenzene	95	20.713	20.718	-0.005	81	1472892	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		21.006					ND	
85 N-Propylbenzene	91		21.075					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75		21.097					ND	
88 4-Ethyltoluene	105		21.268					ND	
87 n-Decane	57		21.273					ND	
89 2-Chlorotoluene	91		21.273					ND	
90 1,3,5-Trimethylbenzene	105		21.380					ND	
91 Alpha Methyl Styrene	118		21.748					ND	
92 tert-Butylbenzene	119		21.871					ND	
93 1,2,4-Trimethylbenzene	105		21.967					ND	
94 sec-Butylbenzene	105		22.202					ND	
95 4-Isopropyltoluene	119		22.404					ND	
96 1,3-Dichlorobenzene	146	22.436	22.431	0.005	90	768		0.0101	
97 1,4-Dichlorobenzene	146	22.570	22.570	0.000	71	773		0.0103	
98 Benzyl chloride	91	22.767	22.762	0.005	89	1208		0.0104	
100 n-Butylbenzene	91		22.975					ND	
99 Undecane	57		23.007					ND	
101 1,2-Dichlorobenzene	146		23.093					ND	
102 Dodecane	57		24.550					ND	
103 1,2,4-Trichlorobenzene	180		25.521					ND	
104 Hexachlorobutadiene	225		25.708					ND	
105 Naphthalene	128		25.980					ND	
106 1,2,3-Trichlorobenzene	180	26.423	26.439	-0.016	79	644		0.0157	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

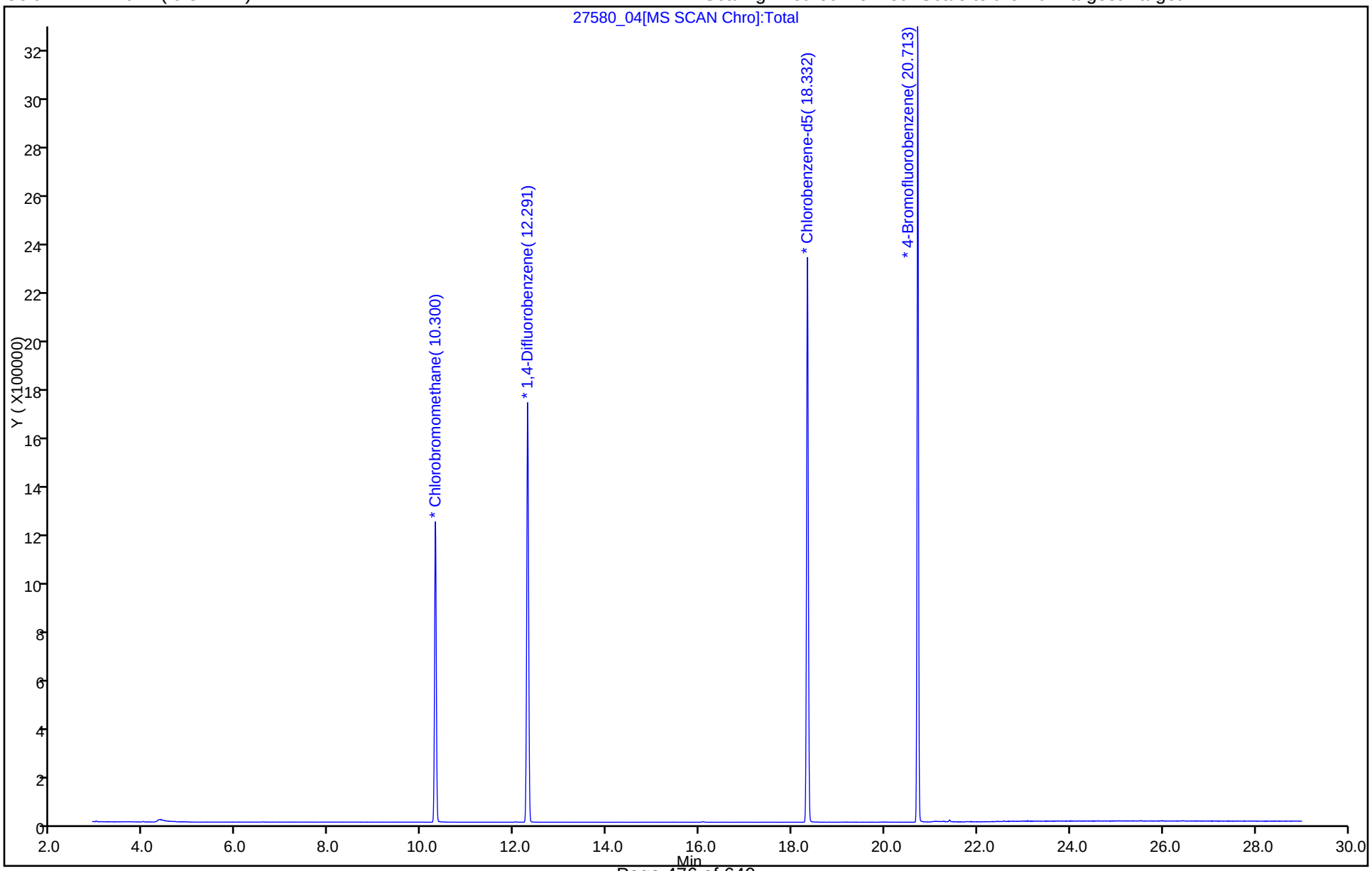
Report Date: 26-Oct-2017 11:14:35 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171025-27580.b\27580_04.D

Injection Date:	25-Oct-2017 12:10:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab File ID: 27603_04.D Lab Sample ID: MB 200-122611/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 10/26/2017 13:33

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-122611/3	27603_03.D	10/26/2017 12:40
4095	200-40548-2	27603_07.D	10/26/2017 16:23

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122611/4

Matrix: Air Lab File ID: 27603_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/26/2017 13:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122611 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40548-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-122611/4

Matrix: Air | Lab File ID: 27603_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 10/26/2017 13:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122611 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-122611/4

Matrix: Air Lab File ID: 27603_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 10/26/2017 13:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122611 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171026-27603.b\27603_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-Oct-2017 13:33:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0027603-004
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20171026-27603.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 27-Oct-2017 08:25:01 Calib Date: 14-Oct-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20171013-27408.b\27408_13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: puangmaleek Date: 27-Oct-2017 08:25:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967					ND	
2 Dichlorodifluoromethane	85		3.037					ND	
3 Chlorodifluoromethane	51		3.090					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298					ND	
5 Chloromethane	50		3.432					ND	
6 Butane	43		3.634					ND	
7 Vinyl chloride	62		3.672					ND	
8 Butadiene	54		3.752					ND	
10 Bromomethane	94		4.424					ND	
11 Chloroethane	64		4.664					ND	
12 2-Methylbutane	43		4.750					ND	
13 Vinyl bromide	106		5.059					ND	
14 Trichlorofluoromethane	101		5.166					ND	
16 Pentane	43		5.315					ND	
17 Ethanol	45		5.758					ND	
18 Ethyl ether	59		5.839					ND	
19 Acrolein	56		6.212					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.260					ND	
21 1,1-Dichloroethene	96		6.297					ND	
22 Acetone	43		6.527					ND	
23 Carbon disulfide	76		6.671					ND	
24 Isopropyl alcohol	45		6.847					ND	
25 3-Chloro-1-propene	41		7.093					ND	
26 Acetonitrile	41		7.205					ND	
T 15 Methyl Acetate TIC	43		7.237					ND	
27 Methylene Chloride	49		7.392					ND	
28 2-Methyl-2-propanol	59		7.632					ND	
29 Methyl tert-butyl ether	73		7.802					ND	
31 trans-1,2-Dichloroethene	61		7.840					ND	
32 Acrylonitrile	53		7.973					ND	
33 Hexane	57		8.240					ND	
34 1,1-Dichloroethane	63		8.715					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.800					ND	
37 cis-1,2-Dichloroethene	96		9.836					ND	
38 2-Butanone (MEK)	72		9.879					ND	
39 Ethyl acetate	88		9.943					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.295	10.300	-0.005	92	316728	10.0	10.0	
41 Tetrahydrofuran	42		10.305					ND	
42 Chloroform	83		10.444					ND	
43 Cyclohexane	84		10.690					ND	
44 1,1,1-Trichloroethane	97		10.711					ND	
45 Carbon tetrachloride	117		10.967					ND	
46 Isooctane	57		11.416					ND	
47 Benzene	78		11.426					ND	
48 1,2-Dichloroethane	62		11.613					ND	
49 n-Heptane	43		11.827					ND	
* 50 1,4-Difluorobenzene	114	12.291	12.291	0.000	98	1563331	10.0	10.0	
52 n-Butanol	56		12.712					ND	
53 Trichloroethene	95		12.755					ND	
A 51 GRO	1	13.011	(4.740-21.283)		0	329822		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.305					ND	
55 Methyl methacrylate	69		13.502					ND	
56 1,4-Dioxane	88		13.545					ND	
57 Dibromomethane	174		13.572					ND	
58 Dichlorobromomethane	83		13.881					ND	
A 59 TVOC as Toluene	1	14.703	(2.957-26.449)		0	553229		0	
60 cis-1,3-Dichloropropene	75		14.837					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.119					ND	
65 Toluene	92		15.424					ND	
A 63 Toluene Range	1	15.424	(15.384-15.464)		0	8021		NC	
64 n-Octane	43		15.514					ND	
A 62 C8 Range	1		(15.583-15.564)					ND	
66 trans-1,3-Dichloropropene	75		16.032					ND	
67 1,1,2-Trichloroethane	83		16.406					ND	
68 Tetrachloroethene	166		16.523					ND	
69 2-Hexanone	43		16.854					ND	
71 Chlorodibromomethane	129		17.169					ND	
72 Ethylene Dibromide	107		17.430					ND	
* 74 Chlorobenzene-d5	117	18.332	18.332	0.000	94	1389143	10.0	10.0	
75 Chlorobenzene	112		18.391					ND	
76 Ethylbenzene	91		18.546					ND	
77 n-Nonane	57		18.700					ND	
78 m-Xylene & p-Xylene	106		18.797					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.823					ND	
79 o-Xylene	106		19.634					ND	
80 Styrene	104		19.688					ND	
S 73 Xylenes, Total	106		20.100					ND	
81 Bromoform	173		20.120					ND	
82 Isopropylbenzene	105		20.339					ND	
* 83 4-Bromofluorobenzene	95	20.713	20.718	-0.005	80	1224250	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		21.006					ND	
85 N-Propylbenzene	91		21.075					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75		21.097					ND	
88 4-Ethyltoluene	105		21.268					ND	
89 2-Chlorotoluene	91		21.273					ND	
87 n-Decane	57		21.273					ND	
90 1,3,5-Trimethylbenzene	105		21.380					ND	
91 Alpha Methyl Styrene	118		21.748					ND	
92 tert-Butylbenzene	119		21.871					ND	
93 1,2,4-Trimethylbenzene	105		21.967					ND	
94 sec-Butylbenzene	105		22.201					ND	
95 4-Isopropyltoluene	119		22.404					ND	
96 1,3-Dichlorobenzene	146	22.431	22.431	0.000	1	515		0.009217	7
97 1,4-Dichlorobenzene	146	22.570	22.570	0.000	76	618		0.0112	
98 Benzyl chloride	91		22.762					ND	
100 n-Butylbenzene	91		22.970					ND	
99 Undecane	57		23.007					ND	
101 1,2-Dichlorobenzene	146		23.093					ND	
102 Dodecane	57		24.550					ND	
103 1,2,4-Trichlorobenzene	180	25.521	25.521	0.000	1	691		0.0199	
104 Hexachlorobutadiene	225		25.708					ND	
105 Naphthalene	128	25.985	25.980	0.005	1	1292		0.0158	
106 1,2,3-Trichlorobenzene	180	26.444	26.439	0.005	1	479		0.0158	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

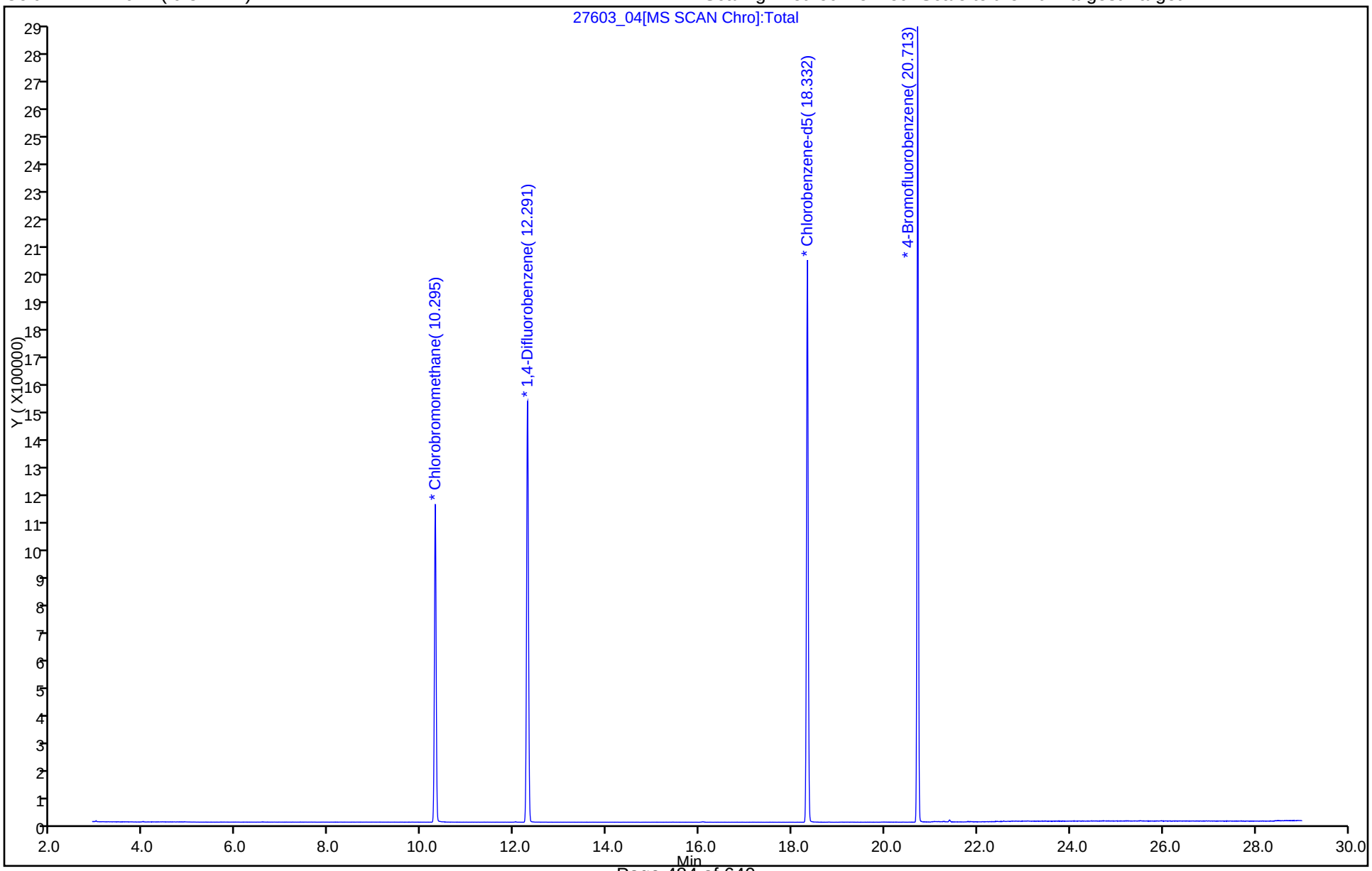
Report Date: 27-Oct-2017 08:25:02 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171026-27603.b\27603_04.D

Injection Date:	26-Oct-2017 13:33:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab File ID: 27150_01.D BFB Injection Date: 09/28/2017

Instrument ID: CHX.i BFB Injection Time: 16:14

Analysis Batch No.: 121534

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	16.6	
75	30.0 - 66.0% of mass 95	47.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.6	(0.7) 1
174	50.0 - 120.0% of mass 95	88.5	
175	4.0 - 9.0 % of mass 174	6.3	(7.1) 1
176	93.0 - 101.0% of mass 174	85.5	(96.5) 1
177	5.0 - 9.0% of mass 176	5.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-121534/3	27150_03.D	09/28/2017	17:49
	IC 200-121534/4	27150_04.D	09/28/2017	18:40
	IC 200-121534/6	27150_06.D	09/28/2017	20:20
	IC 200-121534/8	27150_08.D	09/28/2017	22:01
	ICIS 200-121534/9	27150_09.D	09/28/2017	22:52
	IC 200-121534/10	27150_10.D	09/28/2017	23:42
	IC 200-121534/11	27150_11.D	09/29/2017	00:33
	IC 200-121534/12	27150_12.D	09/29/2017	01:23
	ICV 200-121534/17	27150_17.D	09/29/2017	05:36

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab File ID: 27236_01.D BFB Injection Date: 10/04/2017

Instrument ID: CHX.i BFB Injection Time: 10:29

Analysis Batch No.: 121739

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.3	
75	30.0 - 66.0% of mass 95	49.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.7	(0.8) 1
174	50.0 - 120.0% of mass 95	83.1	
175	4.0 - 9.0 % of mass 174	6.0	(7.2) 1
176	93.0 - 101.0% of mass 174	80.2	(96.5) 1
177	5.0 - 9.0% of mass 176	5.2	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-121739/2	27236_02.D	10/04/2017	11:24
	LCS 200-121739/3	27236_03.D	10/04/2017	12:15
	MB 200-121739/4	27236_04.D	10/04/2017	13:05
5465	200-40322-9	27236_23.D	10/05/2017	05:46

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab File ID: 200-27085-002.D BFB Injection Date: 09/25/2017

Instrument ID: CHG.i BFB Injection Time: 16:44

Analysis Batch No.: 121363

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.3	
75	30.0 - 66.0% of mass 95	42.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.9	
173	Less than 2.0% of mass 174	0.4	(0.4) 1
174	50.0 - 120.0% of mass 95	98.9	
175	4.0 - 9.0 % of mass 174	6.8	(6.9) 1
176	93.0 - 101.0% of mass 174	97.0	(98.1) 1
177	5.0 - 9.0% of mass 176	6.4	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-121363/6	200-27085-006.D	09/25/2017	20:02
	IC 200-121363/8	200-27085-008.D	09/25/2017	21:44
	IC 200-121363/9	200-27085-009.D	09/25/2017	22:34
	IC 200-121363/11	200-27085-011.D	09/26/2017	00:15
	ICIS 200-121363/12	200-27085-012.D	09/26/2017	01:06
	IC 200-121363/13	200-27085-013.D	09/26/2017	01:56
	IC 200-121363/14	200-27085-014.D	09/26/2017	02:46
	IC 200-121363/15	200-27085-015.D	09/26/2017	03:37
	ICV 200-121363/19	200-27085-019.D	09/26/2017	06:59

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab File ID: 200-27370-001.D BFB Injection Date: 10/12/2017

Instrument ID: CHG.i BFB Injection Time: 09:46

Analysis Batch No.: 122057

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.4	
75	30.0 - 66.0% of mass 95	41.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.1	
173	Less than 2.0% of mass 174	0.4	(0.4) 1
174	50.0 - 120.0% of mass 95	89.7	
175	4.0 - 9.0 % of mass 174	6.3	(7.0) 1
176	93.0 - 101.0% of mass 174	89.0	(99.2) 1
177	5.0 - 9.0% of mass 176	5.9	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-122057/2	200-27370-002.D	10/12/2017	10:34
	LCS 200-122057/3	200-27370-003.D	10/12/2017	11:24
	MB 200-122057/5	200-27370-005.D	10/12/2017	13:05
2595	200-40420-6	200-27370-027.D	10/13/2017	07:39

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab File ID: 27339-01.D BFB Injection Date: 10/10/2017

Instrument ID: CHB.i BFB Injection Time: 16:05

Analysis Batch No.: 121987

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	11.9	
75	30.0 - 66.0% of mass 95	37.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	102.2	
175	4.0 - 9.0 % of mass 174	7.3	(7.1) 1
176	93.0 - 101.0% of mass 174	99.8	(97.7) 1
177	5.0 - 9.0% of mass 176	6.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-121987/4	27339-04.D	10/10/2017	18:40
	IC 200-121987/5	27339-05.D	10/10/2017	19:32
	IC 200-121987/7	27339-07.D	10/10/2017	21:17
	IC 200-121987/9	27339-09.D	10/10/2017	23:02
	ICIS 200-121987/10	27339-10.D	10/10/2017	23:54
	IC 200-121987/11	27339-11.D	10/11/2017	00:47
	IC 200-121987/12	27339-12.D	10/11/2017	01:39
	IC 200-121987/13	27339-13.D	10/11/2017	02:31
	ICV 200-121987/17	27339-17.D	10/11/2017	06:00

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab File ID: 27498-01.D BFB Injection Date: 10/20/2017

Instrument ID: CHB.i BFB Injection Time: 09:00

Analysis Batch No.: 122350

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	14.7	
75	30.0 - 66.0% of mass 95	42.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	98.6	
175	4.0 - 9.0 % of mass 174	7.0	(7.1) 1
176	93.0 - 101.0% of mass 174	96.6	(98.0) 1
177	5.0 - 9.0% of mass 176	6.2	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-122350/2	27498-02.D	10/20/2017	09:50
	LCS 200-122350/3	27498-03.D	10/20/2017	10:43
	MB 200-122350/4	27498-04.D	10/20/2017	11:36
2536	200-40531-5	27498-19.D	10/21/2017	00:38

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab File ID: 27408_01.D BFB Injection Date: 10/13/2017

Instrument ID: CHC.i BFB Injection Time: 14:57

Analysis Batch No.: 122137

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.4	
75	30.0 - 66.0% of mass 95	47.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	86.7	
175	4.0 - 9.0 % of mass 174	6.2	(7.1) 1
176	93.0 - 101.0% of mass 174	84.4	(97.3) 1
177	5.0 - 9.0% of mass 176	5.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-122137/4	27408_04.D	10/13/2017	17:45
	IC 200-122137/5	27408_05.D	10/13/2017	18:38
	IC 200-122137/7	27408_07.D	10/13/2017	20:25
	IC 200-122137/9	27408_09.D	10/13/2017	22:11
	ICIS 200-122137/10	27408_10.D	10/13/2017	23:04
	IC 200-122137/11	27408_11.D	10/13/2017	23:58
	IC 200-122137/12	27408_12.D	10/14/2017	00:51
	IC 200-122137/13	27408_13.D	10/14/2017	01:45
	ICV 200-122137/17	27408_17.D	10/14/2017	05:16

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab File ID: 27580_01.D BFB Injection Date: 10/25/2017

Instrument ID: CHC.i BFB Injection Time: 09:39

Analysis Batch No.: 122537

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	21.1	
75	30.0 - 66.0% of mass 95	51.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	70.4	
175	4.0 - 9.0 % of mass 174	5.1	(7.2) 1
176	93.0 - 101.0% of mass 174	68.8	(97.8) 1
177	5.0 - 9.0% of mass 176	4.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-122537/2	27580_02.D	10/25/2017	10:25
	LCS 200-122537/3	27580_03.D	10/25/2017	11:17
	MB 200-122537/4	27580_04.D	10/25/2017	12:10
2511	200-40547-6	27580_08.D	10/25/2017	15:55

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab File ID: 27408_01.D BFB Injection Date: 10/13/2017

Instrument ID: CHC.i BFB Injection Time: 14:57

Analysis Batch No.: 122137

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.4	
75	30.0 - 66.0% of mass 95	47.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	86.7	
175	4.0 - 9.0 % of mass 174	6.2	(7.1) 1
176	93.0 - 101.0% of mass 174	84.4	(97.3) 1
177	5.0 - 9.0% of mass 176	5.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-122137/4	27408_04.D	10/13/2017	17:45
	IC 200-122137/5	27408_05.D	10/13/2017	18:38
	IC 200-122137/7	27408_07.D	10/13/2017	20:25
	IC 200-122137/9	27408_09.D	10/13/2017	22:11
	ICIS 200-122137/10	27408_10.D	10/13/2017	23:04
	IC 200-122137/11	27408_11.D	10/13/2017	23:58
	IC 200-122137/12	27408_12.D	10/14/2017	00:51
	IC 200-122137/13	27408_13.D	10/14/2017	01:45
	ICV 200-122137/17	27408_17.D	10/14/2017	05:16

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab File ID: 27603_01.D BFB Injection Date: 10/26/2017

Instrument ID: CHC.i BFB Injection Time: 10:39

Analysis Batch No.: 122611

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	25.8	
75	30.0 - 66.0% of mass 95	56.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	66.2	
175	4.0 - 9.0 % of mass 174	4.6	(7.0) 1
176	93.0 - 101.0% of mass 174	63.8	(96.5) 1
177	5.0 - 9.0% of mass 176	4.2	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-122611/2	27603_02.D	10/26/2017	11:48
	LCS 200-122611/3	27603_03.D	10/26/2017	12:40
	MB 200-122611/4	27603_04.D	10/26/2017	13:33
4095	200-40548-2	27603_07.D	10/26/2017	16:23

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Sample No.: ICIS 200-121534/9 Date Analyzed: 09/28/2017 22:52

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27150_09.D Heated Purge: (Y/N) N

Calibration ID: 38110

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		192484	10.22	938320	12.30	836466	18.63
UPPER LIMIT		269478	10.55	1313648	12.63	1171052	18.96
LOWER LIMIT		115490	9.89	562992	11.97	501880	18.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-121534/17		194457	10.22	977843	12.30	858240	18.63

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Sample No.: CCVIS 200-121739/2 Date Analyzed: 10/04/2017 11:24

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27236_02.D Heated Purge: (Y/N) N

Calibration ID: 38110

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		190365	10.22	846236	12.30	748957	18.63
UPPER LIMIT		266511	10.55	1184730	12.63	1048540	18.96
LOWER LIMIT		114219	9.89	507742	11.97	449374	18.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-121739/3		199454	10.22	889798	12.30	819900	18.63
MB 200-121739/4		196301	10.21	905645	12.30	810048	18.63
200-40322-9	5465	191652	10.22	873630	12.30	737452	18.63

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Sample No.: ICIS 200-121363/12 Date Analyzed: 09/26/2017 01:06

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-27085-012.D Heated Purge: (Y/N) N

Calibration ID: 38097

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		414920	9.44	2411880	11.35	2233373	17.30
UPPER LIMIT		580888	9.77	3376632	11.68	3126722	17.63
LOWER LIMIT		248952	9.11	1447128	11.02	1340024	16.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-121363/19		432458	9.44	2588351	11.35	2383178	17.30

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Sample No.: CCVIS 200-122057/2 Date Analyzed: 10/12/2017 10:34

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-27370-002.D Heated Purge: (Y/N) N

Calibration ID: 38097

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		472915	9.43	2837529	11.33	2459941	17.29
UPPER LIMIT		662081	9.76	3972541	11.66	3443917	17.62
LOWER LIMIT		283749	9.10	1702517	11.00	1475965	16.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-122057/3		454499	9.44	2678264	11.33	2378692	17.29
MB 200-122057/5		447721	9.43	2596706	11.33	2334120	17.29
200-40420-6	2595	456143	9.42	2808316	11.32	2364937	17.29

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Sample No.: ICIS 200-121987/10 Date Analyzed: 10/10/2017 23:54

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27339-10.D Heated Purge: (Y/N) N

Calibration ID: 38201

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		269848	9.70	1324986	11.11	1132584	15.22
UPPER LIMIT		377787	10.03	1854980	11.44	1585618	15.55
LOWER LIMIT		161909	9.37	794992	10.78	679550	14.89
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-121987/17		274066	9.70	1332179	11.11	1175594	15.22

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Sample No.: CCVIS 200-122350/2 Date Analyzed: 10/20/2017 09:50

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27498-02.D Heated Purge: (Y/N) N

Calibration ID: 38201

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		299555	9.70	1469334	11.11	1275880	15.22
UPPER LIMIT		419377	10.03	2057068	11.44	1786232	15.55
LOWER LIMIT		179733	9.37	881600	10.78	765528	14.89
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-122350/3		323637	9.70	1563959	11.11	1387295	15.22
MB 200-122350/4		324208	9.70	1620257	11.11	1219459	15.21
200-40531-5	2536	258978	9.70	1301403	11.10	966170	15.21

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Sample No.: ICIS 200-122137/10 Date Analyzed: 10/13/2017 23:04

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27408_10.D Heated Purge: (Y/N) N

Calibration ID: 38203

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		284633	10.31	1417162	12.30	1299505	18.34
UPPER LIMIT		398486	10.64	1984027	12.63	1819307	18.67
LOWER LIMIT		170780	9.98	850297	11.97	779703	18.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-122137/17		319344	10.31	1590605	12.30	1669466	18.34

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Sample No.: CCVIS 200-122537/2 Date Analyzed: 10/25/2017 10:25

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27580_02.D Heated Purge: (Y/N) N

Calibration ID: 38203

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		394994	10.30	2119074	12.29	1833828	18.33
UPPER LIMIT		552992	10.63	2966704	12.62	2567359	18.66
LOWER LIMIT		236996	9.97	1271444	11.96	1100297	18.00
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-122537/3		383163	10.30	1938594	12.30	1801080	18.33
MB 200-122537/4		361955	10.30	1836440	12.29	1886831	18.33
200-40547-6	2511	329202	10.30	1582098	12.29	1410350	18.33

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Sample No.: ICIS 200-122137/10 Date Analyzed: 10/13/2017 23:04

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27408_10.D Heated Purge: (Y/N) N

Calibration ID: 38203

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		284633	10.31	1417162	12.30	1299505	18.34
UPPER LIMIT		398486	10.64	1984027	12.63	1819307	18.67
LOWER LIMIT		170780	9.98	850297	11.97	779703	18.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-122137/17		319344	10.31	1590605	12.30	1669466	18.34

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Sample No.: CCVIS 200-122611/2 Date Analyzed: 10/26/2017 11:48

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 27603_02.D Heated Purge: (Y/N) N

Calibration ID: 38203

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		281198	10.30	1517986	12.29	1217337	18.33
UPPER LIMIT		393677	10.63	2125180	12.62	1704272	18.66
LOWER LIMIT		168719	9.97	910792	11.96	730402	18.00
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-122611/3		305700	10.30	1518810	12.29	1402940	18.33
MB 200-122611/4		316728	10.30	1563331	12.29	1389143	18.33
200-40548-2	4095	290325	10.30	1407779	12.29	1262417	18.33

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40322-1

SDG No.:

Client Sample ID: 5465 | Lab Sample ID: 200-40322-9

Matrix: Air | Lab File ID: 27236_23.D

Analysis Method: TO-15 | Date Collected: 10/03/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/05/2017 05:46

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 121739 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40322-1

SDG No.:

Client Sample ID: 5465 | Lab Sample ID: 200-40322-9

Matrix: Air | Lab File ID: 27236_23.D

Analysis Method: TO-15 | Date Collected: 10/03/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/05/2017 05:46

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 121739 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Client Sample ID: 5465 Lab Sample ID: 200-40322-9

Matrix: Air Lab File ID: 27236_23.D

Analysis Method: TO-15 Date Collected: 10/03/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/05/2017 05:46

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 121739 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_23.D
Lims ID: 200-40322-A-9
Client ID: 5465
Sample Type: Client
Inject. Date: 05-Oct-2017 05:46:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027236-023
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 06-Oct-2017 13:21:48 Calib Date: 29-Sep-2017 01:23:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170928-27150.b\27150_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bunmaa Date: 06-Oct-2017 13:21:48

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		3.055				ND	
	2 Dichlorodifluoromethane	85		3.124				ND	
	3 Chlorodifluoromethane	51		3.167				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.370				ND	
	5 Chloromethane	50		3.504				ND	
	6 Butane	43		3.686				ND	
	7 Vinyl chloride	62		3.729				ND	
	8 Butadiene	54		3.798				ND	
	10 Bromomethane	94		4.440				ND	
	11 Chloroethane	64		4.659				ND	
	13 Vinyl bromide	106		5.029				ND	
	14 Trichlorofluoromethane	101		5.120				ND	
	17 Ethanol	45	5.735	5.681	0.054	87	1338	0.1818	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.147				ND	
	21 1,1-Dichloroethene	96		6.195				ND	
	22 Acetone	43	6.505	6.505	0.053	47	1341	0.0665	7M
	23 Carbon disulfide	76		6.585				ND	
	24 Isopropyl alcohol	45		6.735				ND	
	25 3-Chloro-1-propene	41		6.971				ND	
	27 Methylene Chloride	49		7.270				ND	
	28 2-Methyl-2-propanol	59		7.511				ND	
	29 Methyl tert-butyl ether	73		7.677				ND	
	31 trans-1,2-Dichloroethene	61		7.698				ND	
	33 Hexane	57		8.078				ND	
	34 1,1-Dichloroethane	63		8.592				ND	
	35 Vinyl acetate	43		8.672				ND	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	37 cis-1,2-Dichloroethene	96		9.731				ND	
	38 2-Butanone (MEK)	72		9.801				ND	
	39 Ethyl acetate	88		9.838				ND	
*	40 Chlorobromomethane	128	10.218	10.218	0.000	88	191652	10.0	
	41 Tetrahydrofuran	42		10.239				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.352				ND	
	43 Cyclohexane	84		10.592				ND	
	44 1,1,1-Trichloroethane	97		10.635				ND	
	45 Carbon tetrachloride	117		10.892				ND	
	46 Isooctane	57		11.347				ND	
	47 Benzene	78		11.395				ND	
	48 1,2-Dichloroethane	62		11.603				ND	
	49 n-Heptane	43		11.759				ND	
*	50 1,4-Difluorobenzene	114	12.299	12.299	0.000	94	873630	10.0	
	53 Trichloroethene	95		12.791				ND	
	54 1,2-Dichloropropane	63		13.396				ND	
	55 Methyl methacrylate	69		13.583				ND	
	56 1,4-Dioxane	88		13.652				ND	
	57 Dibromomethane	174		13.663				ND	
	58 Dichlorobromomethane	83		13.973				ND	
	60 cis-1,3-Dichloropropene	75		14.952				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.279				ND	
	65 Toluene	92		15.568				ND	
	66 trans-1,3-Dichloropropene	75		16.209				ND	
	67 1,1,2-Trichloroethane	83		16.605				ND	
	68 Tetrachloroethene	166		16.691				ND	
	69 2-Hexanone	43		17.092				ND	
	71 Chlorodibromomethane	129		17.402				ND	
	72 Ethylene Dibromide	107		17.686				ND	
*	74 Chlorobenzene-d5	117	18.633	18.633	0.000	86	737452	10.0	
	75 Chlorobenzene	112		18.697				ND	
	76 Ethylbenzene	91		18.858				ND	
	78 m-Xylene & p-Xylene	106		19.125				ND	
S	73 Xylenes, Total	106		19.600				ND	
	79 o-Xylene	106		20.018				ND	
	80 Styrene	104		20.077				ND	
	81 Bromoform	173		20.548				ND	
	82 Isopropylbenzene	105		20.773				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.495				ND	
	85 N-Propylbenzene	91		21.554				ND	
	88 4-Ethyltoluene	105		21.757				ND	
	89 2-Chlorotoluene	91		21.762				ND	
	90 1,3,5-Trimethylbenzene	105		21.875				ND	
	92 tert-Butylbenzene	119		22.388				ND	
	93 1,2,4-Trimethylbenzene	105		22.490				ND	
	94 sec-Butylbenzene	105		22.736				ND	
	95 4-Isopropyltoluene	119		22.950				ND	
	96 1,3-Dichlorobenzene	146		22.972				ND	
	97 1,4-Dichlorobenzene	146		23.116				ND	
	98 Benzyl chloride	91		23.325				ND	
	100 n-Butylbenzene	91		23.544				ND	
	101 1,2-Dichlorobenzene	146		23.667				ND	
	103 1,2,4-Trichlorobenzene	180		26.246				ND	
	104 Hexachlorobutadiene	225		26.438				ND	
	105 Naphthalene	128		26.748				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

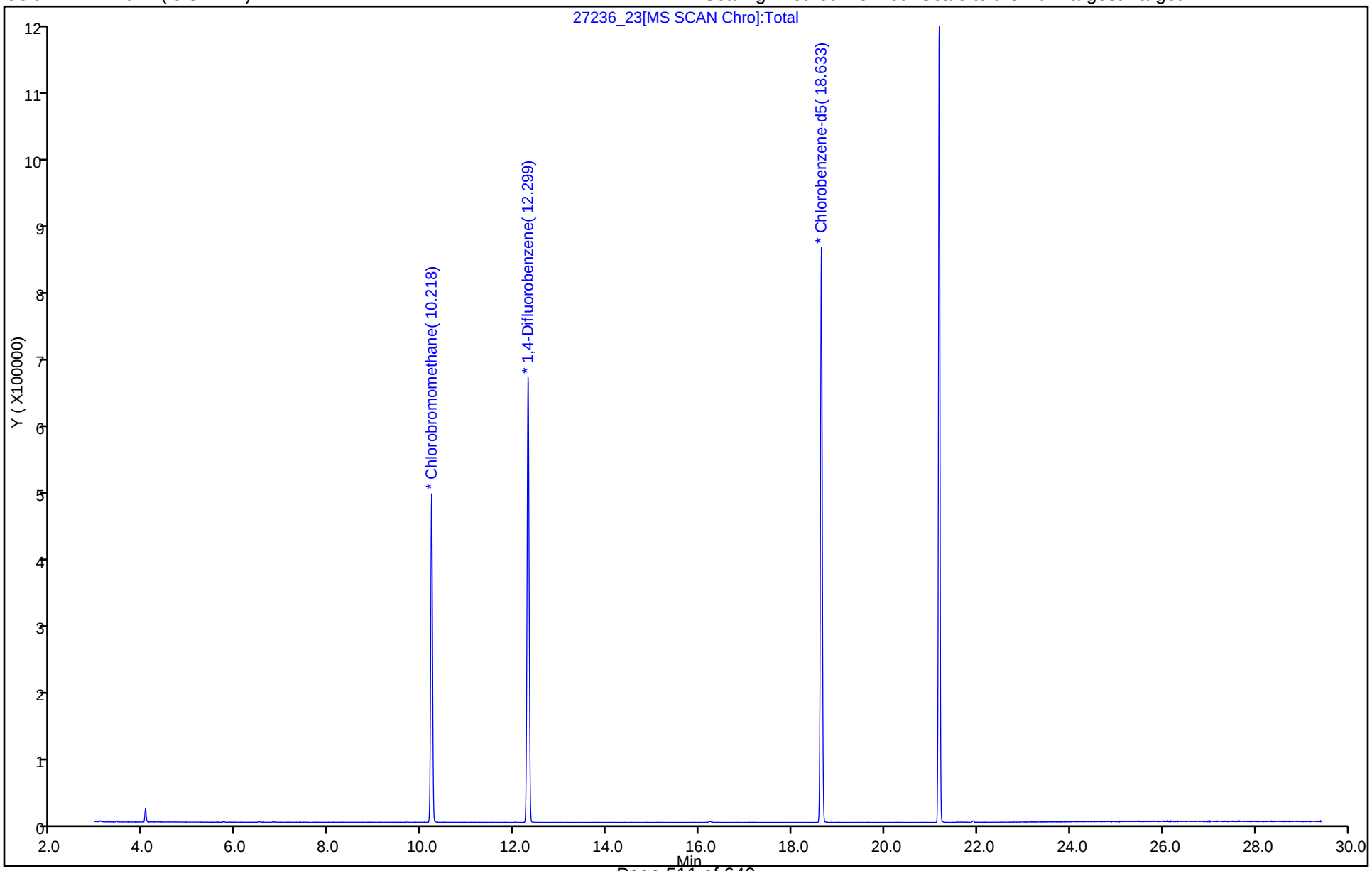
Report Date: 06-Oct-2017 13:21:50 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_23.D

Injection Date:	05-Oct-2017 05:46:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-40322-A-9	Lab Sample ID:	200-40322-9	Worklist Smp#:	23
Client ID:	5465				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	23
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

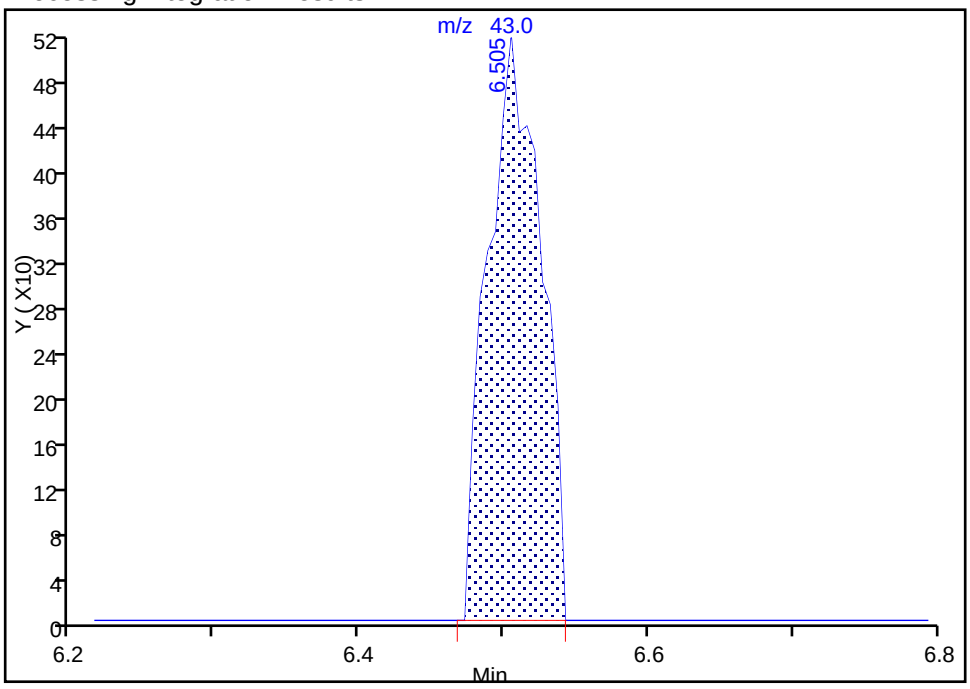
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_23.D				
Injection Date:	05-Oct-2017 05:46:30	Instrument ID:	CHX.i		
Lims ID:	200-40322-A-9	Lab Sample ID:	200-40322-9		
Client ID:	5465				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

Signal: 1

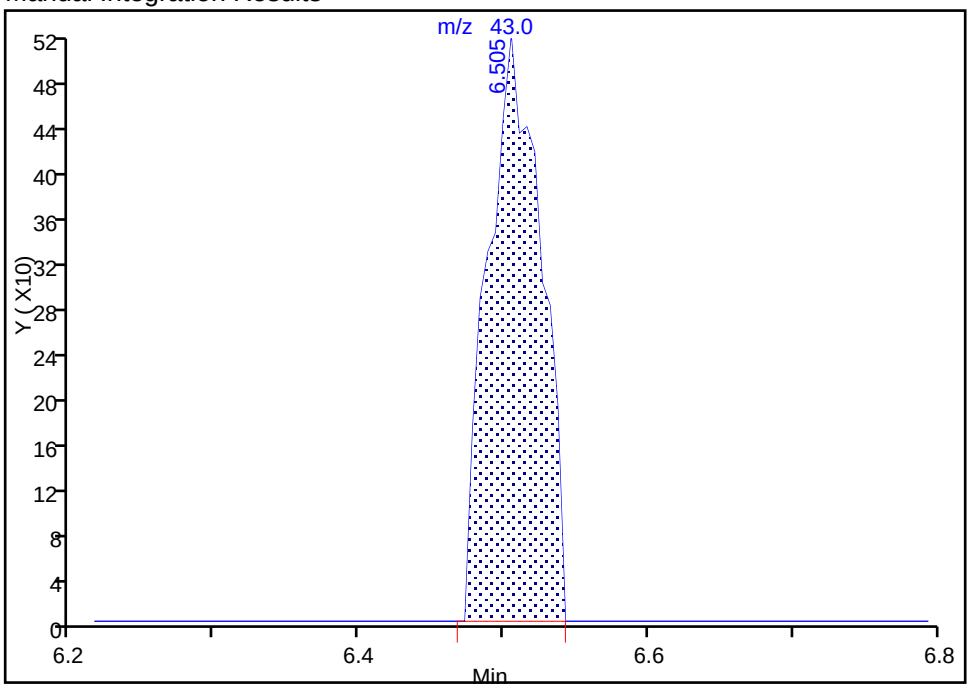
Processing Integration Results

RT: 6.51
Area: 1341
Amount: 0.066489
Amount Units: ppb v/v



Manual Integration Results

RT: 6.51
Area: 1341
Amount: 0.066489
Amount Units: ppb v/v



Reviewer: bunmaa, 06-Oct-2017 13:19:30
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

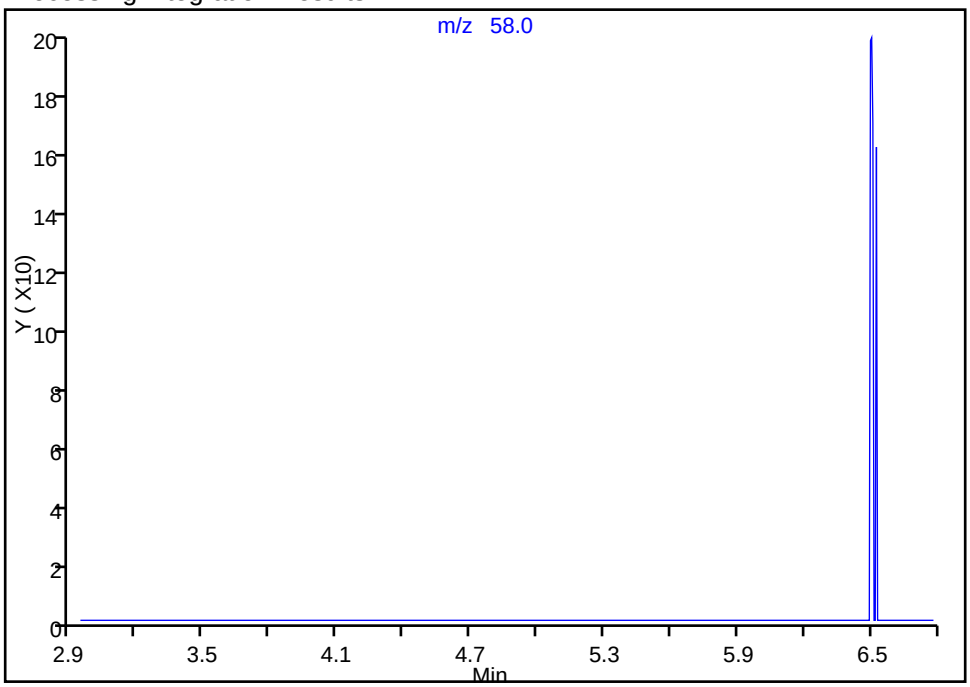
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20171004-27236.b\27236_23.D				
Injection Date:	05-Oct-2017 05:46:30	Instrument ID:	CHX.i		
Lims ID:	200-40322-A-9	Lab Sample ID:	200-40322-9		
Client ID:	5465				
Operator ID:	ert	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

Signal: 2

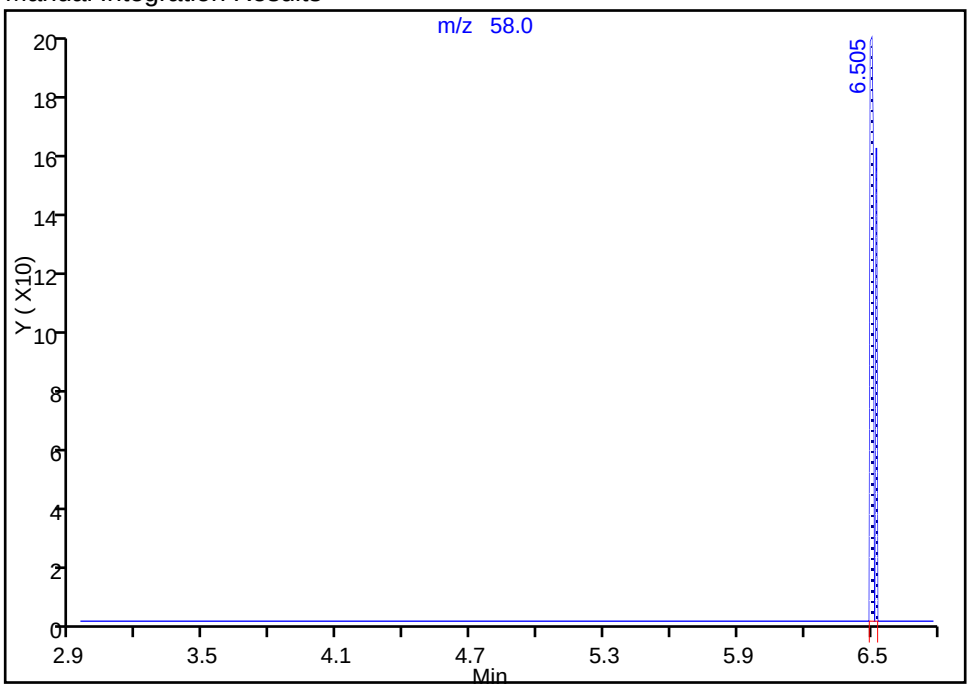
Processing Integration Results

RT: 6.51
Area: 0
Amount: 0.066489
Amount Units: ppb v/v



Manual Integration Results

RT: 6.51
Area: 231
Amount: 0.066489
Amount Units: ppb v/v



Reviewer: bunmaa, 06-Oct-2017 13:19:50

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40420-1

SDG No.:

Client Sample ID: 2595 | Lab Sample ID: 200-40420-6

Matrix: Air | Lab File ID: 200-27370-027.D

Analysis Method: TO-15 | Date Collected: 10/11/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/13/2017 07:39

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122057 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40420-1

SDG No.:

Client Sample ID: 2595 | Lab Sample ID: 200-40420-6

Matrix: Air | Lab File ID: 200-27370-027.D

Analysis Method: TO-15 | Date Collected: 10/11/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/13/2017 07:39

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122057 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.054		0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.28		0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Client Sample ID: 2595 Lab Sample ID: 200-40420-6

Matrix: Air Lab File ID: 200-27370-027.D

Analysis Method: TO-15 Date Collected: 10/11/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/13/2017 07:39

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122057 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-027.D
Lims ID: 200-40420-A-6
Client ID: 2595
Sample Type: Client
Inject. Date: 13-Oct-2017 07:39:30 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027370-027
Misc. Info.: 40420-06
Operator ID: vtp Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Oct-2017 10:54:56 Calib Date: 26-Sep-2017 03:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170925-27085.b\200-27085-015.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: phamvu Date: 13-Oct-2017 10:54:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.128				ND	
2 Dichlorodifluoromethane	85		3.187				ND	
3 Chlorodifluoromethane	51		3.224				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.395				ND	
5 Chloromethane	50		3.518				ND	
6 Butane	43		3.668				ND	
7 Vinyl chloride	62		3.706				ND	
8 Butadiene	54		3.764				ND	
10 Bromomethane	94		4.315				ND	
11 Chloroethane	64		4.497				ND	
13 Vinyl bromide	106		4.818				ND	
14 Trichlorofluoromethane	101		4.888				ND	
17 Ethanol	45		5.364				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.765				ND	
21 1,1-Dichloroethene	96	5.819	5.824	-0.005	1	609	0.0205	
22 Acetone	43		6.054				ND	
23 Carbon disulfide	76		6.193				ND	
24 Isopropyl alcohol	45		6.289				ND	
25 3-Chloro-1-propene	41		6.509				ND	
27 Methylene Chloride	49		6.766				ND	
28 2-Methyl-2-propanol	59		6.985				ND	
29 Methyl tert-butyl ether	73		7.145				ND	
31 trans-1,2-Dichloroethene	61		7.161				ND	
33 Hexane	57		7.493				ND	
34 1,1-Dichloroethane	63		7.964				ND	
35 Vinyl acetate	43		8.028				ND	
37 cis-1,2-Dichloroethene	96		8.991				ND	
38 2-Butanone (MEK)	72		9.066				ND	
39 Ethyl acetate	88		9.082				ND	
* 40 Chlorobromomethane	128	9.424	9.435	-0.011	71	456143	10.0	
41 Tetrahydrofuran	42		9.478				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
42 Chloroform	83		9.547				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
43 Cyclohexane	84		9.783				ND	
44 1,1,1-Trichloroethane	97		9.820				ND	
45 Carbon tetrachloride	117		10.056				ND	
46 Isooctane	57		10.462				ND	
47 Benzene	78		10.516				ND	
48 1,2-Dichloroethane	62		10.698				ND	
49 n-Heptane	43		10.837				ND	
* 50 1,4-Difluorobenzene	114	11.323	11.334	-0.011	92	2808316	10.0	
53 Trichloroethene	95	11.789	11.794	-0.005	97	22731	0.2723	
54 1,2-Dichloropropane	63		12.356				ND	
55 Methyl methacrylate	69		12.527				ND	
57 Dibromomethane	174	12.597	12.602	-0.005	84	1214	0.0136	
56 1,4-Dioxane	88		12.607				ND	
58 Dichlorobromomethane	83		12.886				ND	
60 cis-1,3-Dichloropropene	75		13.806				ND	
61 4-Methyl-2-pentanone (MIBK	43		14.127				ND	
65 Toluene	92		14.384				ND	
66 trans-1,3-Dichloropropene	75		14.988				ND	
67 1,1,2-Trichloroethane	83		15.363				ND	
68 Tetrachloroethene	166	15.443	15.448	-0.005	97	166597	1.39	
69 2-Hexanone	43		15.844				ND	
71 Chlorodibromomethane	129		16.117				ND	
72 Ethylene Dibromide	107		16.390				ND	
* 74 Chlorobenzene-d5	117	17.288	17.288	0.000	82	2364937	10.0	
75 Chlorobenzene	112		17.353				ND	
76 Ethylbenzene	91		17.508				ND	
78 m-Xylene & p-Xylene	106		17.765				ND	
79 o-Xylene	106		18.620				ND	
80 Styrene	104		18.674				ND	
81 Bromoform	173		19.123				ND	
82 Isopropylbenzene	105		19.353				ND	
S 73 Xylenes, Total	106		19.600				ND	
84 1,1,2,2-Tetrachloroethane	83		20.054				ND	
85 N-Propylbenzene	91		20.118				ND	
89 2-Chlorotoluene	91		20.316				ND	
88 4-Ethyltoluene	105		20.316				ND	
90 1,3,5-Trimethylbenzene	105		20.434				ND	
92 tert-Butylbenzene	119		20.937				ND	
93 1,2,4-Trimethylbenzene	105		21.039				ND	
94 sec-Butylbenzene	105		21.274				ND	
95 4-Isopropyltoluene	119		21.488				ND	
96 1,3-Dichlorobenzene	146		21.509				ND	
97 1,4-Dichlorobenzene	146		21.648				ND	
98 Benzyl chloride	91		21.857				ND	
100 n-Butylbenzene	91		22.066				ND	
101 1,2-Dichlorobenzene	146		22.178				ND	
103 1,2,4-Trichlorobenzene	180		24.628				ND	
104 Hexachlorobutadiene	225		24.810				ND	
105 Naphthalene	128		25.104				ND	

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

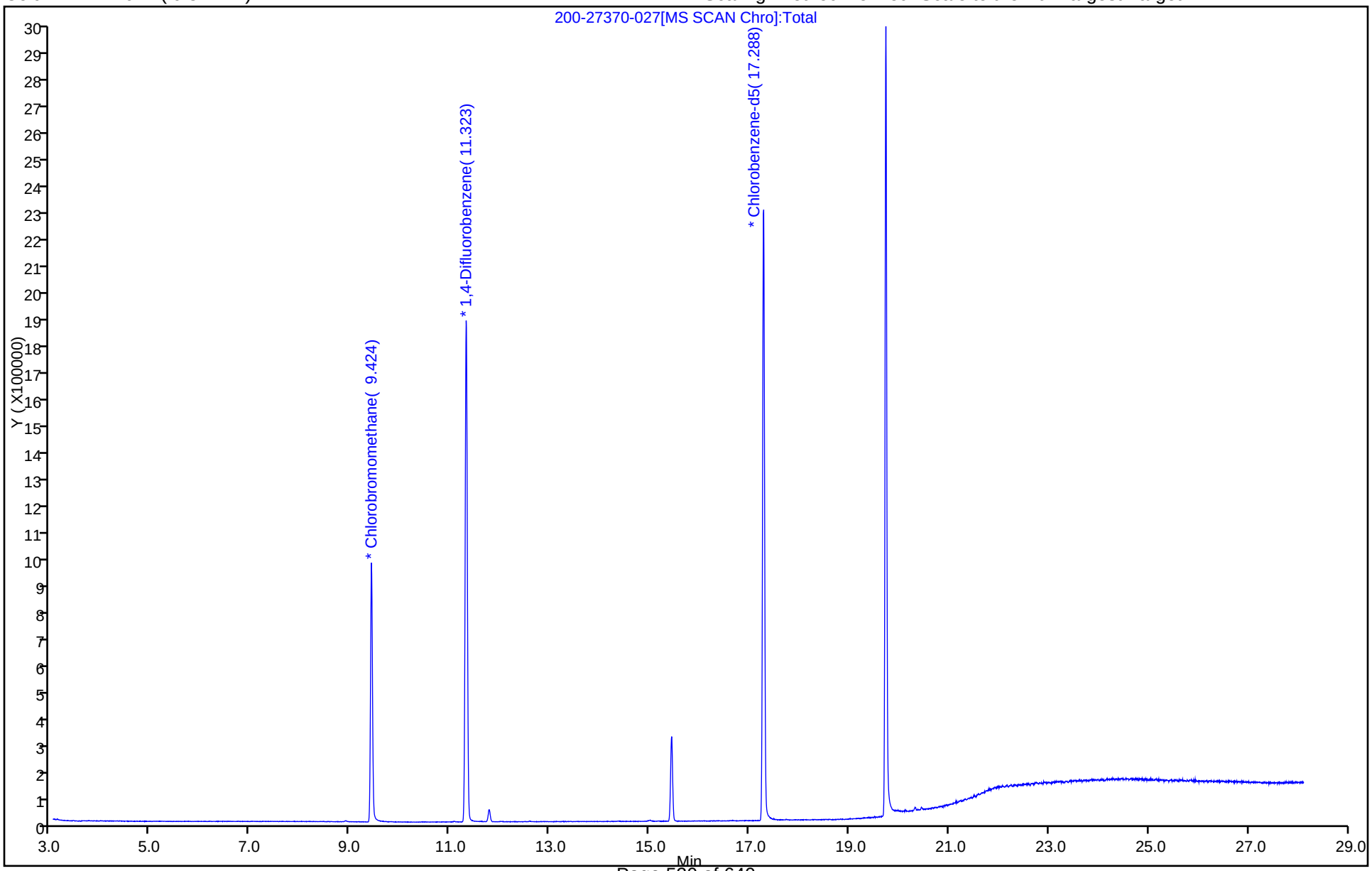
Report Date: 13-Oct-2017 10:55:03 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-027.D

Injection Date:	13-Oct-2017 07:39:30	Instrument ID:	CHG.i	Operator ID:	vtp
Lims ID:	200-40420-A-6	Lab Sample ID:	200-40420-6	Worklist Smp#:	27
Client ID:	2595				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	27
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



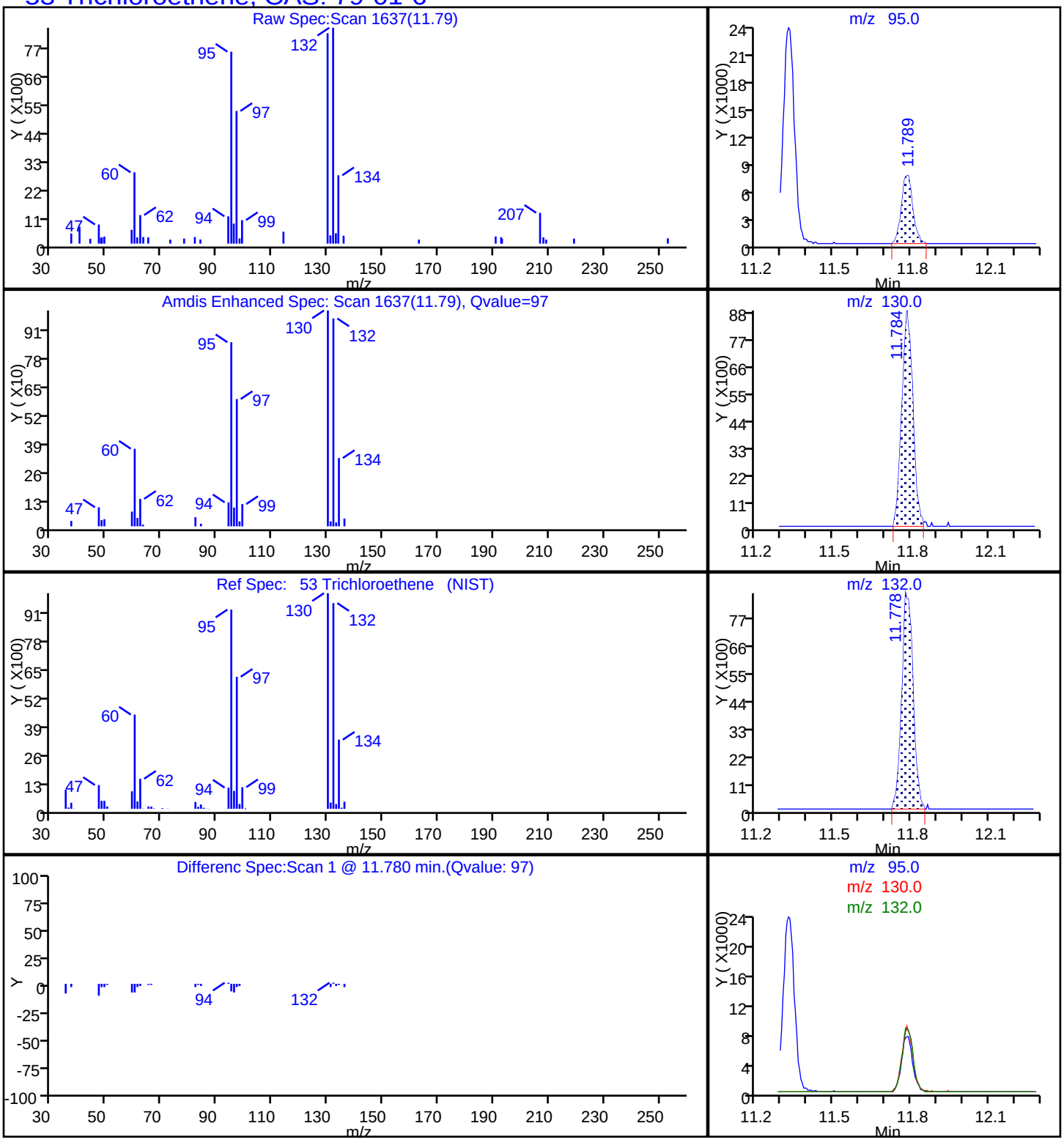
Report Date: 13-Oct-2017 10:55:03 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-027.D

Injection Date:	13-Oct-2017 07:39:30	Instrument ID:	CHG.i		
Lims ID:	200-40420-A-6	Lab Sample ID:	200-40420-6		
Client ID:	2595				
Operator ID:	vtp	ALS Bottle#:	27	Worklist Smp#:	27
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



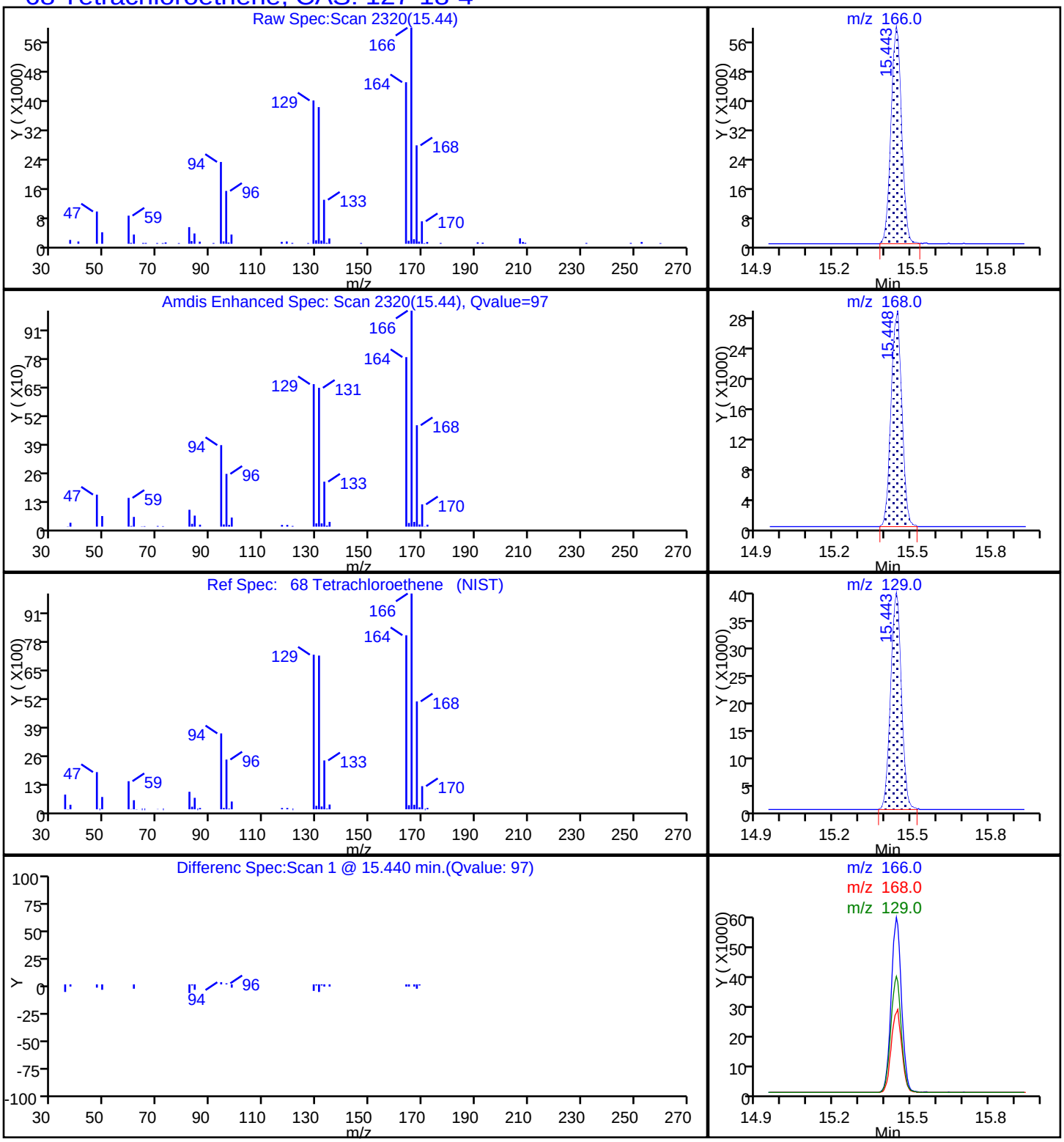
Report Date: 13-Oct-2017 10:55:03 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20171012-27370.b\200-27370-027.D

Injection Date:	13-Oct-2017 07:39:30	Instrument ID:	CHG.i		
Lims ID:	200-40420-A-6	Lab Sample ID:	200-40420-6		
Client ID:	2595				
Operator ID:	vtp	ALS Bottle#:	27	Worklist Smp#:	27
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Client Sample ID: 2536 Lab Sample ID: 200-40531-5

Matrix: Air Lab File ID: 27498-19.D

Analysis Method: TO-15 Date Collected: 10/19/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/21/2017 00:38

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122350 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40531-1

SDG No.:

Client Sample ID: 2536 | Lab Sample ID: 200-40531-5

Matrix: Air | Lab File ID: 27498-19.D

Analysis Method: TO-15 | Date Collected: 10/19/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/21/2017 00:38

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122350 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Client Sample ID: 2536 Lab Sample ID: 200-40531-5

Matrix: Air Lab File ID: 27498-19.D

Analysis Method: TO-15 Date Collected: 10/19/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/21/2017 00:38

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122350 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-19.D
Lims ID: 200-40531-A-5
Client ID: 2536
Sample Type: Client
Inject. Date: 21-Oct-2017 00:38:30 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027498-018
Misc. Info.: 40437-06
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 23-Oct-2017 11:03:53 Calib Date: 11-Oct-2017 02:31:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20171010-27339.b\27339-13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bunmaa Date: 23-Oct-2017 11:03:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.129				ND	M
2 Dichlorodifluoromethane	85		3.188				ND	
3 Chlorodifluoromethane	51		3.225				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.407				ND	
5 Chloromethane	50		3.535				ND	
6 Butane	43		3.711				ND	
7 Vinyl chloride	62		3.743				ND	
8 Butadiene	54		3.812				ND	
10 Bromomethane	94		4.474				ND	
11 Chloroethane	64		4.709				ND	
13 Vinyl bromide	106		5.115				ND	
14 Trichlorofluoromethane	101		5.216				ND	
16 Ethanol	45		5.675				ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.246				ND	
20 1,1-Dichloroethene	96		6.315				ND	
21 Acetone	43		6.470				ND	
22 Isopropyl alcohol	45		6.684				ND	
23 Carbon disulfide	76		6.748				ND	
24 3-Chloro-1-propene	41		7.014				ND	
27 Methylene Chloride	49		7.276				ND	M
28 2-Methyl-2-propanol	59		7.383				ND	
29 Methyl tert-butyl ether	73		7.628				ND	
30 trans-1,2-Dichloroethene	61		7.687				ND	
32 Hexane	57		8.018				ND	
33 1,1-Dichloroethane	63		8.429				ND	
34 Vinyl acetate	43		8.434				ND	
36 2-Butanone (MEK)	72		9.320				ND	
37 cis-1,2-Dichloroethene	96		9.331				ND	M
35 Ethyl acetate	88		9.331				ND	
* 39 Chlorobromomethane	128	9.699	9.699	0.000	87	258978	10.0	
38 Tetrahydrofuran	42		9.710				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.774				ND	
S	41 1,2-Dichloroethene, Total	61		10.000				ND	
	42 1,1,1-Trichloroethane	97		10.035				ND	
	43 Cyclohexane	84		10.046				ND	
	44 Carbon tetrachloride	117		10.238				ND	
	45 Isooctane	57		10.521				ND	
	46 Benzene	78		10.564				ND	
	47 1,2-Dichloroethane	62		10.665				ND	
	48 n-Heptane	43		10.777				ND	
*	50 1,4-Difluorobenzene	114	11.103	11.108	-0.005	93	1301403	10.0	
	53 Trichloroethene	95	11.471	11.476	-0.005	90	1394	0.0389	
	54 1,2-Dichloropropane	63		11.844				ND	
	55 Methyl methacrylate	69		11.882				ND	
	56 1,4-Dioxane	88		11.972				ND	
	57 Dibromomethane	174		12.031				ND	
	58 Dichlorobromomethane	83		12.202				ND	
	60 cis-1,3-Dichloropropene	75		12.832				ND	
	61 4-Methyl-2-pentanone (MIBK	43		12.976				ND	
	64 Toluene	92		13.264				ND	M
	66 trans-1,3-Dichloropropene	75		13.622				ND	
	67 1,1,2-Trichloroethane	83		13.894				ND	
	68 Tetrachloroethene	166		14.038				ND	
	69 2-Hexanone	43		14.150				ND	
	70 Chlorodibromomethane	129		14.449				ND	
	71 Ethylene Dibromide	107		14.652				ND	
*	72 Chlorobenzene-d5	117	15.212	15.217	-0.005	84	966170	10.0	
	73 Chlorobenzene	112		15.255				ND	
	74 Ethylbenzene	91	15.329	15.329	0.010	1	2030	0.0171	7M
	76 m-Xylene & p-Xylene	106		15.468				ND	
	78 o-Xylene	106		15.980				ND	M
S	77 Xylenes, Total	106		16.000				ND	
	79 Styrene	104		16.002				ND	
	80 Bromoform	173		16.295				ND	
	81 Isopropylbenzene	105		16.391				ND	
	83 1,1,2,2-Tetrachloroethane	83		16.797				ND	
	84 N-Propylbenzene	91		16.872				ND	
	87 4-Ethyltoluene	105		16.994				ND	
	88 2-Chlorotoluene	91		17.037				ND	
	89 1,3,5-Trimethylbenzene	105		17.064				ND	
	91 tert-Butylbenzene	119		17.437				ND	
	92 1,2,4-Trimethylbenzene	105		17.507				ND	
	93 sec-Butylbenzene	105		17.694				ND	
	94 4-Isopropyltoluene	119		17.848				ND	
	95 1,3-Dichlorobenzene	146		17.928				ND	
	96 1,4-Dichlorobenzene	146		18.041				ND	
	97 Benzyl chloride	91		18.185				ND	
	99 n-Butylbenzene	91		18.355				ND	
	100 1,2-Dichlorobenzene	146		18.521				ND	
	103 1,2,4-Trichlorobenzene	180		20.885				ND	
	104 Hexachlorobutadiene	225		21.051				ND	
	105 Naphthalene	128		21.365				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

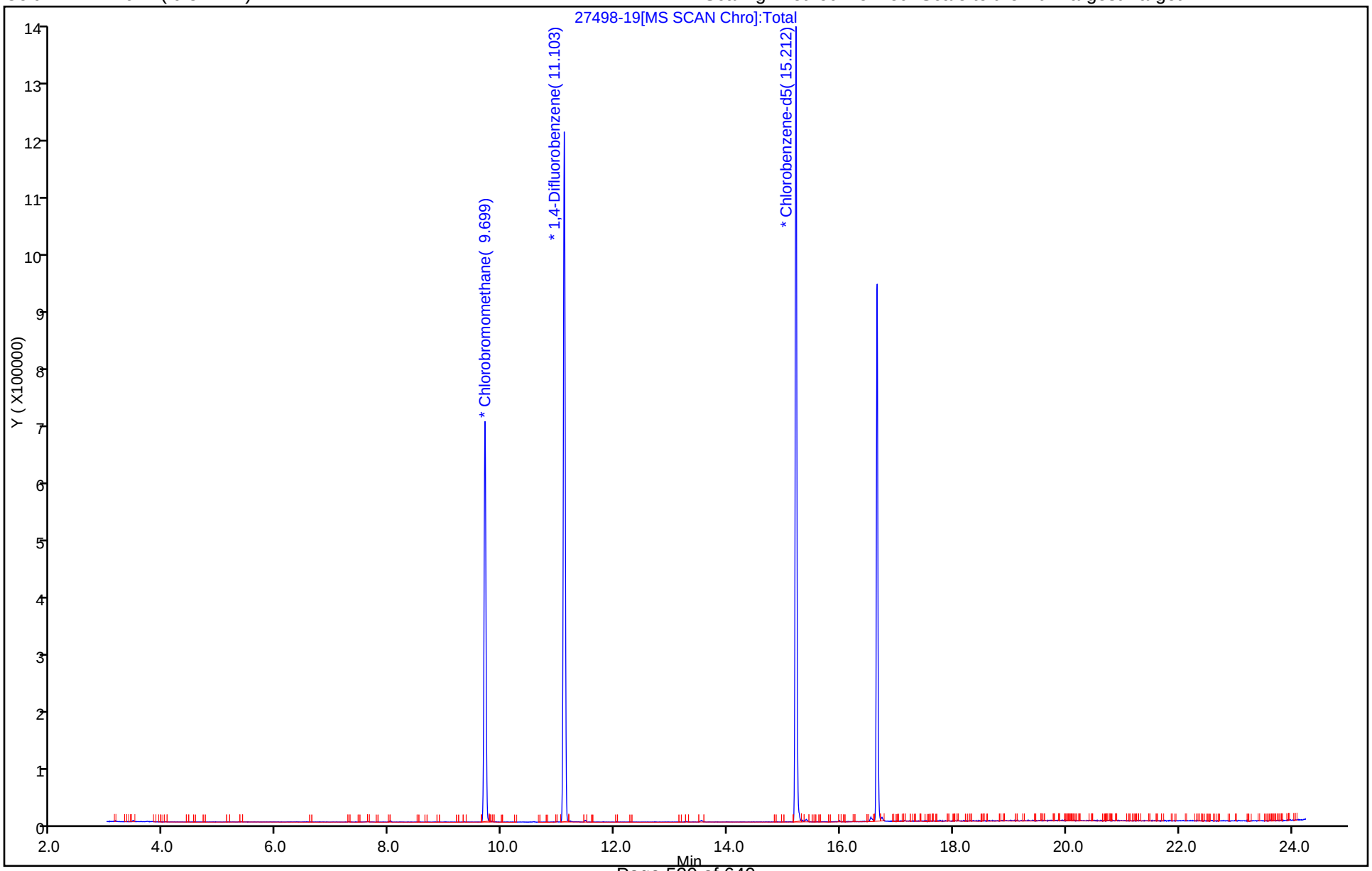
Report Date: 23-Oct-2017 11:03:54 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-19.D

Injection Date:	21-Oct-2017 00:38:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	200-40531-A-5	Lab Sample ID:	200-40531-5	Worklist Smp#:	18
Client ID:	2536				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	19
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

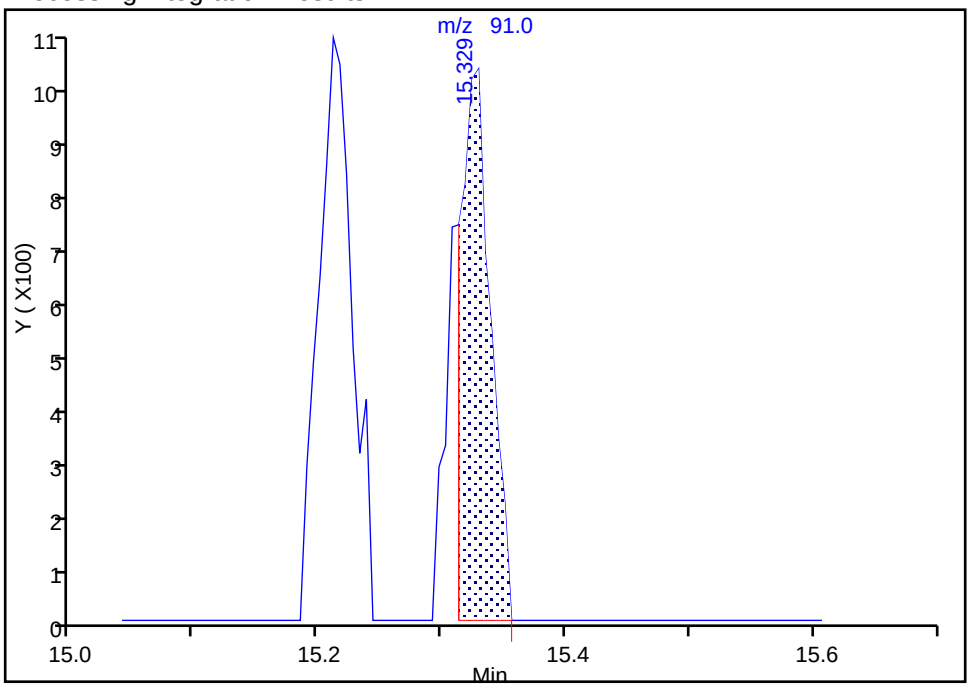
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-19.D				
Injection Date:	21-Oct-2017 00:38:30	Instrument ID:	CHB.i		
Lims ID:	200-40531-A-5	Lab Sample ID:	200-40531-5		
Client ID:	2536				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Signal: 1

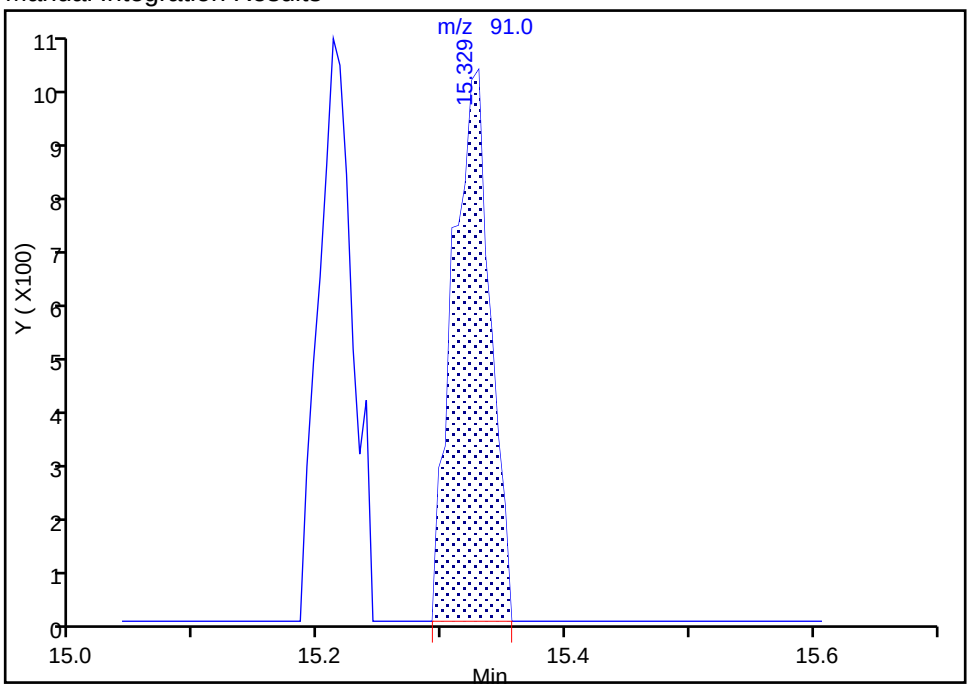
Processing Integration Results

RT: 15.33
Area: 1623
Amount: 0.013704
Amount Units: ppb v/v



Manual Integration Results

RT: 15.33
Area: 2030
Amount: 0.017141
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 11:02:00

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

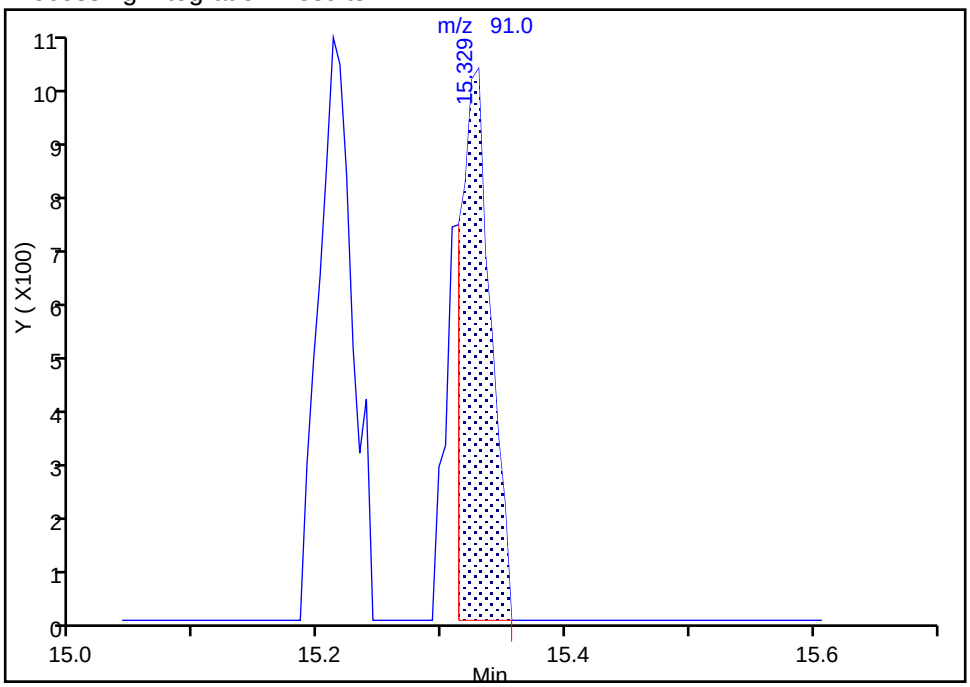
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-19.D				
Injection Date:	21-Oct-2017 00:38:30	Instrument ID:	CHB.i		
Lims ID:	200-40531-A-5	Lab Sample ID:	200-40531-5		
Client ID:	2536				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Signal: 1

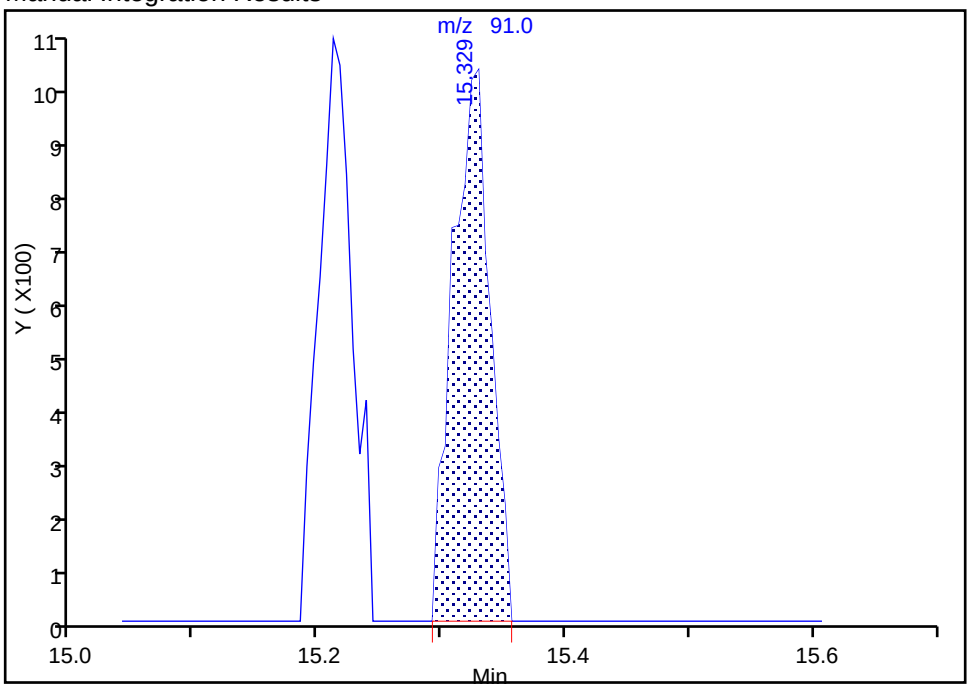
Processing Integration Results

RT: 15.33
Area: 1623
Amount: 0.013704
Amount Units: ppb v/v



Manual Integration Results

RT: 15.33
Area: 2030
Amount: 0.017141
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 11:02:11

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

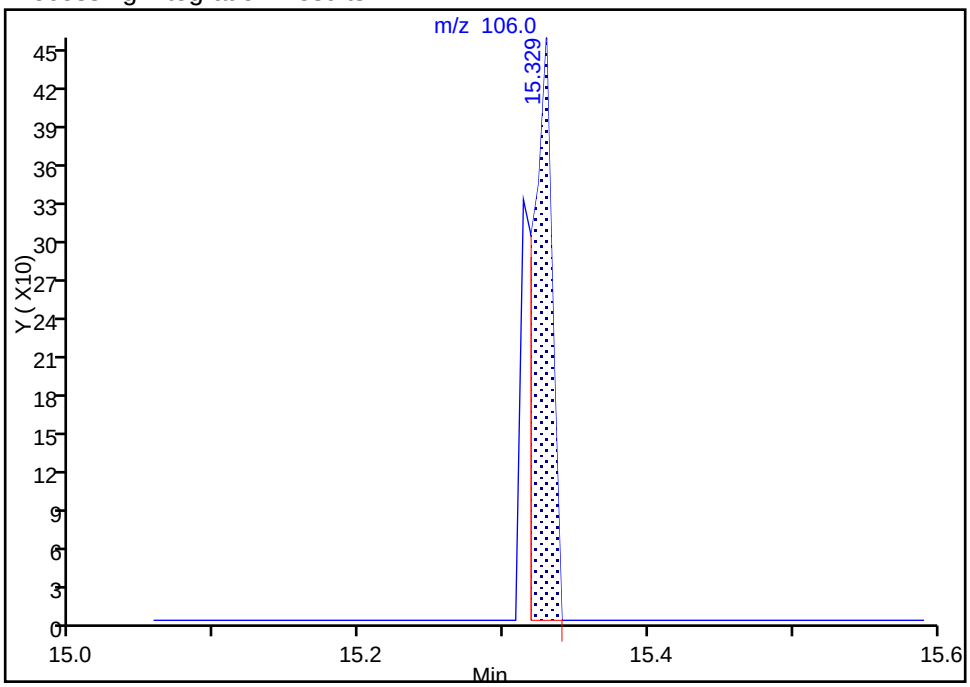
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20171020-27498.b\27498-19.D				
Injection Date:	21-Oct-2017 00:38:30	Instrument ID:	CHB.i		
Lims ID:	200-40531-A-5	Lab Sample ID:	200-40531-5		
Client ID:	2536				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

74 Ethylbenzene, CAS: 100-41-4

Signal: 2

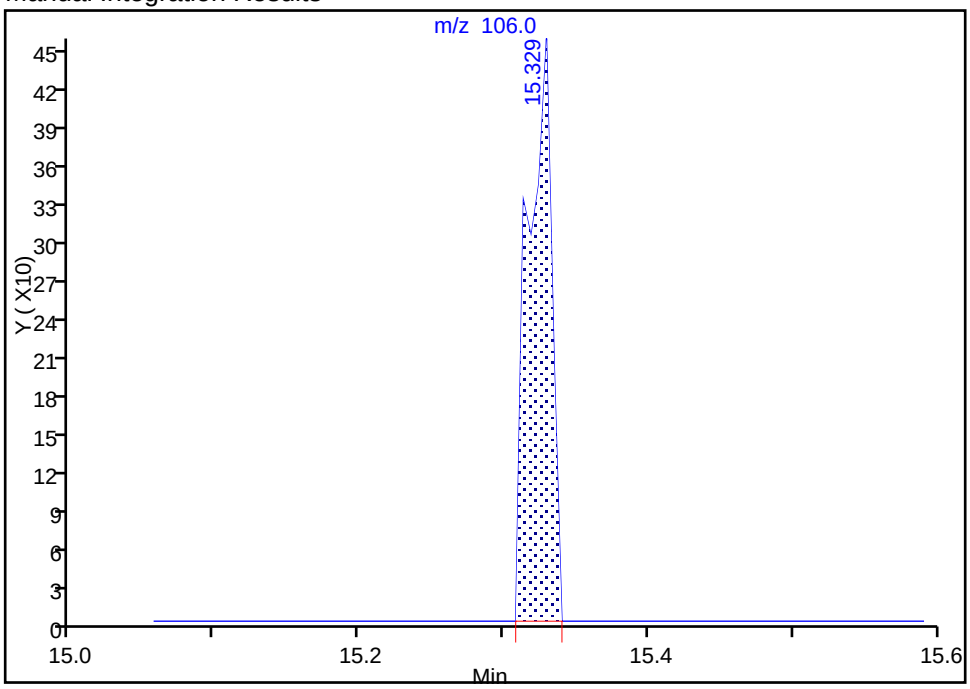
Processing Integration Results

RT: 15.33
Area: 414
Amount: 0.013704
Amount Units: ppb v/v



Manual Integration Results

RT: 15.33
Area: 519
Amount: 0.017141
Amount Units: ppb v/v



Reviewer: bunmaa, 23-Oct-2017 11:02:31

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Client Sample ID: 2511 Lab Sample ID: 200-40547-6

Matrix: Air Lab File ID: 27580_08.D

Analysis Method: TO-15 Date Collected: 10/20/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/25/2017 15:55

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Client Sample ID: 2511 Lab Sample ID: 200-40547-6

Matrix: Air Lab File ID: 27580_08.D

Analysis Method: TO-15 Date Collected: 10/20/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/25/2017 15:55

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Client Sample ID: 2511 Lab Sample ID: 200-40547-6

Matrix: Air Lab File ID: 27580_08.D

Analysis Method: TO-15 Date Collected: 10/20/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/25/2017 15:55

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122537 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171025-27580.b\27580_08.D
Lims ID: 200-40547-A-6
Client ID: 2511
Sample Type: Client
Inject. Date: 25-Oct-2017 15:55:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027580-008
Misc. Info.: 40547-06
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20171025-27580.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 26-Oct-2017 11:14:31 Calib Date: 14-Oct-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20171013-27408.b\27408_13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: daiglep Date: 26-Oct-2017 10:42:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967				ND	
2 Dichlorodifluoromethane	85		3.037				ND	
3 Chlorodifluoromethane	51		3.090				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298				ND	
5 Chloromethane	50		3.432				ND	
6 Butane	43		3.634				ND	
7 Vinyl chloride	62		3.672				ND	
8 Butadiene	54		3.752				ND	
10 Bromomethane	94		4.424				ND	
11 Chloroethane	64		4.665				ND	
13 Vinyl bromide	106		5.059				ND	
14 Trichlorofluoromethane	101		5.172				ND	
17 Ethanol	45		5.759				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.266				ND	
21 1,1-Dichloroethene	96		6.298				ND	
22 Acetone	43		6.527				ND	
23 Carbon disulfide	76	6.676	6.677	-0.001	100	7823	0.1361	
24 Isopropyl alcohol	45		6.853				ND	
25 3-Chloro-1-propene	41		7.093				ND	
27 Methylene Chloride	49		7.392				ND	
28 2-Methyl-2-propanol	59		7.632				ND	
29 Methyl tert-butyl ether	73		7.803				ND	
31 trans-1,2-Dichloroethene	61		7.840				ND	
33 Hexane	57		8.240				ND	
34 1,1-Dichloroethane	63		8.715				ND	
35 Vinyl acetate	43		8.801				ND	
37 cis-1,2-Dichloroethene	96		9.836				ND	
38 2-Butanone (MEK)	72		9.879				ND	
39 Ethyl acetate	88		9.943				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
* 40 Chlorobromomethane	128	10.300	10.300	0.000	93	329202	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		10.306				ND	
	42 Chloroform	83		10.444				ND	
	43 Cyclohexane	84		10.690				ND	
	44 1,1,1-Trichloroethane	97		10.711				ND	
	45 Carbon tetrachloride	117		10.967				ND	
	46 Isooctane	57		11.416				ND	
	47 Benzene	78		11.426				ND	
	48 1,2-Dichloroethane	62		11.613				ND	
	49 n-Heptane	43		11.821				ND	
*	50 1,4-Difluorobenzene	114	12.291	12.291	0.000	98	1582098	10.0	
	53 Trichloroethene	95		12.761				ND	
	54 1,2-Dichloropropane	63		13.310				ND	
	55 Methyl methacrylate	69		13.502				ND	
	56 1,4-Dioxane	88		13.550				ND	
	57 Dibromomethane	174		13.572				ND	
	58 Dichlorobromomethane	83		13.887				ND	
	60 cis-1,3-Dichloropropene	75		14.837				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.120				ND	
	65 Toluene	92		15.429				ND	
	66 trans-1,3-Dichloropropene	75		16.037				ND	
	67 1,1,2-Trichloroethane	83		16.406				ND	
	68 Tetrachloroethene	166		16.523				ND	
	69 2-Hexanone	43		16.854				ND	
	71 Chlorodibromomethane	129		17.169				ND	
	72 Ethylene Dibromide	107		17.430				ND	
*	74 Chlorobenzene-d5	117	18.332	18.332	0.000	94	1410350	10.0	
	75 Chlorobenzene	112		18.391				ND	
	76 Ethylbenzene	91		18.546				ND	
	78 m-Xylene & p-Xylene	106		18.802				ND	
	79 o-Xylene	106		19.635				ND	
	80 Styrene	104		19.688				ND	
S	73 Xylenes, Total	106		20.100				ND	
	81 Bromoform	173		20.120				ND	
	82 Isopropylbenzene	105		20.339				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.006				ND	
	85 N-Propylbenzene	91		21.075				ND	
	88 4-Ethyltoluene	105		21.268				ND	
	89 2-Chlorotoluene	91		21.273				ND	
	90 1,3,5-Trimethylbenzene	105		21.380				ND	
	92 tert-Butylbenzene	119		21.871				ND	
	93 1,2,4-Trimethylbenzene	105		21.967				ND	
	94 sec-Butylbenzene	105		22.202				ND	
	95 4-Isopropyltoluene	119		22.404				ND	
	96 1,3-Dichlorobenzene	146		22.431				ND	
	97 1,4-Dichlorobenzene	146		22.570				ND	
	98 Benzyl chloride	91		22.762				ND	
	100 n-Butylbenzene	91		22.975				ND	
	101 1,2-Dichlorobenzene	146		23.093				ND	
	103 1,2,4-Trichlorobenzene	180		25.521				ND	
	104 Hexachlorobutadiene	225		25.708				ND	
	105 Naphthalene	128		25.980				ND	

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

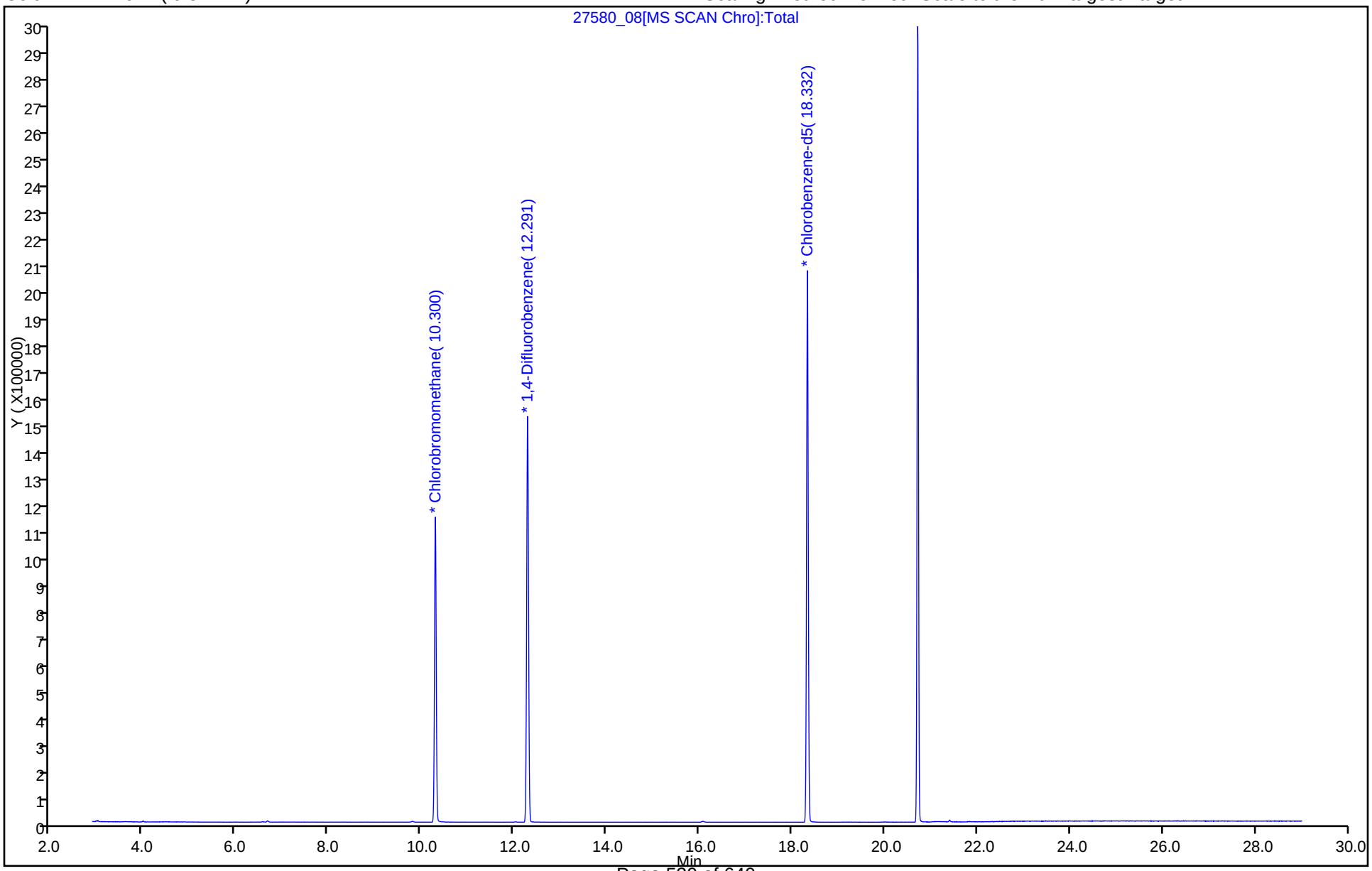
Report Date: 26-Oct-2017 11:14:42 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171025-27580.b\27580_08.D

Injection Date:	25-Oct-2017 15:55:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-40547-A-6	Lab Sample ID:	200-40547-6	Worklist Smp#:	8
Client ID:	2511				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40548-1

SDG No.:

Client Sample ID: 4095 | Lab Sample ID: 200-40548-2

Matrix: Air | Lab File ID: 27603_07.D

Analysis Method: TO-15 | Date Collected: 10/20/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/26/2017 16:23

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122611 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-40548-1

SDG No.:

Client Sample ID: 4095 | Lab Sample ID: 200-40548-2

Matrix: Air | Lab File ID: 27603_07.D

Analysis Method: TO-15 | Date Collected: 10/20/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 10/26/2017 16:23

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 122611 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Client Sample ID: 4095 Lab Sample ID: 200-40548-2

Matrix: Air Lab File ID: 27603_07.D

Analysis Method: TO-15 Date Collected: 10/20/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 10/26/2017 16:23

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 122611 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171026-27603.b\27603_07.D
Lims ID: 200-40548-A-2
Client ID: 4095
Sample Type: Client
Inject. Date: 26-Oct-2017 16:23:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027603-007
Misc. Info.: 40548-02
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20171026-27603.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 27-Oct-2017 08:29:42 Calib Date: 14-Oct-2017 01:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20171013-27408.b\27408_13.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: puangmaleek Date: 27-Oct-2017 08:29:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967				ND	
2 Dichlorodifluoromethane	85		3.037				ND	
3 Chlorodifluoromethane	51		3.090				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.298				ND	
5 Chloromethane	50		3.432				ND	
6 Butane	43		3.634				ND	
7 Vinyl chloride	62		3.672				ND	
8 Butadiene	54		3.752				ND	
10 Bromomethane	94		4.424				ND	
11 Chloroethane	64		4.664				ND	
13 Vinyl bromide	106		5.059				ND	
14 Trichlorofluoromethane	101		5.166				ND	
17 Ethanol	45		5.758				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.260				ND	
21 1,1-Dichloroethene	96		6.297				ND	
22 Acetone	43		6.527				ND	
23 Carbon disulfide	76		6.671				ND	
24 Isopropyl alcohol	45		6.847				ND	
25 3-Chloro-1-propene	41		7.093				ND	
27 Methylene Chloride	49		7.392				ND	
28 2-Methyl-2-propanol	59		7.632				ND	
29 Methyl tert-butyl ether	73		7.802				ND	
31 trans-1,2-Dichloroethene	61		7.840				ND	
33 Hexane	57		8.240				ND	
34 1,1-Dichloroethane	63		8.715				ND	
35 Vinyl acetate	43		8.800				ND	
37 cis-1,2-Dichloroethene	96		9.836				ND	
38 2-Butanone (MEK)	72		9.879				ND	
39 Ethyl acetate	88		9.943				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
* 40 Chlorobromomethane	128	10.295	10.300	-0.005	91	290325	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		10.305				ND	
	42 Chloroform	83		10.444				ND	
	43 Cyclohexane	84		10.690				ND	
	44 1,1,1-Trichloroethane	97		10.711				ND	
	45 Carbon tetrachloride	117		10.967				ND	
	46 Isooctane	57		11.416				ND	
	47 Benzene	78		11.426				ND	
	48 1,2-Dichloroethane	62		11.613				ND	
	49 n-Heptane	43		11.827				ND	
*	50 1,4-Difluorobenzene	114	12.291	12.291	0.000	98	1407779	10.0	
	53 Trichloroethene	95		12.755				ND	
	54 1,2-Dichloropropane	63		13.305				ND	
	55 Methyl methacrylate	69		13.502				ND	
	56 1,4-Dioxane	88		13.545				ND	
	57 Dibromomethane	174		13.572				ND	
	58 Dichlorobromomethane	83		13.881				ND	
	60 cis-1,3-Dichloropropene	75		14.837				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.119				ND	
	65 Toluene	92		15.424				ND	
	66 trans-1,3-Dichloropropene	75		16.032				ND	
	67 1,1,2-Trichloroethane	83		16.406				ND	
	68 Tetrachloroethene	166	16.518	16.523	-0.005	75	662	0.0220	
	69 2-Hexanone	43		16.854				ND	
	71 Chlorodibromomethane	129		17.169				ND	
	72 Ethylene Dibromide	107		17.430				ND	
*	74 Chlorobenzene-d5	117	18.327	18.332	-0.005	95	1262417	10.0	
	75 Chlorobenzene	112		18.391				ND	
	76 Ethylbenzene	91		18.546				ND	
	78 m-Xylene & p-Xylene	106		18.797				ND	
	79 o-Xylene	106		19.634				ND	
	80 Styrene	104		19.688				ND	
S	73 Xylenes, Total	106		20.100				ND	
	81 Bromoform	173		20.120				ND	
	82 Isopropylbenzene	105		20.339				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.006				ND	
	85 N-Propylbenzene	91		21.075				ND	
	88 4-Ethyltoluene	105		21.268				ND	
	89 2-Chlorotoluene	91		21.273				ND	
	90 1,3,5-Trimethylbenzene	105		21.380				ND	
	92 tert-Butylbenzene	119		21.871				ND	
	93 1,2,4-Trimethylbenzene	105		21.967				ND	
	94 sec-Butylbenzene	105		22.201				ND	
	95 4-Isopropyltoluene	119		22.404				ND	
	96 1,3-Dichlorobenzene	146		22.431				ND	
	97 1,4-Dichlorobenzene	146		22.570				ND	
	98 Benzyl chloride	91		22.762				ND	
	100 n-Butylbenzene	91		22.970				ND	
	101 1,2-Dichlorobenzene	146		23.093				ND	
	103 1,2,4-Trichlorobenzene	180		25.521				ND	
	104 Hexachlorobutadiene	225		25.708				ND	
	105 Naphthalene	128		25.980				ND	

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

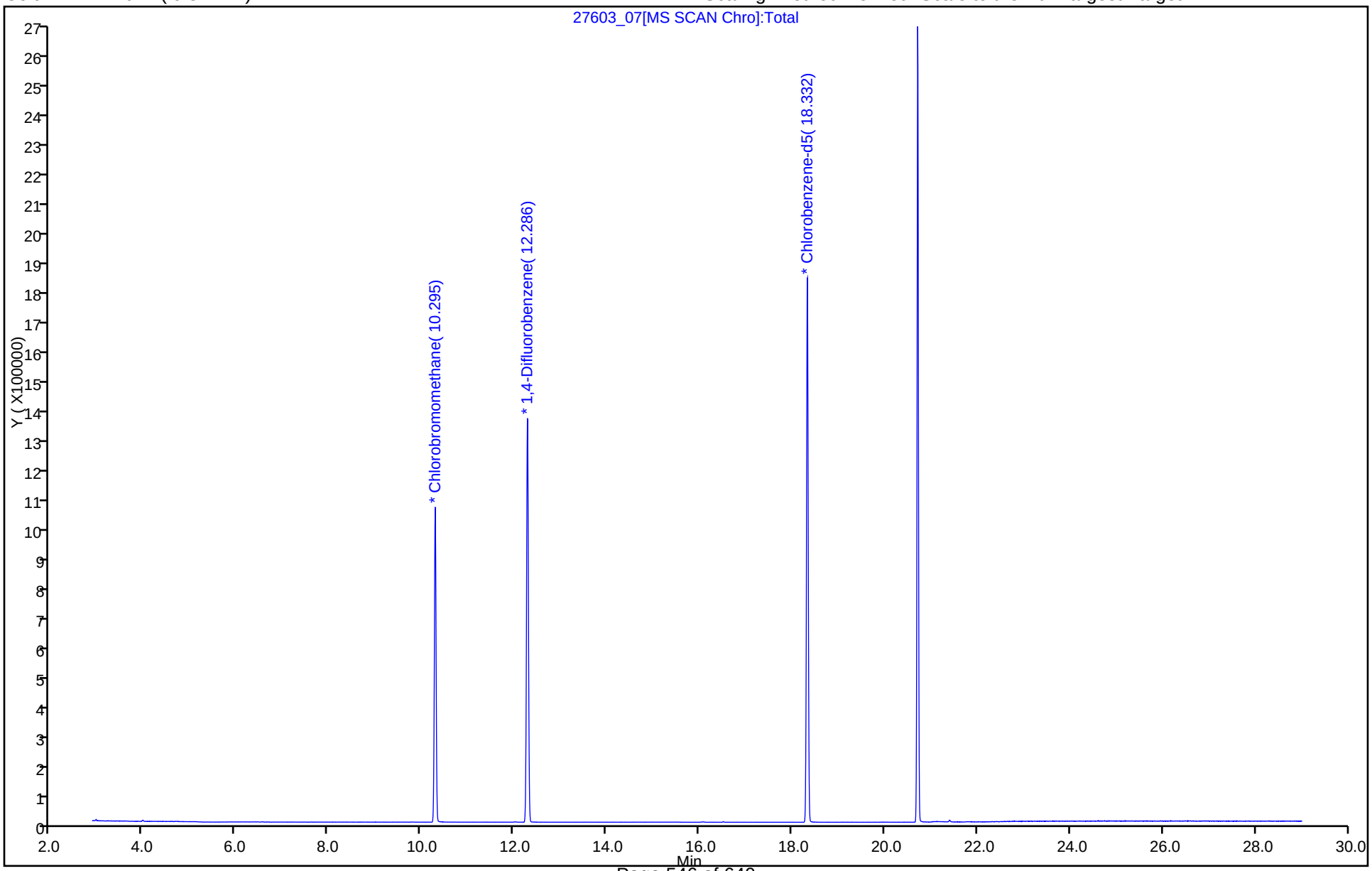
Report Date: 27-Oct-2017 08:29:43 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20171026-27603.b\27603_07.D

Injection Date:	26-Oct-2017 16:23:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-40548-A-2	Lab Sample ID:	200-40548-2	Worklist Smp#:	7
Client ID:	4095				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-121534/3	27150_03.D
Level 2	IC 200-121534/4	27150_04.D
Level 3	IC 200-121534/6	27150_06.D
Level 4	IC 200-121534/8	27150_08.D
Level 5	ICIS 200-121534/9	27150_09.D
Level 6	IC 200-121534/10	27150_10.D
Level 7	IC 200-121534/11	27150_11.D
Level 8	IC 200-121534/12	27150_12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5242	+++++ 0.5023	+++++ 0.4607	0.5952	0.5193	Ave		0.5203				9.4		30.0			
Dichlorodifluoromethane	+++++ 2.2100	+++++ 2.1084	2.3238 1.8896	2.4432	2.1879	Ave		2.1938				8.6		30.0			
Freon 22	+++++ 1.1930	+++++ 1.1394	1.3112 1.0515	1.3308	1.1830	Ave		1.2015				8.8		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2053	2.0338 2.1000	2.3064 1.8710	2.4313	2.1699	Ave		2.1597				8.5		30.0			
Chloromethane	+++++ 0.6921	+++++ 0.6555	0.7610 0.6089	0.7581	0.6775	Ave		0.6922				8.6		30.0			
n-Butane	+++++ 1.0804	+++++ 1.0310	1.2274 0.9376	1.2077	1.0728	Ave		1.0928				10.0		30.0			
Vinyl chloride	0.5851 0.8469	0.7633 0.8092	0.9135 0.7389	0.9290	0.8363	Ave		0.8028				13.7		30.0			
1,3-Butadiene	0.4445 0.6079	0.5873 0.5832	0.6585 0.5323	0.6668	0.5943	Ave		0.5843				12.1		30.0			
Bromomethane	+++++ 0.7975	0.7360 0.7635	0.8497 0.6794	0.8842	0.7921	Ave		0.7860				8.7		30.0			
Chloroethane	+++++ 0.4156	+++++ 0.3970	0.4419 0.3563	0.4577	0.4045	Ave		0.4122				8.7		30.0			
Isopentane	+++++ 0.7438	0.9535 0.7099	0.9040 0.6366	0.8324	0.7344	Ave		0.7878				14.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.9112	0.8103 0.8705	0.9348 0.7924	0.9775	0.8839	Ave		0.8829				7.5		30.0			
Trichlorofluoromethane	+++++ 2.3566	2.1989 2.2539	2.4185 2.0679	2.5510	2.2933	Ave		2.3057				6.8		30.0			
n-Pentane	+++++ 1.2392	+++++ 1.1780	1.4282 1.0774	1.3841	1.2244	Ave		1.2552				10.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.3727	+++++ 0.3160	0.4909 0.2792	0.4444	0.4010	Ave		0.3840				20.5		30.0			
Ethyl ether	+++++ 0.5641	0.4779 0.5376	0.5905 0.4937	0.6167	0.5477	Ave		0.5469				9.1		30.0			
Freon TF	+++++ 1.7506	1.5616 1.6705	1.8052 1.5140	1.8996	1.7097	Ave		1.7016				7.9		30.0			
Acrolein	+++++ 0.2424	+++++ 0.2244	+++++ 0.2145	0.2514	0.2725	Ave		0.2410				9.5		30.0			
1,1-Dichloroethene	+++++ 0.8453	0.7527 0.8082	0.8655 0.7409	0.9064	0.8231	Ave		0.8203				7.2		30.0			
Acetone	+++++ 1.0709	+++++ 1.0233	+++++ 0.9324	1.2255	1.0098	Ave		1.0524				10.3		30.0			
Carbon disulfide	+++++ 2.3082	+++++ 2.2027	2.4401 2.0199	2.5419	2.2656	Ave		2.2964				8.0		30.0			
Isopropyl alcohol	+++++ 1.3047	+++++ 1.2537	+++++ 1.1461	1.4245	1.2121	Ave		1.2683				8.3		30.0			
3-Chloropropene	+++++ 0.7914	0.8140 0.7497	0.8576 0.6915	0.8388	0.8973	Ave		0.8058				8.6		30.0			
Acetonitrile	+++++ 0.5279	+++++ 0.5229	+++++ 0.4810	0.6083	0.5020	Ave		0.5284				9.2		30.0			
Methylene Chloride	+++++ 0.8501	+++++ 0.8084	0.9377 0.7457	0.9277	0.8323	Ave		0.8503				8.6		30.0			
tert-Butyl alcohol	+++++ 1.8623	+++++ 1.7960	+++++ 1.6568	2.0004	1.7100	Ave		1.8051				7.5		30.0			
Methyl tert-butyl ether	+++++ 2.4999	2.3281 2.3898	2.6282 2.2033	2.7156	2.4199	Ave		2.4550				7.2		30.0			
trans-1,2-Dichloroethene	+++++ 1.2137	1.1181 1.1594	1.2824 1.0636	1.3276	1.1946	Ave		1.1942				7.6		30.0			
Acrylonitrile	+++++ 0.5922	+++++ 0.5605	0.6098 0.5252	0.6364	0.5695	Ave		0.5823				6.7		30.0			
n-Hexane	+++++ 1.2440	1.2583 1.1842	1.3776 1.0908	1.3622	1.2207	Ave		1.2483				8.0		30.0			
1,1-Dichloroethane	1.3043 1.5812	1.4906 1.5104	1.6698 1.3996	1.7346	1.5461	Ave		1.5296				9.1		30.0			
Vinyl acetate	+++++ 1.9212	+++++ 1.8348	+++++ 1.7195	2.0850	1.8726	Ave		1.8866				7.1		30.0			
cis-1,2-Dichloroethene	+++++ 1.0245	0.9440 0.9881	1.0502 0.9162	1.0884	0.9867	Ave		0.9997				6.0		30.0			
Methyl Ethyl Ketone	+++++ 0.4820	+++++ 0.4649	0.5605 0.4330	0.5165	0.4516	Ave		0.4848				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0755	+++++ 0.0738	+++++ 0.0685	0.0798	0.0708	Ave		0.0737				5.9		30.0			
Tetrahydrofuran	+++++ 0.1837	+++++ 0.1737	+++++ 0.1626	0.2039	0.1809	Ave		0.1810				8.4		30.0			
Chloroform	+++++ 2.0147	1.8729 1.9427	2.0810 1.8123	2.1312	1.9383	Ave		1.9704				5.7		30.0			
Cyclohexane	+++++ 0.2699	0.2536 0.2597	0.2776 0.2433	0.2880	0.2606	Ave		0.2647				5.7		30.0			
1,1,1-Trichloroethane	+++++ 0.4270	0.3853 0.4131	0.4303 0.3901	0.4507	0.4105	Ave		0.4153				5.5		30.0			
Carbon tetrachloride	0.2964 0.4357	0.3727 0.4309	0.4196 0.4179	0.4588	0.4308	Ave		0.4078				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 0.9140	0.8537 0.8763	0.9592 0.8275	0.9816	0.8905	Ave		0.9004				6.2		30.0			
Benzene	+++++ 0.6155	0.6052 0.5935	0.6555 0.5604	0.6611	0.5966	Ave		0.6126				5.8		30.0			
1,2-Dichloroethane	+++++ 0.2538	0.2354 0.2453	0.2563 0.2343	0.2691	0.2453	Ave		0.2485				4.9		30.0			
n-Heptane	+++++ 0.3032	0.3108 0.2909	0.3257 0.2751	0.3266	0.2940	Ave		0.3038				6.2		30.0			
n-Butanol	+++++ 0.1130	+++++ 0.1096	+++++ 0.1072	0.1174	0.0974	Ave		0.1089				6.9		30.0			
Trichloroethene	0.1916 0.2722	0.2476 0.2671	0.2716 0.2599	0.2810	0.2589	Ave		0.2562				10.9		30.0			
1,2-Dichloropropane	+++++ 0.2086	0.1825 0.2032	0.2130 0.1970	0.2183	0.2008	Ave		0.2033				5.8		30.0			
Methyl methacrylate	+++++ 0.2105	+++++ 0.2057	0.2098 0.2009	0.2124	0.1967	Ave		0.2060				3.0		30.0			
1,4-Dioxane	+++++ 0.1362	+++++ 0.1349	+++++ 0.1271	0.1419	0.1164	Ave		0.1313				7.5		30.0			
Dibromomethane	+++++ 0.2776	0.2405 0.2735	0.2586 0.2747	0.2776	0.2548	Ave		0.2653				5.4		30.0			
Bromodichloromethane	+++++ 0.4414	0.3691 0.4296	0.4160 0.4164	0.4541	0.4227	Ave		0.4213				6.4		30.0			
cis-1,3-Dichloropropene	+++++ 0.3290	0.2856 0.3215	0.3138 0.3139	0.3358	0.3134	Ave		0.3162				5.1		30.0			
methyl isobutyl ketone	+++++ 0.4015	+++++ 0.3869	0.4394 0.3716	0.4194	0.3746	Ave		0.3989				6.7		30.0			
Toluene	+++++ 0.5040	0.4542 0.4904	0.4927 0.4637	0.5144	0.4763	Ave		0.4851				4.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.4180	0.3957 0.4030	0.4238 0.3789	0.4420	0.4034	Ave		0.4093				5.0		30.0			
trans-1,3-Dichloropropene	+++++ 0.3388	0.3288 0.3398	0.4265 0.3260	0.3479	0.3246	Ave		0.3475				10.3		30.0			
1,1,2-Trichloroethane	+++++ 0.2488	0.2197 0.2434	0.2405 0.2324	0.2552	0.2346	Ave		0.2392				4.9		30.0			
Tetrachloroethene	0.3462 0.4448	0.3854 0.4398	0.4174 0.4255	0.4385	0.4113	Ave		0.4136				8.1		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4455	+++++ 0.4283	0.6169 0.4058	0.4599	0.3991	Ave		0.4592				17.5		30.0			
Dibromochloromethane	+++++ 0.5191	0.4118 0.5033	0.4591 0.4757	0.5156	0.5120	Ave		0.4852				8.1		30.0			
1,2-Dibromoethane	+++++ 0.4839	0.3876 0.4716	0.4412 0.4544	0.4892	0.4521	Ave		0.4543				7.5		30.0			
Chlorobenzene	+++++ 0.7038	0.6215 0.6819	0.6869 0.6564	0.7173	0.6581	Ave		0.6751				4.8		30.0			
Ethylbenzene	+++++ 1.1418	1.0101 1.1085	1.1002 1.0475	1.1717	1.0779	Ave		1.0939				5.0		30.0			
n-Nonane	+++++ 0.4858	0.4388 0.4691	0.4668 0.4432	0.4997	0.4573	Ave		0.4658				4.7		30.0			
m,p-Xylene	+++++ 0.4600	0.3910 0.4440	0.4270 0.4150	0.4644	0.4330	Ave		0.4335				5.9		30.0			
Xylene, o-	+++++ 0.4463	0.3884 0.4373	0.4199 0.4133	0.4503	0.4181	Ave		0.4248				5.1		30.0			
Styrene	+++++ 0.7172	0.5333 0.6868	0.6175 0.6573	0.7114	0.6678	Ave		0.6559				9.7		30.0			
Bromoform	+++++ 0.4570	0.3176 0.4285	0.3924 0.3841	0.4577	0.5139	Ave		0.4216				15.1		30.0			
Cumene	+++++ 1.3175	1.1156 1.2764	1.1969 1.1894	1.3232	1.2368	Ave		1.2365				6.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.6579	0.5597 0.6371	0.6247 0.5819	0.6688	0.6189	Ave		0.6213				6.3		30.0			
n-Propylbenzene	+++++ 1.6040	1.3541 1.5496	1.4859 1.3944	1.6332	1.5119	Ave		1.5047				6.8		30.0			
1,2,3-Trichloropropane	+++++ 0.5147	+++++ 0.4972	0.5178 0.4582	0.5211	0.4822	Ave		0.4985				4.9		30.0			
n-Decane	+++++ 0.6254	+++++ 0.5656	0.5814 0.4919	0.6560	0.6109	Ave		0.5885				9.7		30.0			
4-Ethyltoluene	+++++ 1.3651	1.1040 1.2769	1.2282 1.0375	1.3809	1.2942	Ave		1.2410				10.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.1393	0.9582 1.0776	1.0565 0.9095	1.1547	1.0815	Ave		1.0539				8.6		30.0			
1,3,5-Trimethylbenzene	+++++ 1.1194	0.9196 1.0448	1.0109 0.9273	1.1306	1.0557	Ave		1.0298				8.1		30.0			
Alpha Methyl Styrene	+++++ 0.5667	0.3945 0.5226	0.4566 0.4753	0.5519	0.5239	Ave		0.4988				12.1		30.0			
tert-Butylbenzene	+++++ 1.0581	0.8830 0.9770	0.9627 0.8745	1.0704	0.9990	Ave		0.9749				7.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.1135	0.9265 1.0041	1.0131 0.9246	1.1414	1.0683	Ave		1.0273				8.3		30.0			
sec-Butylbenzene	+++++ 1.5820	1.3297 1.4206	1.4733 1.3078	1.6452	1.5273	Ave		1.4694				8.6		30.0			
4-Isopropyltoluene	+++++ 1.2739	1.0891 1.1611	1.2127 1.1369	1.3800	1.2897	Ave		1.2205				8.3		30.0			
1,3-Dichlorobenzene	+++++ 0.7995	0.5939 0.7183	0.7112 0.6563	0.7997	0.7578	Ave		0.7195				10.5		30.0			
1,4-Dichlorobenzene	+++++ 0.7930	0.5888 0.7047	0.7128 0.6682	0.7845	0.7461	Ave		0.7140				9.9		30.0			
Benzyl chloride	+++++ 0.8889	0.6301 0.7621	0.6991 0.7646	0.8989	0.9632	Ave		0.8010				15.0		30.0			
n-Butylbenzene	+++++ 1.1243	0.9977 1.0640	1.1363 1.0646	1.2831	1.1730	Ave		1.1204				8.2		30.0			
n-Undecane	+++++ 0.5820	+++++ 0.5580	+++++ 0.5696	0.6400	0.5274	Ave		0.5754				7.2		30.0			
1,2-Dichlorobenzene	+++++ 0.7234	0.5647 0.6454	0.6798 0.6314	0.7406	0.7036	Ave		0.6698				9.1		30.0			
n-Dodecane	+++++ 0.4439	+++++ 0.3926	+++++ 0.3842	0.4243	0.4179	Ave		0.4126				5.9		30.0			
1,2,4-Trichlorobenzene	+++++ 0.5661	+++++ 0.5093	0.4717 0.5684	0.4507	0.4972	Ave		0.5106				9.5		30.0			
Hexachlorobutadiene	+++++ 0.5078	0.3858 0.4975	0.4443 0.4942	0.4498	0.4335	Ave		0.4590				9.5		30.0			
Naphthalene	+++++ 1.2604	+++++ 1.0540	1.0776 1.1951	0.9074	1.1290	Ave		1.1039				11.1		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5129	+++++ 0.4608	0.4254 0.4799	0.4018	0.4556	Ave		0.4561				8.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-121534/3	27150_03.D
Level 2	IC 200-121534/4	27150_04.D
Level 3	IC 200-121534/6	27150_06.D
Level 4	IC 200-121534/8	27150_08.D
Level 5	ICIS 200-121534/9	27150_09.D
Level 6	IC 200-121534/10	27150_10.D
Level 7	IC 200-121534/11	27150_11.D
Level 8	IC 200-121534/12	27150_12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 152043	+++++ 196746	+++++ 370063	55278	99940	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 640991	+++++ 825834	21330 1517912	226907	421057	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 346022	+++++ 446296	12035 844677	123597	227660	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 639620	7698 822547	21170 1502973	225798	417590	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 200734	+++++ 256758	6985 489116	70405	130378	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 313343	+++++ 403846	11266 753165	112158	206454	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	441 245641	2889 316957	8385 593564	86281	160938	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	335 176307	2223 228428	6044 427630	61926	114370	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 231313	2786 299041	7799 545734	82118	152428	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 120526	+++++ 155509	4056 286228	42510	77849	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 215742	3609 278054	8298 511362	77305	141332	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 264296	3067 340945	8580 636544	90779	170102	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 683509	8323 882804	22199 1661122	236918	441332	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 359419	+++++ 461404	13109 865518	128549	235637	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 144454	+++++ 247589	45115 560665	82602	115804	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 163624	1809 210565	5420 396587	57273	105399	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 507734	5911 654303	16570 1216246	176421	329025	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 70310	+++++ 87908	+++++ 172281	23347	52434	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 245160	2849 316555	7944 595133	84182	158398	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 310610	+++++ 400812	+++++ 748970	113811	194326	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 669452	+++++ 862763	22397 1622601	236072	436008	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 378426	+++++ 491071	+++++ 920704	132301	233274	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 229526	3081 293643	7872 555522	77906	172682	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 153102	+++++ 204817	+++++ 386379	56498	96599	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 246549	+++++ 316654	8607 599015	86160	160173	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 540139	+++++ 703458	+++++ 1330947	185782	329085	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 725058	8812 936044	24124 1769892	252203	465708	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 352022	4232 454107	11771 854372	123294	229894	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 171768	+++++ 219539	5597 421914	59102	109596	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 360803	4763 463829	12645 876267	126515	234924	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	983 458601	5642 591612	15327 1124337	161097	297546	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 557217	+++++ 718666	+++++ 1381285	193637	360383	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 297135	3573 387029	9640 735998	101081	189884	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 139808	+++++ 182081	5145 347793	47969	86915	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 21905	+++++ 28906	+++++ 55033	7412	13629	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 262061	+++++ 337598	+++++ 642926	92316	169706	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 584338	7089 760944	19101 1455862	197929	373013	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 384923	4818 504722	12539 962127	130360	244447	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 609073	7319 802703	19435 1542639	204001	385134	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1160 621373	7080 837286	18952 1652359	207667	404113	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1303661	16216 1702842	43322 3272234	444338	835454	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 877911	11495 1153319	29606 2216122	299238	559720	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 362013	4471 476770	11575 926525	121790	230123	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 432398	5904 565389	14709 1087632	147857	275842	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 161136	+++++ 212995	+++++ 423804	53139	91337	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	750 388227	4704 519027	12265 1027671	127188	242898	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 297447	3467 394885	9618 778924	98801	188348	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 300228	+++++ 399702	9477 794232	96127	184498	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 194299	+++++ 262168	+++++ 502713	64254	109199	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 395857	4568 531542	11680 1086278	125677	238992	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 629527	7011 834923	18788 1646716	205573	396569	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 469294	5425 624799	14174 1241233	152022	294019	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 572626	+++++ 751808	19845 1469274	189844	351453	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 633642	7597 841485	19899 1647075	207388	398308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 596125	7517 783241	19140 1498236	200095	378404	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 483199	6245 660290	19264 1289269	157495	304496	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 312823	3674 417712	9715 825435	102899	196189	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1175 559176	6445 754693	16858 1511324	176789	343964	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 560095	+++++ 734916	24915 1441503	185422	333728	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 652606	6887 863554	18541 1689780	207848	428160	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 608335	6483 809127	17818 1614071	197211	378087	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 884801	10395 1170094	27744 2331506	289167	550366	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1435427	16893 1901986	44435 3720705	472370	901417	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 610766	7338 804962	18853 1574252	201437	382415	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1156635	13079 1523573	34494 2947968	374463	724267	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 561098	6495 750358	16958 1468217	181532	349695	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 901605	8919 1178513	24939 2334736	286792	558522	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 574482	5312 735245	15848 1364361	184538	429746	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1656380	18657 2190210	48341 4224875	533434	1034375	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 827061	9361 1093124	25230 2067043	269649	517620	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2016567	22647 2658838	60014 4952999	658437	1264375	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 647036	+++++ 853057	20914 1627553	210091	403283	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 786256	+++++ 970515	23481 1747439	264451	510870	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 1716200	18464 2191042	49605 3685332	556736	1082376	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1432266	16026 1848939	42671 3230602	465533	904451	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1407336	15380 1792754	40829 3294054	455797	882875	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 712447	6597 896651	18443 1688243	222496	438115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1330235	14768 1676368	38882 3106280	431542	835444	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40322-1 Analy Batch No.: 121534

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/28/2017 17:49 Calibration End Date: 09/29/2017 01:23 Calibration ID: 38110

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1399920	15495 1722909	40917 3284247	460151	893384	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 1988878	22239 2437487	59505 4645391	663265	1277301	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1601524	18215 1992257	48979 4038242	556349	1078545	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1005184	9932 1232584	28724 2331193	322415	633774	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 996986	9847 1209204	28790 2373655	316274	623983	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1117461	10538 1307734	28236 2715785	362411	805546	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 1413415	16686 1825674	45893 3781596	517301	981006	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 731648	+++++ 957538	+++++ 2023335	258021	441048	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 909497	9445 1107423	27456 2242638	298557	588444	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 558016	+++++ 673586	+++++ 1364885	171074	349495	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 711722	+++++ 873810	19053 2019054	181706	415771	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 638395	6453 853674	17947 1755332	181332	362506	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1584572	+++++ 1808540	43523 4245044	365812	944220	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 644759	+++++ 790679	17183 1704787	161975	381043	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-121363/6	200-27085-006.D
Level 2	IC 200-121363/8	200-27085-008.D
Level 3	IC 200-121363/9	200-27085-009.D
Level 4	IC 200-121363/11	200-27085-011.D
Level 5	ICIS 200-121363/12	200-27085-012.D
Level 6	IC 200-121363/13	200-27085-013.D
Level 7	IC 200-121363/14	200-27085-014.D
Level 8	IC 200-121363/15	200-27085-015.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.3379	+++++ 0.3296	+++++ 0.3041	0.3684	0.3349	Ave		0.3350				6.8		30.0			
Dichlorodifluoromethane	+++++ 2.3719	+++++ 2.2724	2.6521 2.0332	2.6555	2.3775	Ave		2.3938				9.9		30.0			
Freon 22	+++++ 0.9581	+++++ 0.9126	1.1054 0.8408	1.0538	0.9600	Ave		0.9718				9.8		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8120	1.9832 1.7266	2.1132 1.5195	2.0662	1.8260	Ave		1.8638				11.1		30.0			
Chloromethane	+++++ 0.4568	+++++ 0.4379	0.5427 0.4125	0.5098	0.4526	Ave		0.4687				10.3		30.0			
n-Butane	+++++ 0.6204	+++++ 0.5883	0.7636 0.5391	0.6931	0.6073	Ave		0.6353				12.6		30.0			
Vinyl chloride	0.6490 0.5762	0.5826 0.5507	0.6450 0.5049	0.6189	0.5584	Ave		0.5857				8.5		30.0			
1,3-Butadiene	0.3753 0.3704	0.3901 0.3509	0.4125 0.3248	0.3979	0.3590	Ave		0.3726				7.5		30.0			
Bromomethane	+++++ 0.7200	0.7179 0.6702	0.7593 0.6245	0.7555	0.6797	Ave		0.7039				6.9		30.0			
Chloroethane	+++++ 0.2258	+++++ 0.2099	0.2294 0.1974	0.2345	0.2128	Ave		0.2183				6.4		30.0			
Isopentane	+++++ 0.3801	0.4603 0.3522	0.4937 0.3282	0.4079	0.3670	Ave		0.3985				15.0		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.7622	0.7500 0.6996	0.7771 0.6610	0.7923	0.7229	Ave		0.7379				6.3		30.0			
Trichlorofluoromethane	+++++ 2.1810	2.2302 2.0036	2.3767 1.8349	2.3241	2.0905	Ave		2.1487				8.8		30.0			
n-Pentane	+++++ 0.6071	+++++ 0.5619	0.6916 0.5235	0.6564	0.5740	Ave		0.6024				10.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.1696	+++++ 0.1371	0.2026 0.1324	0.1929	0.1700	Ave		0.1674				17.0		30.0			
Ethyl ether	+++++ 0.2826	0.2665 0.2691	0.2954 0.2556	0.3098	0.2788	Ave		0.2797				6.6		30.0			
Freon TF	+++++ 1.4517	1.5072 1.3801	1.6062 1.2526	1.6000	1.4314	Ave		1.4613				8.5		30.0			
Acrolein	+++++ 0.0969	+++++ 0.0905	+++++ 0.0873	0.1019	0.1115	Ave		0.0976				9.8		30.0			
1,1-Dichloroethene	+++++ 0.6327	0.6871 0.6153	0.7535 0.5734	0.6763	0.6182	Ave		0.6509				9.1		30.0			
Acetone	+++++ 0.6123	+++++ 0.5999	+++++ 0.5526	0.6896	0.5913	Ave		0.6091				8.2		30.0			
Carbon disulfide	+++++ 1.5815	+++++ 1.5313	1.7524 1.4299	1.7219	1.5556	Ave		1.5954				7.6		30.0			
Isopropyl alcohol	+++++ 0.6615	+++++ 0.5951	+++++ 0.5676	0.7155	0.6226	Ave		0.6325				9.2		30.0			
3-Chloropropene	+++++ 0.4281	0.4818 0.4128	0.4550 0.3842	0.4506	0.4853	Ave		0.4426				8.3		30.0			
Acetonitrile	+++++ 0.2216	+++++ 0.2269	+++++ 0.2160	0.2396	0.2135	Ave		0.2235				4.6		30.0			
Methylene Chloride	+++++ 0.5379	+++++ 0.5199	0.5962 0.4793	0.5882	0.5317	Ave		0.5422				8.1		30.0			
tert-Butyl alcohol	+++++ 1.0461	+++++ 0.9480	+++++ 0.9131	1.1152	0.9853	Ave		1.0015				8.0		30.0			
Methyl tert-butyl ether	+++++ 1.5366	1.6869 1.4852	1.6905 1.3602	1.6880	1.5177	Ave		1.5664				8.1		30.0			
trans-1,2-Dichloroethene	+++++ 0.7597	0.7891 0.7297	0.8751 0.6639	0.8446	0.7587	Ave		0.7744				9.1		30.0			
Acrylonitrile	+++++ 0.2630	+++++ 0.2581	0.2541 0.2494	0.2630	0.2530	Ave		0.2568				2.2		30.0			
n-Hexane	+++++ 0.6251	0.6828 0.6048	0.7111 0.5592	0.6807	0.6199	Ave		0.6405				8.3		30.0			
1,1-Dichloroethane	1.0981 1.0446	1.0462 1.0131	1.1174 0.9371	1.1402	1.0303	Ave		1.0534				6.2		30.0			
Vinyl acetate	+++++ 0.9393	+++++ 0.9127	+++++ 0.8586	1.0174	0.9288	Ave		0.9314				6.1		30.0			
cis-1,2-Dichloroethene	+++++ 0.7870	0.8245 0.7648	0.8507 0.7148	0.8360	0.7696	Ave		0.7925				6.0		30.0			
Methyl Ethyl Ketone	+++++ 0.2448	+++++ 0.2369	0.2739 0.2177	0.2640	0.2385	Ave		0.2460				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0367	+++++ 0.0357	+++++ 0.0329	0.0404	0.0361	Ave		0.0364				7.4		30.0			
Tetrahydrofuran	+++++ 0.0754	+++++ 0.0725	+++++ 0.0683	0.0849	0.0786	Ave		0.0759				8.3		30.0			
Chloroform	+++++ 1.8226	1.8452 1.7527	1.9884 1.6126	2.0071	1.8019	Ave		1.8329				7.4		30.0			
Cyclohexane	+++++ 0.1507	0.1715 0.1443	0.1699 0.1335	0.1700	0.1557	Ave		0.1565				9.4		30.0			
1,1,1-Trichloroethane	+++++ 0.3584	0.3919 0.3449	0.4029 0.3178	0.4062	0.3726	Ave		0.3707				8.8		30.0			
Carbon tetrachloride	0.4014 0.4216	0.4051 0.4126	0.4283 0.3913	0.4662	0.4454	Ave		0.4215				5.9		30.0			
2,2,4-Trimethylpentane	+++++ 0.5139	0.5832 0.4927	0.5887 0.4488	0.5896	0.5398	Ave		0.5367				10.2		30.0			
Benzene	+++++ 0.4153	0.4817 0.3944	0.4785 0.3636	0.4613	0.4250	Ave		0.4314				10.3		30.0			
1,2-Dichloroethane	+++++ 0.2322	0.2292 0.2232	0.2465 0.2131	0.2503	0.2320	Ave		0.2324				5.5		30.0			
n-Heptane	+++++ 0.1814	0.2219 0.1720	0.2074 0.1561	0.2072	0.1906	Ave		0.1910				12.0		30.0			
n-Butanol	+++++ 0.0703	+++++ 0.0623	+++++ 0.0588	0.0731	0.0679	Ave		0.0665				8.8		30.0			
Trichloroethene	0.3844 0.2765	0.3010 0.2630	0.3101 0.2380	0.3162	0.2886	Ave		0.2972				14.7		30.0			
1,2-Dichloropropane	+++++ 0.1824	0.2007 0.1749	0.2039 0.1630	0.2020	0.1859	Ave		0.1875				8.3		30.0			
Methyl methacrylate	+++++ 0.1491	+++++ 0.1446	0.1408 0.1357	0.1619	0.1543	Ave		0.1477				6.4		30.0			
Dibromomethane	+++++ 0.3190	0.3279 0.3039	0.3348 0.2821	0.3463	0.3168	Ave		0.3187				6.6		30.0			
1,4-Dioxane	+++++ 0.1023	+++++ 0.0902	+++++ 0.0796	0.1161	0.1013	Ave		0.0979				14.1		30.0			
Bromodichloromethane	+++++ 0.4687	0.4551 0.4483	0.4778 0.4150	0.5148	0.4868	Ave		0.4667				6.8		30.0			
cis-1,3-Dichloropropene	+++++ 0.3159	0.2974 0.3048	0.3077 0.2863	0.3378	0.3157	Ave		0.3094				5.3		30.0			
methyl isobutyl ketone	+++++ 0.2573	+++++ 0.2475	0.2591 0.2284	0.2859	0.2697	Ave		0.2580				7.6		30.0			
Toluene	+++++ 0.4352	0.4610 0.4136	0.4892 0.3679	0.4879	0.4357	Ave		0.4415				9.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.2740	0.3018 0.2570	0.3184 0.2210	0.3277	0.2937	Ave		0.2848				13.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.3204	0.3290 0.2939	0.3650 0.2897	0.3422	0.3306	Ave		0.3244				8.1		30.0			
1,1,2-Trichloroethane	+++++ 0.2294	0.2325 0.2172	0.2502 0.1966	0.2570	0.2285	Ave		0.2302				8.7		30.0			
Tetrachloroethene	0.5165 0.5103	0.4938 0.4887	0.5343 0.4409	0.5567	0.5029	Ave		0.5055				6.8		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.2767	+++++ 0.2650	0.3295 0.2448	0.3048	0.2817	Ave		0.2838				10.5		30.0			
Dibromochloromethane	+++++ 0.6280	0.5220 0.5934	0.5702 0.5335	0.6601	0.6437	Ave		0.5930				9.1		30.0			
1,2-Dibromoethane	+++++ 0.4926	0.4361 0.4716	0.4707 0.4370	0.5308	0.4830	Ave		0.4745				6.9		30.0			
Chlorobenzene	+++++ 0.6500	0.6243 0.6245	0.6695 0.5801	0.7128	0.6447	Ave		0.6437				6.4		30.0			
Ethylbenzene	+++++ 0.9135	0.9190 0.8697	0.9615 0.7833	1.0230	0.9193	Ave		0.9128				8.2		30.0			
n-Nonane	+++++ 0.3251	0.3307 0.3059	0.3646 0.2666	0.3772	0.3319	Ave		0.3289				11.1		30.0			
m,p-Xylene	+++++ 0.3730	0.4040 0.3500	0.4157 0.3026	0.4306	0.3796	Ave		0.3794				11.5		30.0			
Xylene, o-	+++++ 0.4019	0.3973 0.3827	0.4268 0.3460	0.4438	0.4032	Ave		0.4002				7.8		30.0			
Styrene	+++++ 0.5820	0.4799 0.5543	0.4992 0.5139	0.6268	0.5800	Ave		0.5480				9.6		30.0			
Bromoform	+++++ 0.5338	0.4399 0.4898	0.4500 0.4281	0.5771	0.6476	Ave		0.5095				16.0		30.0			
Cumene	+++++ 1.0560	1.0430 1.0057	1.1096 0.8964	1.1814	1.0686	Ave		1.0515				8.4		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.5365	0.5334 0.5028	0.5717 0.4367	0.6096	0.5476	Ave		0.5340				10.2		30.0			
n-Propylbenzene	+++++ 1.1670	1.0948 1.0945	1.2238 0.9406	1.3244	1.1904	Ave		1.1479				10.5		30.0			
1,2,3-Trichloropropane	+++++ 0.4050	+++++ 0.3814	0.4518 0.3297	0.4628	0.4143	Ave		0.4075				11.9		30.0			
n-Decane	+++++ 0.3037	+++++ 0.2673	0.3603 0.2042	0.4048	0.3370	Ave		0.3129				22.7		30.0			
2-Chlorotoluene	+++++ 0.7300	0.8364 0.6533	0.8958 0.5152	0.9139	0.7799	Ave		0.7606				18.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Ethyltoluene	+++++ 0.8794	0.8075 0.7960	1.0113 0.6326	1.0789	0.9332	Ave		0.8770				17.0		30.0			
1,3,5-Trimethylbenzene	+++++ 0.8738	0.7339 0.8261	0.8749 0.7246	0.9659	0.8755	Ave		0.8392				10.2		30.0			
Alpha Methyl Styrene	+++++ 0.4708	0.3190 0.4500	0.3803 0.4114	0.4994	0.4690	Ave		0.4286				14.6		30.0			
tert-Butylbenzene	+++++ 0.8323	0.7916 0.7900	0.8629 0.6870	0.9324	0.8412	Ave		0.8196				9.2		30.0			
1,2,4-Trimethylbenzene	+++++ 0.8515	0.7164 0.8045	0.8356 0.7011	0.9530	0.8564	Ave		0.8169				10.6		30.0			
sec-Butylbenzene	+++++ 1.1826	1.0428 1.1121	1.2278 0.9459	1.3562	1.2031	Ave		1.1529				11.6		30.0			
4-Isopropyltoluene	+++++ 0.9805	0.7683 0.9084	0.9893 0.7315	1.1389	1.0104	Ave		0.9325				15.3		30.0			
1,3-Dichlorobenzene	+++++ 0.6654	0.5266 0.6142	0.6599 0.5093	0.7496	0.6775	Ave		0.6289				13.6		30.0			
1,4-Dichlorobenzene	+++++ 0.7096	0.5314 0.6619	0.6276 0.5943	0.7554	0.7019	Ave		0.6546				11.7		30.0			
Benzyl chloride	+++++ 0.7360	0.5117 0.6776	0.4850 0.6303	0.7509	0.7810	Ave		0.6532				17.9		30.0			
n-Butylbenzene	+++++ 0.8401	0.6315 0.7767	0.6584 0.6468	0.9575	0.8632	Ave		0.7677				16.4		30.0			
n-Undecane	+++++ 0.3382	+++++ 0.3103	+++++ 0.2527	0.3903	0.3493	Ave		0.3282				15.6		30.0			
1,2-Dichlorobenzene	+++++ 0.6605	0.5057 0.6251	0.5991 0.5607	0.7089	0.6569	Ave		0.6167				11.1		30.0			
n-Dodecane	+++++ 0.2477	+++++ 0.2304	+++++ 0.2037	0.3249	0.2707	Ave		0.2555				18.0		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4231	+++++ 0.3997	0.3099 0.4125	0.4174	0.3845	Ave		0.3912				10.8		30.0			
Hexachlorobutadiene	+++++ 0.4132	0.3988 0.3978	0.3950 0.3231	0.4435	0.4128	Ave		0.3977				9.3		30.0			
Naphthalene	+++++ 0.7992	+++++ 0.7216	0.5812 0.7993	0.7381	0.7315	Ave		0.7285				11.0		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3480	+++++ 0.3333	0.2670 0.3516	0.3570	0.3224	Ave		0.3299				10.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-121363/6	200-27085-006.D
Level 2	IC 200-121363/8	200-27085-008.D
Level 3	IC 200-121363/9	200-27085-009.D
Level 4	IC 200-121363/11	200-27085-011.D
Level 5	ICIS 200-121363/12	200-27085-012.D
Level 6	IC 200-121363/13	200-27085-013.D
Level 7	IC 200-121363/14	200-27085-014.D
Level 8	IC 200-121363/15	200-27085-015.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 213789	+++++ 286229	+++++ 536771	77239	138912	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1500701	+++++ 1973235	55387 3588432	556767	986267	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 606154	+++++ 792503	23086 1484043	220950	398239	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1146433	16410 1499263	44131 2681762	433196	757500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 289013	+++++ 380281	11333 728078	106896	187739	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 392491	+++++ 510853	15947 951455	145323	251918	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1029 364548	4821 478199	13470 891049	129754	231645	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	595 234358	3228 304738	8615 573233	83419	148945	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 455560	5940 581979	15858 1102272	158397	281953	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 142846	+++++ 182259	4790 348404	49175	88296	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 240509	3809 305816	10311 579178	85521	152262	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 482254	6206 607519	16228 1166690	166113	299905	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1379923	18454 1739877	49634 3238558	487267	867239	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 384123	+++++ 487905	14444 923995	137617	238105	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 143410	+++++ 238198	42371 584236	80926	105826	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 178775	2205 233682	6170 451035	64961	115677	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 918461	12471 1198382	33543 2210807	335467	593819	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 61288	+++++ 78561	+++++ 154114	21371	46242	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 400301	5685 534294	15736 1011936	141805	256454	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 387385	+++++ 520949	+++++ 975312	144577	245292	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1000573	+++++ 1329717	36596 2523758	361011	645327	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 418541	+++++ 516782	+++++ 1001789	150019	258269	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 270886	3987 358469	9503 678047	94478	201312	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 140182	+++++ 197042	+++++ 381293	50233	88575	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 340299	+++++ 451487	12450 845858	123329	220574	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 661863	+++++ 823167	+++++ 1611557	233823	408739	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 972205	13958 1289696	35304 2400668	353911	629612	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 480641	6529 633612	18276 1171801	177083	314739	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 166417	+++++ 224159	5307 440146	55135	104943	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 395522	5650 525205	14851 986927	142721	257151	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1741 660913	8657 879707	23336 1654006	239061	427419	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 594280	+++++ 792540	+++++ 1515438	213307	385319	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 497918	6822 664140	17765 1261603	175284	319242	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 154882	+++++ 205676	5721 384240	55352	98949	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 23239	+++++ 31036	+++++ 58076	8480	14994	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 291026	+++++ 383764	+++++ 721982	105348	189457	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1153174	15268 1521954	41526 2846136	420819	747515	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 581801	8176 763435	21300 1411406	211094	375348	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1383222	18685 1824859	50513 3361241	504333	898438	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	3332 1627214	19316 2182871	53700 4138133	578817	1074063	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1983600	27806 2606627	73809 4746442	731932	1301597	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1602778	22968 2086603	59989 3845134	572623	1024808	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 896177	10928 1180846	30905 2253510	310708	559410	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 700210	10583 909895	26005 1650439	257255	459585	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 271298	+++++ 329368	+++++ 621889	90739	163764	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	3191 1067278	14354 1391505	38874 2517103	392507	696007	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 704157	9568 925365	25561 1723323	250746	448373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 575389	+++++ 765054	17658 1435519	200948	372071	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1231388	15633 1607625	41969 2983171	429903	763987	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 394935	+++++ 476992	+++++ 841346	144124	244285	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1808974	21700 2371602	59907 4388654	639142	1173929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1219328	14182 1612545	38573 3027731	419322	761356	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 993116	+++++ 1309343	32487 2415912	354973	650415	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1502182	20260 1960061	54616 3531126	543280	972885	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1057601	14389 1359796	39918 2336724	406803	708145	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1236449	15686 1554801	45763 3063323	424795	797312	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 791845	10218 1029237	27941 1886813	286177	510301	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	4095 1761594	21700 2315734	59654 4231681	619885	1122879	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 955169	+++++ 1255889	36791 2349589	339378	629117	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2167526	22941 2811970	63664 5120240	735022	1437427	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1700377	19166 2234531	52557 4193683	591096	1078461	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2243742	27436 2959270	74752 5567576	793766	1439476	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3153132	40388 4121083	107352 7517017	1139184	2052703	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1122083	14531 1449523	40705 2558295	420084	741222	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2575226	35512 3317039	92836 5808692	959017	1695105	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1387359	17458 1813462	47650 3320072	494248	900210	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2008852	21092 2626585	55742 4931605	698034	1295148	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1842481	19331 2320762	50243 4108280	642603	1446064	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3644944	45836 4765677	123893 8602720	1315533	2386040	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1851821	23439 2382496	63829 4191142	678794	1222772	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4028344	48111 5186285	136648 9026485	1474800	2658113	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1398065	+++++ 1807481	50445 3164102	515318	925052	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1048396	+++++ 1266462	40225 1959825	450767	752579	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2519747	36755 3095740	100017 4943809	1017686	1741403	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3035631	35486 3771724	112920 6071210	1201462	2083763	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3016144	32252 3914284	97683 6953915	1075543	1954999	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1625217	14017 2132188	42460 3948545	556092	1047270	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2873051	34787 3743259	96349 6593402	1038263	1878256	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40420-1 Analy Batch No.: 121363

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2017 20:02 Calibration End Date: 09/26/2017 03:37 Calibration ID: 38097

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2938995	31485 3811953	93295 6728783	1061180	1912271	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4081893	45827 5269713	137089 9077592	1510178	2686459	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3384481	33765 4304561	110465 7020126	1268259	2256186	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2296910	23143 2910473	73684 4887302	834730	1512865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2449515	23352 3136266	70074 5703865	841149	1567279	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2540465	22489 3210787	54154 6049262	836221	1743836	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2899704	27754 3680313	73508 6207624	1066189	1927509	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1167485	+++++ 1470548	+++++ 2425558	434661	779922	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2279914	22223 2962199	66896 5381322	789423	1466918	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 855105	+++++ 1091880	+++++ 1955130	361837	604447	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1460514	+++++ 1894077	34607 3958384	464798	858479	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1426262	17526 1884835	44109 3100870	493842	921764	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2758578	+++++ 3419361	64895 7670746	821957	1633370	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1201076	+++++ 1579379	29807 3373776	397533	719801	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-121987/4	27339-04.D
Level 2	IC 200-121987/5	27339-05.D
Level 3	IC 200-121987/7	27339-07.D
Level 4	IC 200-121987/9	27339-09.D
Level 5	ICIS 200-121987/10	27339-10.D
Level 6	IC 200-121987/11	27339-11.D
Level 7	IC 200-121987/12	27339-12.D
Level 8	IC 200-121987/13	27339-13.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.3925	+++++ 0.3601	+++++ 0.3206	0.5060	0.3899	Ave		0.3938				17.5		30.0			
Dichlorodifluoromethane	+++++ 1.6495	+++++ 1.5656	1.8855 1.3930	2.0239	1.6138	Ave		1.6885				13.5		30.0			
Freon 22	+++++ 0.8408	+++++ 0.7857	0.9809 0.6998	1.0481	0.8197	Ave		0.8625				15.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.8046	1.6508 1.7187	1.9705 1.5203	2.1618	1.7312	Ave		1.7940				11.9		30.0			
Chloromethane	+++++ 0.5519	+++++ 0.5119	0.6505 0.4644	0.6796	0.5326	Ave		0.5652				14.7		30.0			
n-Butane	+++++ 0.9233	+++++ 0.8530	1.1477 0.7570	1.1759	0.9150	Ave		0.9620				17.3		30.0			
Vinyl chloride	0.6402 0.7384	0.6925 0.7008	0.7979 0.6250	0.8885	0.7067	Ave		0.7238				11.8		30.0			
1,3-Butadiene	0.5413 0.5408	0.5348 0.5129	0.6002 0.4556	0.6673	0.5277	Ave		0.5476				11.4		30.0			
Bromomethane	+++++ 0.8913	0.8342 0.8668	0.9167 0.7875	1.0250	0.8369	Ave		0.8798				8.7		30.0			
Chloroethane	+++++ 0.4876	+++++ 0.4611	0.5181 0.4176	0.5572	0.4590	Ave		0.4834				10.2		30.0			
Isopentane	+++++ 0.8740	1.0136 0.8161	1.0692 0.7262	1.1002	0.8589	Ave		0.9226				15.2		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.9893	0.8977 0.9710	1.0030 0.8931	1.1163	0.9178	Ave		0.9698				8.1		30.0			
Trichlorofluoromethane	+++++ 2.0058	1.8674 1.9291	2.1168 1.7483	2.3574	1.8906	Ave		1.9879				10.0		30.0			
n-Pentane	+++++ 1.3630	+++++ 1.2797	1.7431 1.1413	1.7218	1.3540	Ave		1.4338				17.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4086	+++++ 0.3616	0.5485 0.3076	0.5099	0.4171	Ave		0.4255				21.2		30.0			
Ethyl ether	+++++ 0.6154	0.5886 0.5843	0.6681 0.5256	0.7305	0.5812	Ave		0.6134				10.9		30.0			
Acrolein	+++++ 0.2921	+++++ 0.2822	+++++ 0.2544	0.3409	0.2508	Ave		0.2841				12.8		30.0			
Freon TF	+++++ 1.8433	1.7276 1.7996	1.9678 1.6347	2.1418	1.7230	Ave		1.8340				9.4		30.0			
1,1-Dichloroethene	+++++ 0.9372	0.9210 0.9135	1.0026 0.8379	1.0766	0.8689	Ave		0.9368				8.6		30.0			
Acetone	+++++ 1.0725	+++++ 0.9919	+++++ 0.8845	1.3926	1.1196	Ave		1.0922				17.4		30.0			
Isopropyl alcohol	+++++ 1.3073	+++++ 1.2233	+++++ 1.0814	1.6902	1.2837	Ave		1.3172				17.2		30.0			
Carbon disulfide	+++++ 2.4643	+++++ 2.3752	2.6719 2.1479	2.8932	2.3251	Ave		2.4796				10.7		30.0			
3-Chloropropene	+++++ 1.0496	1.0331 1.0084	1.0572 0.8899	1.3280	1.0479	Ave		1.0591				12.5		30.0			
Acetonitrile	+++++ 0.6666	+++++ 0.5959	+++++ 0.5446	0.8174	0.6324	Ave		0.6514				15.8		30.0			
Methylene Chloride	+++++ 0.8791	+++++ 0.8252	1.0145 0.7464	1.0858	0.8478	Ave		0.8998				14.1		30.0			
tert-Butyl alcohol	+++++ 1.8184	+++++ 1.7204	+++++ 1.5414	2.2639	1.7476	Ave		1.8183				14.8		30.0			
Methyl tert-butyl ether	+++++ 2.5601	2.4650 2.4535	2.7710 2.2136	3.0254	2.4275	Ave		2.5594				10.3		30.0			
trans-1,2-Dichloroethene	+++++ 1.2152	1.1875 1.1583	1.2748 1.0546	1.4668	1.1576	Ave		1.2164				10.6		30.0			
Acrylonitrile	+++++ 0.6445	+++++ 0.6140	0.6919 0.5573	0.7777	0.6177	Ave		0.6505				11.7		30.0			
n-Hexane	+++++ 1.3949	1.6330 1.3236	1.6614 1.1972	1.6854	1.3444	Ave		1.4628				13.3		30.0			
1,1-Dichloroethane	1.6173 1.5963	1.5002 1.5205	1.7427 1.3781	1.9348	1.5186	Ave		1.6011				10.7		30.0			
Vinyl acetate	+++++ 2.0626	+++++ 1.9095	+++++ 1.7090	2.5663	1.9381	Ave		2.0371				15.8		30.0			
Methyl Ethyl Ketone	+++++ 0.5045	+++++ 0.4850	0.6253 0.4376	0.5956	0.4844	Ave		0.5221				13.9		30.0			
cis-1,2-Dichloroethene	+++++ 1.0900	1.0243 1.0632	1.1577 0.9686	1.2507	1.0209	Ave		1.0822				8.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0904	+++++ 0.0880	+++++ 0.0801	0.1028	0.0831	Ave		0.0889				9.9		30.0			
Tetrahydrofuran	+++++ 0.1984	+++++ 0.1851	+++++ 0.1702	0.2464	0.1913	Ave		0.1983				14.5		30.0			
Chloroform	+++++ 1.8272	1.7584 1.7477	1.9692 1.5866	2.1481	1.7278	Ave		1.8236				10.1		30.0			
1,1,1-Trichloroethane	+++++ 0.3622	0.3465 0.3517	0.3829 0.3271	0.4227	0.3417	Ave		0.3621				8.8		30.0			
Cyclohexane	+++++ 0.2887	0.2644 0.2825	0.3020 0.2663	0.3316	0.2692	Ave		0.2864				8.4		30.0			
Carbon tetrachloride	0.3462 0.3757	0.3170 0.3691	0.3565 0.3412	0.4291	0.3471	Ave		0.3602				9.2		30.0			
2,2,4-Trimethylpentane	+++++ 0.9726	0.9525 0.9235	1.0571 0.8587	1.1516	0.9188	Ave		0.9764				10.0		30.0			
Benzene	+++++ 0.6434	0.6484 0.6237	0.6982 0.5859	0.7393	0.6008	Ave		0.6485				8.3		30.0			
1,2-Dichloroethane	+++++ 0.2020	0.1903 0.1925	0.2186 0.1803	0.2422	0.1925	Ave		0.2026				10.4		30.0			
n-Heptane	+++++ 0.3311	0.3580 0.3126	0.3852 0.2871	0.4094	0.3245	Ave		0.3440				12.4		30.0			
n-Butanol	+++++ 0.1242	+++++ 0.1190	+++++ 0.1120	0.1577	0.1183	Ave		0.1262				14.4		30.0			
Trichloroethene	0.2739 0.2793	0.2480 0.2704	0.2956 0.2569	0.3164	0.2596	Ave		0.2750				8.1		30.0			
1,2-Dichloropropane	+++++ 0.2366	0.2217 0.2252	0.2397 0.2109	0.2773	0.2236	Ave		0.2336				9.2		30.0			
Methyl methacrylate	+++++ 0.2334	+++++ 0.2249	0.2474 0.2113	0.2700	0.2202	Ave		0.2345				9.1		30.0			
1,4-Dioxane	+++++ 0.1317	+++++ 0.1280	+++++ 0.1185	0.1619	0.1283	Ave		0.1337				12.3		30.0			
Dibromomethane	+++++ 0.3076	0.3034 0.3039	0.3165 0.2872	0.3346	0.2828	Ave		0.3052				5.7		30.0			
Bromodichloromethane	+++++ 0.4214	0.3832 0.4059	0.4235 0.3819	0.4900	0.3968	Ave		0.4147				8.9		30.0			
cis-1,3-Dichloropropene	+++++ 0.3529	0.3128 0.3400	0.3546 0.3202	0.4045	0.3302	Ave		0.3450				8.8		30.0			
methyl isobutyl ketone	+++++ 0.4232	+++++ 0.3956	0.4976 0.3664	0.5169	0.4094	Ave		0.4348				13.7		30.0			
n-Octane	+++++ 0.4639	0.4628 0.4297	0.5382 0.3813	0.5777	0.4542	Ave		0.4725				13.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.5608	0.5661 0.5545	0.6426 0.5199	0.6363	0.5386	Ave		0.5741				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.3359	0.2887 0.3239	0.3178 0.3032	0.3843	0.3144	Ave		0.3240				9.4		30.0			
1,1,2-Trichloroethane	+++++ 0.2680	0.2556 0.2626	0.2982 0.2496	0.3116	0.2605	Ave		0.2723				8.6		30.0			
Tetrachloroethene	0.5312 0.5113	0.4585 0.5141	0.5303 0.4961	0.5608	0.4865	Ave		0.5111				6.1		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4619	+++++ 0.4375	0.7313 0.4108	0.5675	0.4570	Ave		0.5110				23.6		30.0			
Dibromochloromethane	+++++ 0.5658	0.4820 0.5630	0.5481 0.5381	0.6383	0.5398	Ave		0.5536				8.4		30.0			
1,2-Dibromoethane	+++++ 0.5127	0.4575 0.5061	0.5293 0.4839	0.5754	0.4913	Ave		0.5080				7.4		30.0			
Chlorobenzene	+++++ 0.7834	0.7264 0.7797	0.8377 0.7429	0.8731	0.7484	Ave		0.7845				6.8		30.0			
Ethylbenzene	+++++ 1.2066	1.2266 1.1846	1.3383 1.1003	1.3679	1.1561	Ave		1.2258				7.8		30.0			
n-Nonane	+++++ 0.5457	0.5159 0.5206	0.6248 0.4752	0.6479	0.5383	Ave		0.5526				11.2		30.0			
m,p-Xylene	+++++ 0.5049	0.4684 0.4967	0.5251 0.4659	0.5592	0.4811	Ave		0.5002				6.7		30.0			
Xylene, o-	+++++ 0.4971	0.4825 0.4905	0.5380 0.4633	0.5547	0.4769	Ave		0.5004				6.7		30.0			
Styrene	+++++ 0.7884	0.6562 0.7780	0.7949 0.7392	0.8671	0.7500	Ave		0.7677				8.4		30.0			
Bromoform	+++++ 0.5806	0.4558 0.5908	0.4972 0.5634	0.6553	0.5562	Ave		0.5570				11.6		30.0			
Cumene	+++++ 1.3973	1.2880 1.3725	1.4819 1.2790	1.5770	1.3400	Ave		1.3908				7.7		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7113	0.6452 0.6937	0.7603 0.6295	0.8150	0.6921	Ave		0.7067				9.1		30.0			
n-Propylbenzene	+++++ 1.6516	1.4827 1.5930	1.7267 1.4144	1.8651	1.5951	Ave		1.6184				9.3		30.0			
1,2,3-Trichloropropane	+++++ 0.5094	+++++ 0.4929	0.5663 0.4405	0.5860	0.4947	Ave		0.5150				10.3		30.0			
n-Decane	+++++ 0.6744	+++++ 0.6275	0.7586 0.5892	0.8226	0.6811	Ave		0.6922				12.4		30.0			
4-Ethyltoluene	+++++ 1.3843	1.2273 1.3307	1.4453 1.2269	1.5441	1.3322	Ave		1.3559				8.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.0831	0.9924 1.0562	1.1528 0.9874	1.2178	1.0454	Ave		1.0764				7.8		30.0			
1,3,5-Trimethylbenzene	+++++ 1.1296	1.0292 1.0522	1.1843 1.0305	1.2790	1.0927	Ave		1.1139				8.3		30.0			
Alpha Methyl Styrene	+++++ 0.6003	0.4763 0.5723	0.5894 0.5606	0.6582	0.5699	Ave		0.5753				9.5		30.0			
tert-Butylbenzene	+++++ 1.1009	1.0290 1.0494	1.1831 1.0074	1.2755	1.0783	Ave		1.1034				8.6		30.0			
1,2,4-Trimethylbenzene	+++++ 1.0960	1.0071 1.0389	1.1761 1.0178	1.2667	1.0895	Ave		1.0989				8.5		30.0			
sec-Butylbenzene	+++++ 1.6279	1.5842 1.5618	1.8266 1.5086	1.9375	1.6372	Ave		1.6691				9.3		30.0			
4-Isopropyltoluene	+++++ 1.3327	1.2694 1.3355	1.4997 1.3291	1.6181	1.3768	Ave		1.3945				8.7		30.0			
1,3-Dichlorobenzene	+++++ 0.8017	0.6569 0.7646	0.8155 0.7717	0.8839	0.7906	Ave		0.7836				8.7		30.0			
1,4-Dichlorobenzene	+++++ 0.7825	0.6452 0.7488	0.8019 0.7752	0.8697	0.7837	Ave		0.7725				8.7		30.0			
Benzyl chloride	+++++ 0.8545	0.6779 0.8189	0.6500 0.8254	1.0017	0.8236	Ave		0.8074				14.5		30.0			
n-Undecane	+++++ 0.6918	+++++ 0.6769	+++++ 0.6303	0.8028	0.6321	Ave		0.6868				10.2		30.0			
n-Butylbenzene	+++++ 1.1281	0.9959 1.1432	1.2560 1.1138	1.3874	1.1644	Ave		1.1698				10.5		30.0			
1,2-Dichlorobenzene	+++++ 0.7229	0.6455 0.7041	0.7655 0.7260	0.8360	0.7367	Ave		0.7338				7.9		30.0			
n-Dodecane	+++++ 0.3500	+++++ 0.3597	+++++ 0.3318	0.3101	0.2653	Ave		0.3234				11.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3745	+++++ 0.4051	0.1447 0.4576	0.2607	0.3464	Ave		0.3315				33.9	*	30.0			
Hexachlorobutadiene	+++++ 0.4844	0.4011 0.4970	0.5078 0.4713	0.5139	0.4643	Ave		0.4771				8.0		30.0			
Naphthalene	+++++ 0.7609	+++++ 0.8160	0.2631 0.9366	0.4788	0.6851	Ave		0.6567				37.4	*	30.0			
1,2,3-Trichlorobenzene	+++++ 0.2365	+++++ 0.2743	0.0682 0.3193	0.1453	0.2425	Ave		0.2144				42.8	*	30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-121987/4	27339-04.D
Level 2	IC 200-121987/5	27339-05.D
Level 3	IC 200-121987/7	27339-07.D
Level 4	IC 200-121987/9	27339-09.D
Level 5	ICIS 200-121987/10	27339-10.D
Level 6	IC 200-121987/11	27339-11.D
Level 7	IC 200-121987/12	27339-12.D
Level 8	IC 200-121987/13	27339-13.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 162480	+++++ 210659	+++++ 392749	61322	105201	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 682808	+++++ 915820	23734 1706221	245287	435388	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 348070	+++++ 459572	12347 857213	127031	221162	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 747021	8915 1005364	24804 1862162	261996	467082	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 228462	+++++ 299461	8188 568817	82369	143701	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 382218	+++++ 498948	14447 927198	142515	246866	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	686 305646	3740 409966	10044 765577	107688	190676	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	580 223881	2888 300005	7555 558087	80874	142363	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 368941	4505 507054	11539 964567	124228	225788	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 201842	+++++ 269734	6521 511473	67529	123823	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 361803	5474 477370	13459 889561	133340	231724	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 409542	4848 568006	12625 1093928	135293	247619	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 830312	10085 1128461	26645 2141415	285707	510088	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 564207	+++++ 748594	21941 1398024	208674	365311	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 226028	+++++ 423065	69129 941807	123682	168860	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 254731	3179 341819	8410 643766	88536	156816	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 120926	+++++ 165068	+++++ 311608	41316	67672	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 763020	9330 1052687	24770 2002276	259571	464863	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 387975	4974 534381	12620 1026347	130478	234430	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 443984	+++++ 580222	+++++ 1083377	168772	302069	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 541168	+++++ 715551	+++++ 1324574	204848	346350	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1020100	+++++ 1389372	33632 2630902	350647	627313	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 434476	5579 589877	13307 1090031	160953	282715	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 275930	+++++ 348553	+++++ 667090	99065	170617	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 363924	+++++ 482709	12770 914268	131591	228720	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 752743	+++++ 1006374	+++++ 1888065	274371	471496	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1059761	13312 1435214	34880 2711385	366667	654930	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 503020	6413 677566	16047 1291793	177764	312327	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 266782	+++++ 359153	8709 682640	94256	166658	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 577414	8819 774233	20913 1466481	204257	362708	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1733 660809	8102 889399	21936 1688081	234493	409716	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 853833	+++++ 1116968	+++++ 2093382	311026	522894	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 208839	+++++ 283721	7871 536049	72189	130692	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 451216	5532 621928	14573 1186442	151576	275432	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 37433	+++++ 51470	+++++ 98069	12453	22410	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 402205	+++++ 527337	+++++ 986600	148886	253413	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 756389	9496 1022304	24787 1943464	260346	466159	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 734199	9304 1002030	24110 1896087	255441	452627	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 585120	7099 804851	19019 1543269	200354	356648	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1845 761535	8512 1051476	22451 1977873	259297	459769	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1971422	25576 2631065	66567 4977004	695895	1217095	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1304261	17412 1776874	43968 3396048	446758	795946	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 409470	5110 548541	13767 1044989	146328	255071	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 671227	9612 890550	24260 1664127	247364	429897	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 251808	+++++ 338963	+++++ 649009	95299	156691	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1460 566169	6660 770292	18614 1489295	191199	343928	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 479543	5953 641679	15096 1222215	167575	296157	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 473154	+++++ 640731	15582 1224821	163159	291648	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 266866	+++++ 364780	+++++ 686936	97808	170019	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 623531	8147 865805	19930 1664927	202194	374652	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 854188	10291 1156269	26671 2213280	296073	525624	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 715360	8400 968644	22328 1856032	244460	437473	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 857750	+++++ 1127049	31335 2123841	312352	542333	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 940442	12426 1224090	33894 2210079	349092	601731	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 998899	13105 1369634	33822 2587151	336076	609871	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 680879	7752 922878	20011 1757437	232199	416434	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 477414	5917 648558	15698 1242129	164560	295033	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2442 910782	10613 1269787	27915 2468328	296200	550845	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 822770	+++++ 1080582	38491 2043897	299741	517459	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1007856	11158 1390672	28851 2677694	337154	611281	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 913205	10590 1249911	27859 2408052	303930	556333	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1395276	16815 1925907	44092 3696381	461184	847518	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2149181	28393 2925954	70444 5474731	722524	1309126	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 971991	11943 1285854	32885 2364523	342195	609504	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1798618	21685 2453726	55282 4636068	590738	1089589	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 885424	11169 1211373	28320 2305260	292981	539996	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1404350	15190 1921683	41842 3678087	457996	849301	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1034176	10550 1459240	26171 2803305	346123	629776	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2488763	29815 3389879	78004 6363924	832977	1517343	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1266954	14935 1713323	40017 3132571	430490	783655	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2941836	34322 3934509	90888 7037933	985136	1806178	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 907370	+++++ 1217369	29808 2192078	309526	560148	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1201153	+++++ 1549840	39930 2931800	434517	771304	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2465730	28409 3286713	76077 6105136	815602	1508576	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1929250	22971 2608740	60678 4913271	643210	1183721	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2012067	23823 2598803	62335 5127837	675565	1237354	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1069255	11026 1413459	31026 2789263	347634	645343	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1960929	23820 2591966	62274 5012540	673729	1221071	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40531-1 Analy Batch No.: 121987

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 18:40 Calibration End Date: 10/11/2017 02:31 Calibration ID: 38201

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1952073	23313 2565948	61907 5064655	669038	1233656	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2899486	36672 3857535	96145 7506759	1023386	1853946	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2373788	29385 3298568	78939 6613571	854688	1559056	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1428043	15206 1888439	42925 3839822	466867	895265	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1393843	14935 1849474	42211 3857425	459387	887463	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1522066	15693 2022613	34216 4107217	529087	932566	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1232237	+++++ 1671986	+++++ 3136094	424043	715729	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2009313	23052 2823665	66111 5542060	732834	1318485	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1287664	14941 1739067	40293 3612287	441548	834259	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 623440	+++++ 888431	+++++ 1651148	163773	300365	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 667058	+++++ 1000491	7614 2276937	137716	392290	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 862742	9284 1227611	26728 2345313	271453	525733	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1355238	+++++ 2015492	13848 4660361	252888	775810	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 421194	+++++ 677588	3592 1589010	76730	274566	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-122137/4	27408_04.D
Level 2	IC 200-122137/5	27408_05.D
Level 3	IC 200-122137/7	27408_07.D
Level 4	IC 200-122137/9	27408_09.D
Level 5	ICIS 200-122137/10	27408_10.D
Level 6	IC 200-122137/11	27408_11.D
Level 7	IC 200-122137/12	27408_12.D
Level 8	IC 200-122137/13	27408_13.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.6870	+++++ 0.6951	+++++ 0.6340	0.8835	0.7697	Ave		0.7338				13.2		30.0			
Dichlorodifluoromethane	+++++ 1.8263	+++++ 1.8726	1.8655 1.7282	2.2056	1.5489	Ave		1.8412				11.7		30.0			
Freon 22	+++++ 1.2708	+++++ 1.3070	1.5524 1.2028	1.5932	1.3706	Ave		1.3828				11.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.7109	1.8101 1.7751	1.9541 1.6888	2.1319	1.8325	Ave		1.8433				8.4		30.0			
Chloromethane	+++++ 0.7275	+++++ 0.7433	0.9237 0.6856	0.9202	0.7882	Ave		0.7981				12.7		30.0			
n-Butane	+++++ 1.3171	+++++ 1.3268	1.7010 1.2340	1.6567	1.4727	Ave		1.4514				13.3		30.0			
Vinyl chloride	0.6750 0.7582	0.7424 0.7728	0.8600 0.7172	0.9305	0.8132	Ave		0.7837				10.5		30.0			
1,3-Butadiene	0.5026 0.6027	0.5884 0.6161	0.6189 0.5757	0.7387	0.6483	Ave		0.6114				10.9		30.0			
Bromomethane	+++++ 0.5183	0.5881 0.5931	0.6253 0.5371	0.6480	0.5761	Ave		0.5837				7.8		30.0			
Chloroethane	+++++ 0.2714	+++++ 0.3539	0.3553 0.2954	0.3640	0.3252	Ave		0.3275				11.4		30.0			
Isopentane	+++++ 0.6273	1.0741 0.8890	1.0139 0.6223	0.8906	0.8449	Ave		0.8517				20.4		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5157	0.5145 0.5470	0.5835 0.5232	0.6375	0.5439	Ave		0.5522				8.1		30.0			
Trichlorofluoromethane	+++++ 1.3334	1.4446 1.5856	1.7174 1.3437	1.7281	1.4817	Ave		1.5192				10.7		30.0			
n-Pentane	+++++ 1.0457	+++++ 1.3515	1.6985 1.0437	1.4946	1.3315	Ave		1.3276				19.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.2893	+++++ 0.3346	0.4977 0.2973	0.4518	0.4177	Ave		0.3814				22.7		30.0			
Ethyl ether	+++++ 0.3742	0.4924 0.4701	0.5176 0.4493	0.5724	0.4966	Ave		0.4818				12.7		30.0			
Acrolein	+++++ 0.1672	+++++ 0.2172	+++++ 0.2017	0.2457	0.1814	Ave		0.2026				15.2		30.0			
Freon TF	+++++ 0.9947	1.1923 1.1191	1.2391 1.0917	1.3592	1.1761	Ave		1.1674				9.9		30.0			
1,1-Dichloroethene	+++++ 0.4844	0.5323 0.5452	0.5911 0.5354	0.6532	0.5743	Ave		0.5594				9.6		30.0			
Acetone	+++++ 0.9002	+++++ 1.1418	+++++ 1.0658	1.4993	1.3499	Ave		1.1914				19.8		30.0			
Carbon disulfide	+++++ 1.4104	+++++ 1.6823	1.9254 1.6372	2.0497	1.7727	Ave		1.7463				12.9		30.0			
Isopropyl alcohol	+++++ 1.0069	+++++ 1.1995	+++++ 1.1203	1.5702	1.3236	Ave		1.2441				17.3		30.0			
3-Chloropropene	+++++ 0.8173	1.2408 1.0465	1.1012 0.9763	1.2939	1.1245	Ave		1.0858				14.8		30.0			
Acetonitrile	+++++ 0.4788	+++++ 0.5919	+++++ 0.5612	0.7356	0.6519	Ave		0.6039				16.0		30.0			
Methylene Chloride	+++++ 0.6674	+++++ 0.8435	1.0214 0.7981	1.0586	0.9041	Ave		0.8822				16.5		30.0			
tert-Butyl alcohol	+++++ 1.2814	+++++ 1.5189	+++++ 1.4351	1.9232	1.6212	Ave		1.5560				15.4		30.0			
Methyl tert-butyl ether	+++++ 1.5886	1.9411 1.9156	2.1185 1.8454	2.2990	2.0027	Ave		1.9587				11.3		30.0			
trans-1,2-Dichloroethene	+++++ 0.8405	1.0611 1.0371	1.1534 0.9965	1.2771	1.0958	Ave		1.0659				12.7		30.0			
Acrylonitrile	+++++ 0.4221	+++++ 0.5356	0.6135 0.5140	0.6444	0.5600	Ave		0.5483				14.3		30.0			
n-Hexane	+++++ 0.8631	1.2894 1.0789	1.3156 1.0273	1.3225	1.1676	Ave		1.1521				15.0		30.0			
1,1-Dichloroethane	1.0802 1.0584	1.4425 1.3002	1.4720 1.2515	1.5855	1.3796	Ave		1.3212				14.1		30.0			
Vinyl acetate	+++++ 1.6698	+++++ 2.1173	+++++ 2.0110	2.5755	2.1821	Ave		2.1111				15.4		30.0			
cis-1,2-Dichloroethene	+++++ 0.5948	0.6513 0.6445	0.6980 0.6294	0.7583	0.6620	Ave		0.6626				7.9		30.0			
Methyl Ethyl Ketone	+++++ 0.3016	+++++ 0.3464	0.4773 0.3371	0.4185	0.3706	Ave		0.3753				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0448	+++++ 0.0483	+++++ 0.0475	0.0586	0.0492	Ave		0.0497				10.6		30.0			
Tetrahydrofuran	+++++ 0.1680	+++++ 0.1793	+++++ 0.1790	0.2644	0.2164	Ave		0.2014				19.7		30.0			
Chloroform	+++++ 1.2168	1.4002 1.3568	1.5376 1.3984	1.6562	1.4771	Ave		1.4347				9.8		30.0			
Cyclohexane	+++++ 0.1578	0.1575 0.1621	0.1650 0.1677	0.2114	0.1811	Ave		0.1718				11.2		30.0			
1,1,1-Trichloroethane	+++++ 0.2456	0.2415 0.2524	0.2550 0.2717	0.3323	0.2875	Ave		0.2694				11.9		30.0			
Carbon tetrachloride	0.1907 0.2432	0.2125 0.2532	0.2292 0.2609	0.3191	0.2678	Ave		0.2471				15.7		30.0			
2,2,4-Trimethylpentane	+++++ 0.6841	0.7562 0.7165	0.7774 0.7505	0.9916	0.8420	Ave		0.7883				13.0		30.0			
Benzene	+++++ 0.3837	0.4133 0.4014	0.4059 0.4152	0.5155	0.4444	Ave		0.4256				10.2		30.0			
1,2-Dichloroethane	+++++ 0.1745	0.1803 0.1723	0.1945 0.1908	0.2493	0.2147	Ave		0.1966				13.9		30.0			
n-Heptane	+++++ 0.2865	0.3440 0.2812	0.3403 0.2973	0.4137	0.3542	Ave		0.3310				14.2		30.0			
n-Butanol	+++++ 0.0879	+++++ 0.0817	+++++ 0.0857	0.1207	0.0975	Ave		0.0947				16.5		30.0			
Trichloroethene	0.1648 0.1674	0.1599 0.1686	0.1750 0.1729	0.1963	0.1735	Ave		0.1723				6.3		30.0			
1,2-Dichloropropane	+++++ 0.1605	0.1546 0.1641	0.1601 0.1660	0.2028	0.1773	Ave		0.1694				9.7		30.0			
Methyl methacrylate	+++++ 0.1542	+++++ 0.1543	0.1423 0.1592	0.1793	0.1614	Ave		0.1585				7.7		30.0			
1,4-Dioxane	+++++ 0.0784	+++++ 0.0706	+++++ 0.0719	0.0912	0.0786	Ave		0.0781				10.4		30.0			
Dibromomethane	+++++ 0.1573	0.1409 0.1219	0.1458 0.1294	0.1394	0.1257	Ave		0.1372				9.0		30.0			
Bromodichloromethane	+++++ 0.2992	0.2467 0.3059	0.2817 0.3158	0.3529	0.3162	Ave		0.3026				10.9		30.0			
cis-1,3-Dichloropropene	+++++ 0.2360	0.2132 0.2316	0.2233 0.2367	0.2882	0.2579	Ave		0.2410				10.3		30.0			
methyl isobutyl ketone	+++++ 0.3797	+++++ 0.3814	0.3988 0.3751	0.4631	0.3953	Ave		0.3989				8.2		30.0			
Toluene	+++++ 0.3268	0.2936 0.3030	0.3061 0.2739	0.3876	0.3395	Ave		0.3186				11.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.4139	0.4010 0.4092	0.4124 0.4019	0.5121	0.4445	Ave		0.4278				9.3		30.0			
trans-1,3-Dichloropropene	+++++ 0.2482	0.2873 0.2451	0.3164 0.2527	0.2996	0.2720	Ave		0.2745				10.1		30.0			
1,1,2-Trichloroethane	+++++ 0.1703	0.1379 0.1636	0.1495 0.1483	0.1976	0.1740	Ave		0.1630				12.3		30.0			
Tetrachloroethene	0.1820 0.2627	0.2257 0.2071	0.2432 0.1952	0.3157	0.2761	Ave		0.2385				18.9		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4449	+++++ 0.4238	0.5147 0.3534	0.4935	0.4439	Ave		0.4457				12.7		30.0			
Dibromochloromethane	+++++ 0.2926	0.2326 0.2969	0.2508 0.2795	0.3814	0.2928	Ave		0.2895				16.3		30.0			
1,2-Dibromoethane	+++++ 0.2780	0.2338 0.2785	0.2499 0.2596	0.3568	0.2753	Ave		0.2760				14.2		30.0			
Chlorobenzene	+++++ 0.3790	0.3596 0.3769	0.3922 0.3645	0.4152	0.3778	Ave		0.3808				4.9		30.0			
Ethylbenzene	+++++ 0.7273	0.6027 0.7295	0.6605 0.6549	0.7904	0.7234	Ave		0.6984				8.9		30.0			
n-Nonane	+++++ 0.4321	0.3324 0.4240	0.3657 0.3514	0.4850	0.4415	Ave		0.4046				13.7		30.0			
m,p-Xylene	+++++ 0.2715	0.2358 0.2751	0.2518 0.2589	0.2836	0.2640	Ave		0.2630				6.1		30.0			
Xylene, o-	+++++ 0.2570	0.2277 0.2585	0.2490 0.2523	0.2731	0.2532	Ave		0.2530				5.4		30.0			
Styrene	+++++ 0.4193	0.3228 0.4207	0.3641 0.4111	0.4313	0.4032	Ave		0.3961				9.8		30.0			
Bromoform	+++++ 0.2658	0.1931 0.2783	0.1488 0.2725	0.2780	0.2573	Ave		0.2420				21.0		30.0			
Cumene	+++++ 0.7886	0.6516 0.7993	0.5839 0.7444	0.8307	0.7687	Ave		0.7382				12.0		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4634	0.3572 0.4660	0.3635 0.4290	0.4983	0.4584	Ave		0.4337				12.5		30.0			
n-Propylbenzene	+++++ 1.0879	0.8146 1.0975	0.8051 1.0222	1.1308	1.0536	Ave		1.0017				13.5		30.0			
1,2,3-Trichloropropane	+++++ 0.3889	+++++ 0.3909	0.3067 0.3591	0.4158	0.3820	Ave		0.3739				10.1		30.0			
4-Ethyltoluene	+++++ 0.9056	0.6666 0.9238	0.5934 0.8585	0.8960	0.8568	Ave		0.8144				16.0		30.0			
n-Decane	+++++ 0.6215	+++++ 0.6092	0.4601 0.5249	0.6770	0.6269	Ave		0.5866				13.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 0.8258	0.5607 0.8432	0.5519 0.7720	0.8229	0.7855	Ave		0.7374				17.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7061	0.5434 0.7154	0.4968 0.6864	0.7209	0.6794	Ave		0.6498				14.0		30.0			
Alpha Methyl Styrene	+++++ 0.3213	0.2417 0.3253	0.2068 0.3154	0.3206	0.2994	Ave		0.2901				16.1		30.0			
tert-Butylbenzene	+++++ 0.6148	0.5176 0.6241	0.4397 0.6013	0.6333	0.5923	Ave		0.5747				12.3		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7115	0.5509 0.7275	0.4985 0.7052	0.7318	0.6885	Ave		0.6591				14.3		30.0			
sec-Butylbenzene	+++++ 1.0093	0.7885 1.0376	0.7053 0.9972	1.0503	0.9834	Ave		0.9388				14.4		30.0			
4-Isopropyltoluene	+++++ 0.8178	0.6494 0.8506	0.5481 0.8537	0.8326	0.7889	Ave		0.7630				15.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4322	0.3650 0.4377	0.2926 0.4499	0.4253	0.4128	Ave		0.4022				13.8		30.0			
1,4-Dichlorobenzene	+++++ 0.4223	0.3689 0.4279	0.2931 0.4373	0.4209	0.4107	Ave		0.3973				12.8		30.0			
Benzyl chloride	+++++ 0.7152	0.4787 0.7161	0.3591 0.6865	0.7191	0.6518	Ave		0.6181				23.0		30.0			
n-Butylbenzene	+++++ 0.8850	0.6484 0.9097	0.6239 0.8769	0.9096	0.8463	Ave		0.8143				15.2		30.0			
n-Undecane	+++++ 0.6617	+++++ 0.6529	+++++ 0.5736	0.7029	0.6041	Ave		0.6390				7.9		30.0			
1,2-Dichlorobenzene	+++++ 0.3927	0.3461 0.4019	0.2766 0.4079	0.3969	0.3818	Ave		0.3720				12.6		30.0			
n-Dodecane	+++++ 0.5533	+++++ 0.5262	+++++ 0.2386	0.5531	0.3716	Ave		0.4485				31.1	*	30.0			
1,2,4-Trichlorobenzene	+++++ 0.2895	+++++ 0.2832	0.2002 0.2033	0.2632	0.2608	Ave		0.2500				15.6		30.0			
Hexachlorobutadiene	+++++ 0.2546	0.2433 0.2608	0.1813 0.1675	0.2613	0.2388	Ave		0.2297				16.9		30.0			
Naphthalene	+++++ 0.7010	+++++ 0.6696	0.4973 0.4938	0.5729	0.6085	Ave		0.5905				14.6		30.0			
1,2,3-Trichlorobenzene	+++++ 0.2568	+++++ 0.2525	0.1876 0.1443	0.2326	0.2332	Ave		0.2178				20.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-122137/4	27408_04.D
Level 2	IC 200-122137/5	27408_05.D
Level 3	IC 200-122137/7	27408_07.D
Level 4	IC 200-122137/9	27408_09.D
Level 5	ICIS 200-122137/10	27408_10.D
Level 6	IC 200-122137/11	27408_11.D
Level 7	IC 200-122137/12	27408_12.D
Level 8	IC 200-122137/13	27408_13.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 352953	+++++ 499554	+++++ 981096	123366	219029	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 938308	+++++ 1345857	25919 2674154	307983	440792	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 652907	+++++ 939308	21568 1861176	222479	390033	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 878998	10474 1275735	27149 2613281	297693	521500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 373782	+++++ 534176	12834 1060815	128491	224312	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 676691	+++++ 953533	23633 1909421	231345	419095	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	873 389560	4296 555379	11949 1109851	129939	231416	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	650 309651	3405 442774	8599 890810	103150	184498	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 266308	3403 426249	8688 831143	90482	163932	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 139433	+++++ 254357	4937 457020	50823	92533	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 322285	6215 638884	14086 962906	124359	240451	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 264938	2977 393099	8107 809581	89026	154772	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 685064	8359 1139560	23861 2079240	241306	421655	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 537247	+++++ 971282	23598 1615004	208706	378929	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 198575	+++++ 481059	69230 1149905	126263	178393	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 192273	2849 337845	7191 695276	79936	141321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 85897	+++++ 156118	+++++ 312163	34304	51622	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 511030	6899 804309	17215 1689210	189796	334683	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 248856	3080 391839	8213 828430	91213	163434	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 462482	+++++ 820596	+++++ 1649157	209357	384152	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 724610	+++++ 1209069	26750 2533434	286216	504477	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 517328	+++++ 862093	+++++ 1733479	219263	376663	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 419907	7180 752138	15300 1510770	180675	320003	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 246002	+++++ 425369	+++++ 868443	102725	185530	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 342866	+++++ 606200	14191 1234953	147829	257273	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 658312	+++++ 1091635	+++++ 2220611	268557	461362	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 816162	11232 1376713	29433 2855605	321038	569926	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 431821	6140 745321	16025 1542021	178333	311846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 216874	+++++ 384903	8524 795389	89980	159355	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 443429	7461 775423	18279 1589643	184672	332286	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1397 543743	8347 934446	20451 1936527	221406	392612	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 857867	+++++ 1521690	+++++ 3111831	359642	620985	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 305578	3769 463201	9698 973973	105889	188377	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 154959	+++++ 248975	6631 521616	58446	105457	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 22996	+++++ 34743	+++++ 73565	8189	14001	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 430383	+++++ 675106	+++++ 1432455	178718	306577	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 625146	8102 975156	21363 2163840	231273	420352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 404203	5185 610286	13201 1341972	142857	256531	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 629149	7949 950486	20397 2174763	224606	407304	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1279 622910	6996 953498	18332 2088173	215671	379437	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1752133	24892 2697701	62184 6006580	670193	1193039	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 982748	13604 1511445	32468 3323267	348403	629628	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 446983	5934 648702	15559 1527097	168529	304151	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 733862	11323 1058939	27222 2379123	279588	501898	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 225189	+++++ 307648	+++++ 685896	81592	138207	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1105 428668	5262 634778	13997 1383792	132707	245847	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 411121	5089 617943	12811 1328724	137098	251265	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 394925	+++++ 580836	11387 1274103	121185	228750	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 200756	+++++ 265743	+++++ 575765	61626	111350	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 402813	4638 458980	11661 1035918	94189	178125	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 766324	8121 1151611	22536 2527714	238537	448032	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 604402	7019 871893	17863 1894427	194796	365426	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 972537	+++++ 1436188	31904 3002165	313016	560124	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 752319	9146 1011655	23100 2239478	244888	441041	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1059951	13199 1540779	32987 3216549	346145	629776	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 635730	9458 922819	25309 2022825	202513	385402	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 392140	4297 546188	11283 1212369	124855	226011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	994 604779	7033 691587	18356 1596312	199464	358690	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1024292	+++++ 1414884	38840 2889935	311840	576752	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 673748	7245 991379	18928 2285614	240982	380466	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 640133	7285 929835	18859 2122760	225418	357685	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 872667	11203 1258408	29601 2980581	262350	490917	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1674474	18776 2435780	49844 5354821	499428	939935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 994919	10357 1415555	27595 2873555	306446	573621	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1250073	14693 1837082	38005 4233482	358417	685913	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 591630	7093 863046	18790 2062739	172558	328972	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 965336	10056 1404503	27476 3361179	272499	523872	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 612001	6017 929310	11228 2228164	175622	334284	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1815660	20301 2668651	44067 6087192	524896	998728	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1066965	11128 1555920	27430 3507921	314832	595526	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2504577	25378 3664370	60758 8358658	714485	1368846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 895260	+++++ 1305173	23146 2936414	262728	496259	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2084901	20766 3084392	44779 7019354	566162	1113206	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1430851	+++++ 2033838	34720 4292143	427750	814465	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1901303	17468 2815176	41650 6312471	519918	1020564	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1625606	16930 2388440	37488 5612597	455490	882653	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 739731	7531 1086005	15605 2578848	202596	388935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1415537	16124 2083695	33183 4916479	400156	769572	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40547-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1638160	17164 2428873	37623 5766367	462414	894517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2323768	24566 3464365	53226 8154278	663611	1277648	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1882683	20231 2839887	41360 6980912	526086	1024950	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 995065	11370 1461519	22079 3679113	268719	536332	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 972245	11493 1428660	22117 3576092	265968	533613	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1646684	14913 2390995	27099 5613631	454352	846820	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2037612	20201 3037172	47086 7170241	574752	1099571	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1523382	+++++ 2179981	+++++ 4690506	444109	784828	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 904206	10783 1341743	20873 3335597	250802	496119	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1273766	+++++ 1756717	+++++ 1950619	349480	482740	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 666514	+++++ 945449	15105 1662077	166317	338815	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 586054	7581 870723	13680 1369932	165110	310203	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1613877	+++++ 2235662	37528 4037526	361989	790559	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 591246	+++++ 842914	14158 1179603	146993	302971	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-122137/4	27408_04.D
Level 2	IC 200-122137/5	27408_05.D
Level 3	IC 200-122137/7	27408_07.D
Level 4	IC 200-122137/9	27408_09.D
Level 5	ICIS 200-122137/10	27408_10.D
Level 6	IC 200-122137/11	27408_11.D
Level 7	IC 200-122137/12	27408_12.D
Level 8	IC 200-122137/13	27408_13.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.6870	+++++ 0.6951	+++++ 0.6340	0.8835	0.7697	Ave		0.7338				13.2		30.0			
Dichlorodifluoromethane	+++++ 1.8263	+++++ 1.8726	1.8655 1.7282	2.2056	1.5489	Ave		1.8412				11.7		30.0			
Freon 22	+++++ 1.2708	+++++ 1.3070	1.5524 1.2028	1.5932	1.3706	Ave		1.3828				11.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 1.7109	1.8101 1.7751	1.9541 1.6888	2.1319	1.8325	Ave		1.8433				8.4		30.0			
Chloromethane	+++++ 0.7275	+++++ 0.7433	0.9237 0.6856	0.9202	0.7882	Ave		0.7981				12.7		30.0			
n-Butane	+++++ 1.3171	+++++ 1.3268	1.7010 1.2340	1.6567	1.4727	Ave		1.4514				13.3		30.0			
Vinyl chloride	0.6750 0.7582	0.7424 0.7728	0.8600 0.7172	0.9305	0.8132	Ave		0.7837				10.5		30.0			
1,3-Butadiene	0.5026 0.6027	0.5884 0.6161	0.6189 0.5757	0.7387	0.6483	Ave		0.6114				10.9		30.0			
Bromomethane	+++++ 0.5183	0.5881 0.5931	0.6253 0.5371	0.6480	0.5761	Ave		0.5837				7.8		30.0			
Chloroethane	+++++ 0.2714	+++++ 0.3539	0.3553 0.2954	0.3640	0.3252	Ave		0.3275				11.4		30.0			
Isopentane	+++++ 0.6273	1.0741 0.8890	1.0139 0.6223	0.8906	0.8449	Ave		0.8517				20.4		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.5157	0.5145 0.5470	0.5835 0.5232	0.6375	0.5439	Ave		0.5522				8.1		30.0			
Trichlorofluoromethane	+++++ 1.3334	1.4446 1.5856	1.7174 1.3437	1.7281	1.4817	Ave		1.5192				10.7		30.0			
n-Pentane	+++++ 1.0457	+++++ 1.3515	1.6985 1.0437	1.4946	1.3315	Ave		1.3276				19.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.2893	+++++ 0.3346	0.4977 0.2973	0.4518	0.4177	Ave		0.3814				22.7		30.0			
Ethyl ether	+++++ 0.3742	0.4924 0.4701	0.5176 0.4493	0.5724	0.4966	Ave		0.4818				12.7		30.0			
Acrolein	+++++ 0.1672	+++++ 0.2172	+++++ 0.2017	0.2457	0.1814	Ave		0.2026				15.2		30.0			
Freon TF	+++++ 0.9947	1.1923 1.1191	1.2391 1.0917	1.3592	1.1761	Ave		1.1674				9.9		30.0			
1,1-Dichloroethene	+++++ 0.4844	0.5323 0.5452	0.5911 0.5354	0.6532	0.5743	Ave		0.5594				9.6		30.0			
Acetone	+++++ 0.9002	+++++ 1.1418	+++++ 1.0658	1.4993	1.3499	Ave		1.1914				19.8		30.0			
Carbon disulfide	+++++ 1.4104	+++++ 1.6823	1.9254 1.6372	2.0497	1.7727	Ave		1.7463				12.9		30.0			
Isopropyl alcohol	+++++ 1.0069	+++++ 1.1995	+++++ 1.1203	1.5702	1.3236	Ave		1.2441				17.3		30.0			
3-Chloropropene	+++++ 0.8173	1.2408 1.0465	1.1012 0.9763	1.2939	1.1245	Ave		1.0858				14.8		30.0			
Acetonitrile	+++++ 0.4788	+++++ 0.5919	+++++ 0.5612	0.7356	0.6519	Ave		0.6039				16.0		30.0			
Methylene Chloride	+++++ 0.6674	+++++ 0.8435	1.0214 0.7981	1.0586	0.9041	Ave		0.8822				16.5		30.0			
tert-Butyl alcohol	+++++ 1.2814	+++++ 1.5189	+++++ 1.4351	1.9232	1.6212	Ave		1.5560				15.4		30.0			
Methyl tert-butyl ether	+++++ 1.5886	1.9411 1.9156	2.1185 1.8454	2.2990	2.0027	Ave		1.9587				11.3		30.0			
trans-1,2-Dichloroethene	+++++ 0.8405	1.0611 1.0371	1.1534 0.9965	1.2771	1.0958	Ave		1.0659				12.7		30.0			
Acrylonitrile	+++++ 0.4221	+++++ 0.5356	0.6135 0.5140	0.6444	0.5600	Ave		0.5483				14.3		30.0			
n-Hexane	+++++ 0.8631	1.2894 1.0789	1.3156 1.0273	1.3225	1.1676	Ave		1.1521				15.0		30.0			
1,1-Dichloroethane	1.0802 1.0584	1.4425 1.3002	1.4720 1.2515	1.5855	1.3796	Ave		1.3212				14.1		30.0			
Vinyl acetate	+++++ 1.6698	+++++ 2.1173	+++++ 2.0110	2.5755	2.1821	Ave		2.1111				15.4		30.0			
cis-1,2-Dichloroethene	+++++ 0.5948	0.6513 0.6445	0.6980 0.6294	0.7583	0.6620	Ave		0.6626				7.9		30.0			
Methyl Ethyl Ketone	+++++ 0.3016	+++++ 0.3464	0.4773 0.3371	0.4185	0.3706	Ave		0.3753				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0448	+++++ 0.0483	+++++ 0.0475	0.0586	0.0492	Ave		0.0497				10.6		30.0			
Tetrahydrofuran	+++++ 0.1680	+++++ 0.1793	+++++ 0.1790	0.2644	0.2164	Ave		0.2014				19.7		30.0			
Chloroform	+++++ 1.2168	1.4002 1.3568	1.5376 1.3984	1.6562	1.4771	Ave		1.4347				9.8		30.0			
Cyclohexane	+++++ 0.1578	0.1575 0.1621	0.1650 0.1677	0.2114	0.1811	Ave		0.1718				11.2		30.0			
1,1,1-Trichloroethane	+++++ 0.2456	0.2415 0.2524	0.2550 0.2717	0.3323	0.2875	Ave		0.2694				11.9		30.0			
Carbon tetrachloride	0.1907 0.2432	0.2125 0.2532	0.2292 0.2609	0.3191	0.2678	Ave		0.2471				15.7		30.0			
2,2,4-Trimethylpentane	+++++ 0.6841	0.7562 0.7165	0.7774 0.7505	0.9916	0.8420	Ave		0.7883				13.0		30.0			
Benzene	+++++ 0.3837	0.4133 0.4014	0.4059 0.4152	0.5155	0.4444	Ave		0.4256				10.2		30.0			
1,2-Dichloroethane	+++++ 0.1745	0.1803 0.1723	0.1945 0.1908	0.2493	0.2147	Ave		0.1966				13.9		30.0			
n-Heptane	+++++ 0.2865	0.3440 0.2812	0.3403 0.2973	0.4137	0.3542	Ave		0.3310				14.2		30.0			
n-Butanol	+++++ 0.0879	+++++ 0.0817	+++++ 0.0857	0.1207	0.0975	Ave		0.0947				16.5		30.0			
Trichloroethene	0.1648 0.1674	0.1599 0.1686	0.1750 0.1729	0.1963	0.1735	Ave		0.1723				6.3		30.0			
1,2-Dichloropropane	+++++ 0.1605	0.1546 0.1641	0.1601 0.1660	0.2028	0.1773	Ave		0.1694				9.7		30.0			
Methyl methacrylate	+++++ 0.1542	+++++ 0.1543	0.1423 0.1592	0.1793	0.1614	Ave		0.1585				7.7		30.0			
1,4-Dioxane	+++++ 0.0784	+++++ 0.0706	+++++ 0.0719	0.0912	0.0786	Ave		0.0781				10.4		30.0			
Dibromomethane	+++++ 0.1573	0.1409 0.1219	0.1458 0.1294	0.1394	0.1257	Ave		0.1372				9.0		30.0			
Bromodichloromethane	+++++ 0.2992	0.2467 0.3059	0.2817 0.3158	0.3529	0.3162	Ave		0.3026				10.9		30.0			
cis-1,3-Dichloropropene	+++++ 0.2360	0.2132 0.2316	0.2233 0.2367	0.2882	0.2579	Ave		0.2410				10.3		30.0			
methyl isobutyl ketone	+++++ 0.3797	+++++ 0.3814	0.3988 0.3751	0.4631	0.3953	Ave		0.3989				8.2		30.0			
Toluene	+++++ 0.3268	0.2936 0.3030	0.3061 0.2739	0.3876	0.3395	Ave		0.3186				11.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.4139	0.4010 0.4092	0.4124 0.4019	0.5121	0.4445	Ave		0.4278				9.3		30.0			
trans-1,3-Dichloropropene	+++++ 0.2482	0.2873 0.2451	0.3164 0.2527	0.2996	0.2720	Ave		0.2745				10.1		30.0			
1,1,2-Trichloroethane	+++++ 0.1703	0.1379 0.1636	0.1495 0.1483	0.1976	0.1740	Ave		0.1630				12.3		30.0			
Tetrachloroethene	0.1820 0.2627	0.2257 0.2071	0.2432 0.1952	0.3157	0.2761	Ave		0.2385				18.9		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4449	+++++ 0.4238	0.5147 0.3534	0.4935	0.4439	Ave		0.4457				12.7		30.0			
Dibromochloromethane	+++++ 0.2926	0.2326 0.2969	0.2508 0.2795	0.3814	0.2928	Ave		0.2895				16.3		30.0			
1,2-Dibromoethane	+++++ 0.2780	0.2338 0.2785	0.2499 0.2596	0.3568	0.2753	Ave		0.2760				14.2		30.0			
Chlorobenzene	+++++ 0.3790	0.3596 0.3769	0.3922 0.3645	0.4152	0.3778	Ave		0.3808				4.9		30.0			
Ethylbenzene	+++++ 0.7273	0.6027 0.7295	0.6605 0.6549	0.7904	0.7234	Ave		0.6984				8.9		30.0			
n-Nonane	+++++ 0.4321	0.3324 0.4240	0.3657 0.3514	0.4850	0.4415	Ave		0.4046				13.7		30.0			
m,p-Xylene	+++++ 0.2715	0.2358 0.2751	0.2518 0.2589	0.2836	0.2640	Ave		0.2630				6.1		30.0			
Xylene, o-	+++++ 0.2570	0.2277 0.2585	0.2490 0.2523	0.2731	0.2532	Ave		0.2530				5.4		30.0			
Styrene	+++++ 0.4193	0.3228 0.4207	0.3641 0.4111	0.4313	0.4032	Ave		0.3961				9.8		30.0			
Bromoform	+++++ 0.2658	0.1931 0.2783	0.1488 0.2725	0.2780	0.2573	Ave		0.2420				21.0		30.0			
Cumene	+++++ 0.7886	0.6516 0.7993	0.5839 0.7444	0.8307	0.7687	Ave		0.7382				12.0		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.4634	0.3572 0.4660	0.3635 0.4290	0.4983	0.4584	Ave		0.4337				12.5		30.0			
n-Propylbenzene	+++++ 1.0879	0.8146 1.0975	0.8051 1.0222	1.1308	1.0536	Ave		1.0017				13.5		30.0			
1,2,3-Trichloropropane	+++++ 0.3889	+++++ 0.3909	0.3067 0.3591	0.4158	0.3820	Ave		0.3739				10.1		30.0			
4-Ethyltoluene	+++++ 0.9056	0.6666 0.9238	0.5934 0.8585	0.8960	0.8568	Ave		0.8144				16.0		30.0			
n-Decane	+++++ 0.6215	+++++ 0.6092	0.4601 0.5249	0.6770	0.6269	Ave		0.5866				13.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 0.8258	0.5607 0.8432	0.5519 0.7720	0.8229	0.7855	Ave		0.7374				17.1		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7061	0.5434 0.7154	0.4968 0.6864	0.7209	0.6794	Ave		0.6498				14.0		30.0			
Alpha Methyl Styrene	+++++ 0.3213	0.2417 0.3253	0.2068 0.3154	0.3206	0.2994	Ave		0.2901				16.1		30.0			
tert-Butylbenzene	+++++ 0.6148	0.5176 0.6241	0.4397 0.6013	0.6333	0.5923	Ave		0.5747				12.3		30.0			
1,2,4-Trimethylbenzene	+++++ 0.7115	0.5509 0.7275	0.4985 0.7052	0.7318	0.6885	Ave		0.6591				14.3		30.0			
sec-Butylbenzene	+++++ 1.0093	0.7885 1.0376	0.7053 0.9972	1.0503	0.9834	Ave		0.9388				14.4		30.0			
4-Isopropyltoluene	+++++ 0.8178	0.6494 0.8506	0.5481 0.8537	0.8326	0.7889	Ave		0.7630				15.5		30.0			
1,3-Dichlorobenzene	+++++ 0.4322	0.3650 0.4377	0.2926 0.4499	0.4253	0.4128	Ave		0.4022				13.8		30.0			
1,4-Dichlorobenzene	+++++ 0.4223	0.3689 0.4279	0.2931 0.4373	0.4209	0.4107	Ave		0.3973				12.8		30.0			
Benzyl chloride	+++++ 0.7152	0.4787 0.7161	0.3591 0.6865	0.7191	0.6518	Ave		0.6181				23.0		30.0			
n-Butylbenzene	+++++ 0.8850	0.6484 0.9097	0.6239 0.8769	0.9096	0.8463	Ave		0.8143				15.2		30.0			
n-Undecane	+++++ 0.6617	+++++ 0.6529	+++++ 0.5736	0.7029	0.6041	Ave		0.6390				7.9		30.0			
1,2-Dichlorobenzene	+++++ 0.3927	0.3461 0.4019	0.2766 0.4079	0.3969	0.3818	Ave		0.3720				12.6		30.0			
n-Dodecane	+++++ 0.5533	+++++ 0.5262	+++++ 0.2386	0.5531	0.3716	Ave		0.4485				31.1	*	30.0			
1,2,4-Trichlorobenzene	+++++ 0.2895	+++++ 0.2832	0.2002 0.2033	0.2632	0.2608	Ave		0.2500				15.6		30.0			
Hexachlorobutadiene	+++++ 0.2546	0.2433 0.2608	0.1813 0.1675	0.2613	0.2388	Ave		0.2297				16.9		30.0			
Naphthalene	+++++ 0.7010	+++++ 0.6696	0.4973 0.4938	0.5729	0.6085	Ave		0.5905				14.6		30.0			
1,2,3-Trichlorobenzene	+++++ 0.2568	+++++ 0.2525	0.1876 0.1443	0.2326	0.2332	Ave		0.2178				20.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-122137/4	27408_04.D
Level 2	IC 200-122137/5	27408_05.D
Level 3	IC 200-122137/7	27408_07.D
Level 4	IC 200-122137/9	27408_09.D
Level 5	ICIS 200-122137/10	27408_10.D
Level 6	IC 200-122137/11	27408_11.D
Level 7	IC 200-122137/12	27408_12.D
Level 8	IC 200-122137/13	27408_13.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 352953	+++++ 499554	+++++ 981096	123366	219029	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 938308	+++++ 1345857	25919 2674154	307983	440792	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 652907	+++++ 939308	21568 1861176	222479	390033	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 878998	10474 1275735	27149 2613281	297693	521500	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 373782	+++++ 534176	12834 1060815	128491	224312	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 676691	+++++ 953533	23633 1909421	231345	419095	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	873 389560	4296 555379	11949 1109851	129939	231416	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	650 309651	3405 442774	8599 890810	103150	184498	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 266308	3403 426249	8688 831143	90482	163932	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 139433	+++++ 254357	4937 457020	50823	92533	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 322285	6215 638884	14086 962906	124359	240451	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 264938	2977 393099	8107 809581	89026	154772	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 685064	8359 1139560	23861 2079240	241306	421655	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 537247	+++++ 971282	23598 1615004	208706	378929	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 198575	+++++ 481059	69230 1149905	126263	178393	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 192273	2849 337845	7191 695276	79936	141321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 85897	+++++ 156118	+++++ 312163	34304	51622	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 511030	6899 804309	17215 1689210	189796	334683	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 248856	3080 391839	8213 828430	91213	163434	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 462482	+++++ 820596	+++++ 1649157	209357	384152	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 724610	+++++ 1209069	26750 2533434	286216	504477	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 517328	+++++ 862093	+++++ 1733479	219263	376663	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 419907	7180 752138	15300 1510770	180675	320003	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 246002	+++++ 425369	+++++ 868443	102725	185530	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 342866	+++++ 606200	14191 1234953	147829	257273	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 658312	+++++ 1091635	+++++ 2220611	268557	461362	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 816162	11232 1376713	29433 2855605	321038	569926	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 431821	6140 745321	16025 1542021	178333	311846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 216874	+++++ 384903	8524 795389	89980	159355	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 443429	7461 775423	18279 1589643	184672	332286	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	1397 543743	8347 934446	20451 1936527	221406	392612	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 857867	+++++ 1521690	+++++ 3111831	359642	620985	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 305578	3769 463201	9698 973973	105889	188377	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 154959	+++++ 248975	6631 521616	58446	105457	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 22996	+++++ 34743	+++++ 73565	8189	14001	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 430383	+++++ 675106	+++++ 1432455	178718	306577	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 625146	8102 975156	21363 2163840	231273	420352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 404203	5185 610286	13201 1341972	142857	256531	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 629149	7949 950486	20397 2174763	224606	407304	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1279 622910	6996 953498	18332 2088173	215671	379437	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1752133	24892 2697701	62184 6006580	670193	1193039	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 982748	13604 1511445	32468 3323267	348403	629628	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 446983	5934 648702	15559 1527097	168529	304151	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 733862	11323 1058939	27222 2379123	279588	501898	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 225189	+++++ 307648	+++++ 685896	81592	138207	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1105 428668	5262 634778	13997 1383792	132707	245847	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 411121	5089 617943	12811 1328724	137098	251265	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 394925	+++++ 580836	11387 1274103	121185	228750	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 200756	+++++ 265743	+++++ 575765	61626	111350	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 402813	4638 458980	11661 1035918	94189	178125	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 766324	8121 1151611	22536 2527714	238537	448032	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 604402	7019 871893	17863 1894427	194796	365426	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 972537	+++++ 1436188	31904 3002165	313016	560124	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 752319	9146 1011655	23100 2239478	244888	441041	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1059951	13199 1540779	32987 3216549	346145	629776	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 635730	9458 922819	25309 2022825	202513	385402	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 392140	4297 546188	11283 1212369	124855	226011	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	994 604779	7033 691587	18356 1596312	199464	358690	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1024292	+++++ 1414884	38840 2889935	311840	576752	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 673748	7245 991379	18928 2285614	240982	380466	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 640133	7285 929835	18859 2122760	225418	357685	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 872667	11203 1258408	29601 2980581	262350	490917	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 1674474	18776 2435780	49844 5354821	499428	939935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 994919	10357 1415555	27595 2873555	306446	573621	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1250073	14693 1837082	38005 4233482	358417	685913	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 591630	7093 863046	18790 2062739	172558	328972	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 965336	10056 1404503	27476 3361179	272499	523872	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 612001	6017 929310	11228 2228164	175622	334284	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 1815660	20301 2668651	44067 6087192	524896	998728	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1066965	11128 1555920	27430 3507921	314832	595526	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 2504577	25378 3664370	60758 8358658	714485	1368846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 895260	+++++ 1305173	23146 2936414	262728	496259	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2084901	20766 3084392	44779 7019354	566162	1113206	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1430851	+++++ 2033838	34720 4292143	427750	814465	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 1901303	17468 2815176	41650 6312471	519918	1020564	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 1625606	16930 2388440	37488 5612597	455490	882653	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 739731	7531 1086005	15605 2578848	202596	388935	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1415537	16124 2083695	33183 4916479	400156	769572	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-40548-1 Analy Batch No.: 122137

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/13/2017 17:45 Calibration End Date: 10/14/2017 01:45 Calibration ID: 38203

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1638160	17164 2428873	37623 5766367	462414	894517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2323768	24566 3464365	53226 8154278	663611	1277648	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 1882683	20231 2839887	41360 6980912	526086	1024950	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 995065	11370 1461519	22079 3679113	268719	536332	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 972245	11493 1428660	22117 3576092	265968	533613	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1646684	14913 2390995	27099 5613631	454352	846820	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2037612	20201 3037172	47086 7170241	574752	1099571	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1523382	+++++ 2179981	+++++ 4690506	444109	784828	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 904206	10783 1341743	20873 3335597	250802	496119	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1273766	+++++ 1756717	+++++ 1950619	349480	482740	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 666514	+++++ 945449	15105 1662077	166317	338815	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 586054	7581 870723	13680 1369932	165110	310203	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1613877	+++++ 2235662	37528 4037526	361989	790559	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 591246	+++++ 842914	14158 1179603	146993	302971	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab Sample ID: ICV 200-121534/17 Calibration Date: 09/29/2017 05:36

Instrument ID: CHX.i Calib Start Date: 09/28/2017 17:49

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/29/2017 01:23

Lab File ID: 27150_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5203	0.4406		8.47	10.0	-15.3	30.0
Dichlorodifluoromethane	Ave	2.194	1.917		8.74	10.0	-12.6	30.0
Freon 22	Ave	1.201	1.035		8.61	10.0	-13.9	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.160	2.166		10.0	10.0	0.3	30.0
Chloromethane	Ave	0.6922	0.5807		8.39	10.0	-16.1	30.0
n-Butane	Ave	1.093	0.9338		8.54	10.0	-14.6	30.0
Vinyl chloride	Ave	0.8028	0.7207		8.98	10.0	-10.2	30.0
1,3-Butadiene	Ave	0.5843	0.5064		8.66	10.0	-13.3	30.0
Bromomethane	Ave	0.7860	0.6902		8.78	10.0	-12.2	30.0
Chloroethane	Ave	0.4122	0.3501		8.49	10.0	-15.1	30.0
Isopentane	Ave	0.7878	0.6972		8.85	10.0	-11.5	30.0
Bromoethene(Vinyl Bromide)	Ave	0.8829	0.7921		8.97	10.0	-10.3	30.0
Trichlorofluoromethane	Ave	2.306	2.085		9.04	10.0	-9.6	30.0
n-Pentane	Ave	1.255	1.191		9.48	10.0	-5.1	30.0
Ethanol	Ave	0.3840	0.3396		13.3	15.0	-11.6	30.0
Ethyl ether	Ave	0.5469	0.5483		10.0	10.0	0.3	30.0
Acrolein	Ave	0.2410	0.2657		11.0	10.0	10.2	30.0
Freon TF	Ave	1.702	1.562		9.18	10.0	-8.2	30.0
1,1-Dichloroethene	Ave	0.8203	0.7356		8.97	10.0	-10.3	30.0
Acetone	Ave	1.052	0.9723		9.24	10.0	-7.6	30.0
Carbon disulfide	Ave	2.296	2.338		10.2	10.0	1.8	30.0
Isopropyl alcohol	Ave	1.268	0.9794		7.72	10.0	-22.8	30.0
3-Chloropropene	Ave	0.8058	0.7293		9.05	10.0	-9.5	30.0
Acetonitrile	Ave	0.5284	0.5085		9.62	10.0	-3.8	30.0
Methylene Chloride	Ave	0.8503	0.7490		8.81	10.0	-11.9	30.0
tert-Butyl alcohol	Ave	1.805	1.490		8.25	10.0	-17.5	30.0
Methyl tert-butyl ether	Ave	2.455	2.211		9.00	10.0	-9.9	30.0
trans-1,2-Dichloroethene	Ave	1.194	1.142		9.56	10.0	-4.3	30.0
Acrylonitrile	Ave	0.5823	0.5430		9.32	10.0	-6.7	30.0
n-Hexane	Ave	1.248	1.182		9.46	10.0	-5.3	30.0
1,1-Dichloroethane	Ave	1.530	1.410		9.21	10.0	-7.8	30.0
Vinyl acetate	Ave	1.887	1.777		9.42	10.0	-5.8	30.0
cis-1,2-Dichloroethene	Ave	1.000	0.9070		9.07	10.0	-9.3	30.0
Methyl Ethyl Ketone	Ave	0.4848	0.4276		8.82	10.0	-11.8	30.0
Ethyl acetate	Ave	0.0737	0.0755		10.2	10.0	2.4	30.0
Tetrahydrofuran	Ave	0.1810	0.1611		8.90	10.0	-11.0	30.0
Chloroform	Ave	1.970	1.842		9.34	10.0	-6.5	30.0
Cyclohexane	Ave	0.2647	0.2423		9.15	10.0	-8.5	30.0
1,1,1-Trichloroethane	Ave	0.4153	0.3851		9.27	10.0	-7.3	30.0
Carbon tetrachloride	Ave	0.4078	0.4011		9.83	10.0	-1.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab Sample ID: ICV 200-121534/17 Calibration Date: 09/29/2017 05:36

Instrument ID: CHX.i Calib Start Date: 09/28/2017 17:49

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/29/2017 01:23

Lab File ID: 27150_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9004	0.7924		8.80	10.0	-12.0	30.0
Benzene	Ave	0.6126	0.5474		8.93	10.0	-10.6	30.0
1,2-Dichloroethane	Ave	0.2485	0.2273		9.14	10.0	-8.5	30.0
n-Heptane	Ave	0.3038	0.2639		8.69	10.0	-13.1	30.0
n-Butanol	Ave	0.1089	0.0998		9.16	10.0	-8.3	30.0
Trichloroethene	Ave	0.2562	0.2451		9.56	10.0	-4.4	30.0
1,2-Dichloropropane	Ave	0.2033	0.1817		8.93	10.0	-10.7	30.0
Methyl methacrylate	Ave	0.2060	0.1854		9.00	10.0	-10.0	30.0
1,4-Dioxane	Ave	0.1313	0.1079		8.21	10.0	-17.9	30.0
Dibromomethane	Ave	0.2653	0.2409		9.08	10.0	-9.2	30.0
Bromodichloromethane	Ave	0.4213	0.3892		9.24	10.0	-7.6	30.0
cis-1,3-Dichloropropene	Ave	0.3162	0.2927		9.26	10.0	-7.4	30.0
methyl isobutyl ketone	Ave	0.3989	0.3367		8.44	10.0	-15.6	30.0
Toluene	Ave	0.4851	0.4518		9.31	10.0	-6.9	30.0
n-Octane	Ave	0.4093	0.3630		8.87	10.0	-11.3	30.0
trans-1,3-Dichloropropene	Ave	0.3475	0.3081		8.86	10.0	-11.3	30.0
1,1,2-Trichloroethane	Ave	0.2392	0.2229		9.32	10.0	-6.8	30.0
Tetrachloroethene	Ave	0.4136	0.4031		9.74	10.0	-2.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4592	0.3772		8.21	10.0	-17.9	30.0
Dibromochloromethane	Ave	0.4852	0.4700		9.68	10.0	-3.1	30.0
1,2-Dibromoethane	Ave	0.4543	0.4336		9.54	10.0	-4.6	30.0
Chlorobenzene	Ave	0.6751	0.6277		9.30	10.0	-7.0	30.0
Ethylbenzene	Ave	1.094	1.015		9.28	10.0	-7.2	30.0
n-Nonane	Ave	0.4658	0.4230		9.08	10.0	-9.2	30.0
m,p-Xylene	Ave	0.4335	0.4052		18.7	20.0	-6.5	30.0
Xylene, o-	Ave	0.4248	0.3851		9.06	10.0	-9.4	30.0
Styrene	Ave	0.6559	0.6173		9.41	10.0	-5.9	30.0
Bromoform	Ave	0.4216	0.4744		11.3	10.0	12.5	30.0
Cumene	Ave	1.237	1.144		9.25	10.0	-7.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6213	0.5838		9.39	10.0	-6.0	30.0
n-Propylbenzene	Ave	1.505	1.387		9.22	10.0	-7.8	30.0
1,2,3-Trichloropropane	Ave	0.4985	0.4452		8.93	10.0	-10.7	30.0
n-Decane	Ave	0.5885	0.5503		9.35	10.0	-6.5	30.0
2-Chlorotoluene	Ave	1.054	0.9943		9.43	10.0	-5.7	30.0
4-Ethyltoluene	Ave	1.241	1.222		9.84	10.0	-1.5	30.0
1,3,5-Trimethylbenzene	Ave	1.030	0.9803		9.52	10.0	-4.8	30.0
Alpha Methyl Styrene	Ave	0.4988	0.4929		9.88	10.0	-1.2	30.0
tert-Butylbenzene	Ave	0.9749	0.9318		9.56	10.0	-4.4	30.0
1,2,4-Trimethylbenzene	Ave	1.027	0.9848		9.58	10.0	-4.1	30.0
sec-Butylbenzene	Ave	1.469	1.406		9.57	10.0	-4.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab Sample ID: ICV 200-121534/17 Calibration Date: 09/29/2017 05:36

Instrument ID: CHX.i Calib Start Date: 09/28/2017 17:49

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/29/2017 01:23

Lab File ID: 27150_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.220	1.205		9.87	10.0	-1.2	30.0
1,3-Dichlorobenzene	Ave	0.7195	0.7116		9.89	10.0	-1.1	30.0
1,4-Dichlorobenzene	Ave	0.7140	0.7028		9.84	10.0	-1.6	30.0
Benzyl chloride	Ave	0.8010	0.8147		10.2	10.0	1.7	30.0
n-Butylbenzene	Ave	1.120	1.091		9.74	10.0	-2.6	30.0
n-Undecane	Ave	0.5754	0.5058		8.79	10.0	-12.1	30.0
1,2-Dichlorobenzene	Ave	0.6698	0.6675		9.96	10.0	-0.4	30.0
n-Dodecane	Ave	0.4126	0.3415		8.28	10.0	-17.2	30.0
1,2,4-Trichlorobenzene	Ave	0.5106	0.4284		8.39	10.0	-16.1	30.0
Hexachlorobutadiene	Ave	0.4590	0.4179		9.10	10.0	-9.0	30.0
Naphthalene	Ave	1.104	0.7871		7.13	10.0	-28.7	30.0
1,2,3-Trichlorobenzene	Ave	0.4561	0.3777		8.28	10.0	-17.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab Sample ID: CCVIS 200-121739/2 Calibration Date: 10/04/2017 11:24

Instrument ID: CHX.i Calib Start Date: 09/28/2017 17:49

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/29/2017 01:23

Lab File ID: 27236_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5203	0.6000		11.5	10.0	15.3	30.0
Dichlorodifluoromethane	Ave	2.194	2.459		11.2	10.0	12.1	30.0
Freon 22	Ave	1.201	1.343		11.2	10.0	11.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.160	2.432		11.3	10.0	12.6	30.0
Chloromethane	Ave	0.6922	0.7659		11.1	10.0	10.7	30.0
n-Butane	Ave	1.093	1.215		11.1	10.0	11.2	30.0
Vinyl chloride	Ave	0.8028	0.9405		11.7	10.0	17.2	30.0
1,3-Butadiene	Ave	0.5843	0.6658		11.4	10.0	13.9	30.0
Bromomethane	Ave	0.7860	0.8958		11.4	10.0	14.0	30.0
Chloroethane	Ave	0.4122	0.4521		11.0	10.0	9.7	30.0
Isopentane	Ave	0.7878	0.8093		10.3	10.0	2.7	30.0
Bromoethene(Vinyl Bromide)	Ave	0.8829	0.9332		10.6	10.0	5.7	30.0
Trichlorofluoromethane	Ave	2.306	2.463		10.7	10.0	6.8	30.0
n-Pentane	Ave	1.255	1.367		10.9	10.0	8.9	30.0
Ethanol	Ave	0.3840	0.4468		17.5	15.0	16.3	30.0
Ethyl ether	Ave	0.5469	0.6023		11.0	10.0	10.1	30.0
Acrolein	Ave	0.2410	0.2856		11.8	10.0	18.5	30.0
Freon TF	Ave	1.702	1.836		10.8	10.0	7.9	30.0
1,1-Dichloroethene	Ave	0.8203	0.8689		10.6	10.0	5.9	30.0
Acetone	Ave	1.052	1.118		10.6	10.0	6.2	30.0
Carbon disulfide	Ave	2.296	2.487		10.8	10.0	8.3	30.0
Isopropyl alcohol	Ave	1.268	1.326		10.4	10.0	4.5	30.0
3-Chloropropene	Ave	0.8058	0.9729		12.1	10.0	20.7	30.0
Acetonitrile	Ave	0.5284	0.5701		10.8	10.0	7.9	30.0
Methylene Chloride	Ave	0.8503	0.9290		10.9	10.0	9.3	30.0
tert-Butyl alcohol	Ave	1.805	1.816		10.1	10.0	0.6	30.0
Methyl tert-butyl ether	Ave	2.455	2.579		10.5	10.0	5.1	30.0
trans-1,2-Dichloroethene	Ave	1.194	1.323		11.1	10.0	10.8	30.0
Acrylonitrile	Ave	0.5823	0.6256		10.7	10.0	7.4	30.0
n-Hexane	Ave	1.248	1.335		10.7	10.0	7.0	30.0
1,1-Dichloroethane	Ave	1.530	1.673		10.9	10.0	9.4	30.0
Vinyl acetate	Ave	1.887	2.005		10.6	10.0	6.3	30.0
cis-1,2-Dichloroethene	Ave	1.000	1.004		10.0	10.0	0.4	30.0
Methyl Ethyl Ketone	Ave	0.4848	0.4673		9.64	10.0	-3.6	30.0
Ethyl acetate	Ave	0.0737	0.0728		9.88	10.0	-1.2	30.0
Tetrahydrofuran	Ave	0.1810	0.2097		11.6	10.0	15.9	30.0
Chloroform	Ave	1.970	1.975		10.0	10.0	0.2	30.0
Cyclohexane	Ave	0.2647	0.2880		10.9	10.0	8.8	30.0
1,1,1-Trichloroethane	Ave	0.4153	0.4444		10.7	10.0	7.0	30.0
Carbon tetrachloride	Ave	0.4078	0.4484		11.0	10.0	9.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab Sample ID: CCVIS 200-121739/2 Calibration Date: 10/04/2017 11:24

Instrument ID: CHX.i Calib Start Date: 09/28/2017 17:49

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/29/2017 01:23

Lab File ID: 27236_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9004	0.9776		10.9	10.0	8.6	30.0
Benzene	Ave	0.6126	0.6411		10.5	10.0	4.7	30.0
1,2-Dichloroethane	Ave	0.2485	0.2589		10.4	10.0	4.2	30.0
n-Heptane	Ave	0.3038	0.3149		10.4	10.0	3.7	30.0
n-Butanol	Ave	0.1089	0.0998		9.16	10.0	-8.3	30.0
Trichloroethene	Ave	0.2562	0.2625		10.2	10.0	2.4	30.0
1,2-Dichloropropane	Ave	0.2033	0.2106		10.4	10.0	3.6	30.0
Methyl methacrylate	Ave	0.2060	0.1960		9.51	10.0	-4.8	30.0
1,4-Dioxane	Ave	0.1313	0.1181		8.99	10.0	-10.1	30.0
Dibromomethane	Ave	0.2653	0.2436		9.18	10.0	-8.2	30.0
Bromodichloromethane	Ave	0.4213	0.4348		10.3	10.0	3.2	30.0
cis-1,3-Dichloropropene	Ave	0.3162	0.3202		10.1	10.0	1.3	30.0
methyl isobutyl ketone	Ave	0.3989	0.3752		9.40	10.0	-5.9	30.0
Toluene	Ave	0.4851	0.4893		10.1	10.0	0.9	30.0
n-Octane	Ave	0.4093	0.4187		10.2	10.0	2.3	30.0
trans-1,3-Dichloropropene	Ave	0.3475	0.3326		9.57	10.0	-4.3	30.0
1,1,2-Trichloroethane	Ave	0.2392	0.2473		10.3	10.0	3.4	30.0
Tetrachloroethene	Ave	0.4136	0.3932		9.51	10.0	-4.9	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4592	0.4031		8.77	10.0	-12.2	30.0
Dibromochloromethane	Ave	0.4852	0.5074		10.5	10.0	4.6	30.0
1,2-Dibromoethane	Ave	0.4543	0.4593		10.1	10.0	1.1	30.0
Chlorobenzene	Ave	0.6751	0.6671		9.88	10.0	-1.2	30.0
Ethylbenzene	Ave	1.094	1.109		10.1	10.0	1.4	30.0
n-Nonane	Ave	0.4658	0.4810		10.3	10.0	3.3	30.0
m,p-Xylene	Ave	0.4335	0.4461		20.6	20.0	2.9	30.0
Xylene, o-	Ave	0.4248	0.4210		9.91	10.0	-0.9	30.0
Styrene	Ave	0.6559	0.6680		10.2	10.0	1.8	30.0
Bromoform	Ave	0.4216	0.4849		11.5	10.0	15.0	30.0
Cumene	Ave	1.237	1.269		10.3	10.0	2.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6213	0.6648		10.7	10.0	7.0	30.0
n-Propylbenzene	Ave	1.505	1.579		10.5	10.0	4.9	30.0
1,2,3-Trichloropropane	Ave	0.4985	0.5118		10.3	10.0	2.7	30.0
n-Decane	Ave	0.5885	0.6675		11.3	10.0	13.4	30.0
4-Ethyltoluene	Ave	1.241	1.379		11.1	10.0	11.1	30.0
2-Chlorotoluene	Ave	1.054	1.163		11.0	10.0	10.3	30.0
1,3,5-Trimethylbenzene	Ave	1.030	1.096		10.6	10.0	6.4	30.0
Alpha Methyl Styrene	Ave	0.4988	0.5207		10.4	10.0	4.4	30.0
tert-Butylbenzene	Ave	0.9749	1.038		10.6	10.0	6.5	30.0
1,2,4-Trimethylbenzene	Ave	1.027	1.120		10.9	10.0	9.0	30.0
sec-Butylbenzene	Ave	1.469	1.625		11.1	10.0	10.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Lab Sample ID: CCVIS 200-121739/2 Calibration Date: 10/04/2017 11:24

Instrument ID: CHX.i Calib Start Date: 09/28/2017 17:49

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/29/2017 01:23

Lab File ID: 27236_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.220	1.368		11.2	10.0	12.1	30.0
1,3-Dichlorobenzene	Ave	0.7195	0.7900		11.0	10.0	9.8	30.0
1,4-Dichlorobenzene	Ave	0.7140	0.7683		10.8	10.0	7.6	30.0
Benzyl chloride	Ave	0.8010	1.011		12.6	10.0	26.2	30.0
n-Butylbenzene	Ave	1.120	1.305		11.6	10.0	16.5	30.0
n-Undecane	Ave	0.5754	0.6234		10.8	10.0	8.3	30.0
1,2-Dichlorobenzene	Ave	0.6698	0.7282		10.9	10.0	8.7	30.0
n-Dodecane	Ave	0.4126	0.4557		11.0	10.0	10.4	30.0
1,2,4-Trichlorobenzene	Ave	0.5106	0.4391		8.60	10.0	-14.0	30.0
Hexachlorobutadiene	Ave	0.4590	0.4043		8.81	10.0	-11.9	30.0
Naphthalene	Ave	1.104	1.042		9.44	10.0	-5.6	30.0
1,2,3-Trichlorobenzene	Ave	0.4561	0.4353		9.54	10.0	-4.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab Sample ID: ICV 200-121363/19 Calibration Date: 09/26/2017 06:59

Instrument ID: CHG.i Calib Start Date: 09/25/2017 20:02

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/26/2017 03:37

Lab File ID: 200-27085-019.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.3350	0.3219		9.61	10.0	-3.9	30.0
Dichlorodifluoromethane	Ave	2.394	2.410		10.1	10.0	0.7	30.0
Freon 22	Ave	0.9718	0.9525		9.80	10.0	-2.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.864	2.075		11.1	10.0	11.3	30.0
Chloromethane	Ave	0.4687	0.4466		9.53	10.0	-4.7	30.0
n-Butane	Ave	0.6353	0.6054		9.53	10.0	-4.7	30.0
Vinyl chloride	Ave	0.5857	0.5561		9.49	10.0	-5.1	30.0
1,3-Butadiene	Ave	0.3726	0.3457		9.28	10.0	-7.2	30.0
Bromomethane	Ave	0.7039	0.6954		9.88	10.0	-1.2	30.0
Chloroethane	Ave	0.2183	0.2113		9.68	10.0	-3.2	30.0
Isopentane	Ave	0.3985	0.3931		9.86	10.0	-1.4	30.0
Bromoethene(Vinyl Bromide)	Ave	0.7379	0.7246		9.82	10.0	-1.8	30.0
Trichlorofluoromethane	Ave	2.149	2.109		9.81	10.0	-1.9	30.0
n-Pentane	Ave	0.6024	0.6290		10.4	10.0	4.4	30.0
Ethanol	Ave	0.1674	0.1588		14.2	15.0	-5.2	30.0
Ethyl ether	Ave	0.2797	0.2900		10.4	10.0	3.7	30.0
Freon TF	Ave	1.461	1.445		9.89	10.0	-1.1	30.0
Acrolein	Ave	0.0976	0.1149		11.8	10.0	17.7	30.0
1,1-Dichloroethene	Ave	0.6509	0.6137		9.43	10.0	-5.7	30.0
Acetone	Ave	0.6091	0.5642		9.26	10.0	-7.4	30.0
Carbon disulfide	Ave	1.595	1.798		11.3	10.0	12.7	30.0
Isopropyl alcohol	Ave	0.6325	0.5046		7.98	10.0	-20.2	30.0
3-Chloropropene	Ave	0.4426	0.4286		9.68	10.0	-3.1	30.0
Acetonitrile	Ave	0.2235	0.2229		9.97	10.0	-0.3	30.0
Methylene Chloride	Ave	0.5422	0.5255		9.69	10.0	-3.1	30.0
tert-Butyl alcohol	Ave	1.002	0.8633		8.62	10.0	-13.8	30.0
Methyl tert-butyl ether	Ave	1.566	1.397		8.92	10.0	-10.8	30.0
trans-1,2-Dichloroethene	Ave	0.7744	0.7952		10.3	10.0	2.7	30.0
Acrylonitrile	Ave	0.2568	0.2500		9.74	10.0	-2.6	30.0
n-Hexane	Ave	0.6405	0.6532		10.2	10.0	2.0	30.0
1,1-Dichloroethane	Ave	1.053	1.033		9.80	10.0	-1.9	30.0
Vinyl acetate	Ave	0.9314	0.8957		9.61	10.0	-3.8	30.0
cis-1,2-Dichloroethene	Ave	0.7925	0.7636		9.63	10.0	-3.6	30.0
Methyl Ethyl Ketone	Ave	0.2460	0.2217		9.01	10.0	-9.9	30.0
Ethyl acetate	Ave	0.0364	0.0345		9.48	10.0	-5.2	30.0
Tetrahydrofuran	Ave	0.0759	0.0699		9.20	10.0	-7.9	30.0
Chloroform	Ave	1.833	1.823		9.94	10.0	-0.5	30.0
Cyclohexane	Ave	0.1565	0.1535		9.80	10.0	-1.9	30.0
1,1,1-Trichloroethane	Ave	0.3707	0.3665		9.88	10.0	-1.1	30.0
Carbon tetrachloride	Ave	0.4215	0.4330		10.3	10.0	2.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab Sample ID: ICV 200-121363/19 Calibration Date: 09/26/2017 06:59

Instrument ID: CHG.i Calib Start Date: 09/25/2017 20:02

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/26/2017 03:37

Lab File ID: 200-27085-019.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.5367	0.5169		9.63	10.0	-3.7	30.0
Benzene	Ave	0.4314	0.4206		9.75	10.0	-2.5	30.0
1,2-Dichloroethane	Ave	0.2324	0.2306		9.92	10.0	-0.7	30.0
n-Heptane	Ave	0.1910	0.1821		9.53	10.0	-4.6	30.0
n-Butanol	Ave	0.0665	0.0688		10.3	10.0	3.4	30.0
Trichloroethene	Ave	0.2972	0.2823		9.50	10.0	-5.0	30.0
1,2-Dichloropropane	Ave	0.1875	0.1859		9.91	10.0	-0.9	30.0
Methyl methacrylate	Ave	0.1477	0.1373		9.29	10.0	-7.1	30.0
1,4-Dioxane	Ave	0.0979	0.0861		8.79	10.0	-12.1	30.0
Dibromomethane	Ave	0.3187	0.3125		9.81	10.0	-1.9	30.0
Bromodichloromethane	Ave	0.4667	0.4658		9.98	10.0	-0.2	30.0
cis-1,3-Dichloropropene	Ave	0.3094	0.3190		10.3	10.0	3.1	30.0
methyl isobutyl ketone	Ave	0.2580	0.2220		8.60	10.0	-13.9	30.0
Toluene	Ave	0.4415	0.4392		9.95	10.0	-0.5	30.0
n-Octane	Ave	0.2848	0.2796		9.82	10.0	-1.8	30.0
trans-1,3-Dichloropropene	Ave	0.3244	0.3217		9.92	10.0	-0.8	30.0
1,1,2-Trichloroethane	Ave	0.2302	0.2336		10.1	10.0	1.4	30.0
Tetrachloroethene	Ave	0.5055	0.4973		9.84	10.0	-1.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.2838	0.2332		8.21	10.0	-17.8	30.0
Dibromochloromethane	Ave	0.5930	0.6174		10.4	10.0	4.1	30.0
1,2-Dibromoethane	Ave	0.4745	0.4897		10.3	10.0	3.2	30.0
Chlorobenzene	Ave	0.6437	0.6539		10.2	10.0	1.6	30.0
Ethylbenzene	Ave	0.9128	0.8499		9.31	10.0	-6.9	30.0
n-Nonane	Ave	0.3289	0.3185		9.68	10.0	-3.1	30.0
m,p-Xylene	Ave	0.3794	0.3486		18.4	20.0	-8.1	30.0
Xylene, o-	Ave	0.4002	0.3642		9.10	10.0	-9.0	30.0
Styrene	Ave	0.5480	0.5232		9.55	10.0	-4.5	30.0
Bromoform	Ave	0.5095	0.6016		11.8	10.0	18.1	30.0
Cumene	Ave	1.052	0.9514		9.05	10.0	-9.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5340	0.5019		9.40	10.0	-6.0	30.0
n-Propylbenzene	Ave	1.148	1.060		9.23	10.0	-7.7	30.0
1,2,3-Trichloropropane	Ave	0.4075	0.3683		9.04	10.0	-9.6	30.0
n-Decane	Ave	0.3129	0.3011		9.62	10.0	-3.8	30.0
2-Chlorotoluene	Ave	0.7606	0.7221		9.49	10.0	-5.1	30.0
4-Ethyltoluene	Ave	0.8770	0.8531		9.73	10.0	-2.7	30.0
1,3,5-Trimethylbenzene	Ave	0.8392	0.7747		9.23	10.0	-7.7	30.0
Alpha Methyl Styrene	Ave	0.4286	0.4188		9.77	10.0	-2.3	30.0
tert-Butylbenzene	Ave	0.8196	0.7454		9.09	10.0	-9.1	30.0
1,2,4-Trimethylbenzene	Ave	0.8169	0.7623		9.33	10.0	-6.7	30.0
sec-Butylbenzene	Ave	1.153	1.068		9.26	10.0	-7.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab Sample ID: ICV 200-121363/19 Calibration Date: 09/26/2017 06:59

Instrument ID: CHG.i Calib Start Date: 09/25/2017 20:02

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/26/2017 03:37

Lab File ID: 200-27085-019.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.9325	0.8870		9.51	10.0	-4.9	30.0
1,3-Dichlorobenzene	Ave	0.6289	0.6270		9.97	10.0	-0.3	30.0
1,4-Dichlorobenzene	Ave	0.6546	0.6390		9.76	10.0	-2.4	30.0
Benzyl chloride	Ave	0.6532	0.6482		9.92	10.0	-0.8	30.0
n-Butylbenzene	Ave	0.7677	0.7502		9.77	10.0	-2.3	30.0
n-Undecane	Ave	0.3282	0.3038		9.25	10.0	-7.4	30.0
1,2-Dichlorobenzene	Ave	0.6167	0.5979		9.69	10.0	-3.1	30.0
n-Dodecane	Ave	0.2555	0.2175		8.51	10.0	-14.9	30.0
1,2,4-Trichlorobenzene	Ave	0.3912	0.3191		8.15	10.0	-18.4	30.0
Hexachlorobutadiene	Ave	0.3977	0.3836		9.64	10.0	-3.6	30.0
Naphthalene	Ave	0.7285	0.5164		7.09	10.0	-29.1	30.0
1,2,3-Trichlorobenzene	Ave	0.3299	0.2582		7.83	10.0	-21.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab Sample ID: CCVIS 200-122057/2 Calibration Date: 10/12/2017 10:34

Instrument ID: CHG.i Calib Start Date: 09/25/2017 20:02

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/26/2017 03:37

Lab File ID: 200-27370-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.3350	0.3693		11.0	10.0	10.2	30.0
Dichlorodifluoromethane	Ave	2.394	2.562		10.7	10.0	7.0	30.0
Freon 22	Ave	0.9718	1.021		10.5	10.0	5.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.864	1.952		10.5	10.0	4.7	30.0
Chloromethane	Ave	0.4687	0.4769		10.2	10.0	1.8	30.0
n-Butane	Ave	0.6353	0.6455		10.2	10.0	1.6	30.0
Vinyl chloride	Ave	0.5857	0.5788		9.88	10.0	-1.2	30.0
1,3-Butadiene	Ave	0.3726	0.3775		10.1	10.0	1.3	30.0
Bromomethane	Ave	0.7039	0.7437		10.6	10.0	5.7	30.0
Chloroethane	Ave	0.2183	0.2254		10.3	10.0	3.2	30.0
Isopentane	Ave	0.3985	0.3888		9.75	10.0	-2.4	30.0
Bromoethene(Vinyl Bromide)	Ave	0.7379	0.7723		10.5	10.0	4.7	30.0
Trichlorofluoromethane	Ave	2.149	2.226		10.4	10.0	3.6	30.0
n-Pentane	Ave	0.6024	0.5904		9.80	10.0	-2.0	30.0
Ethanol	Ave	0.1674	0.1623		14.5	15.0	-3.1	30.0
Ethyl ether	Ave	0.2797	0.2758		9.86	10.0	-1.4	30.0
Freon TF	Ave	1.461	1.481		10.1	10.0	1.4	30.0
Acrolein	Ave	0.0976	0.1004		10.3	10.0	2.9	30.0
1,1-Dichloroethene	Ave	0.6509	0.6328		9.72	10.0	-2.8	30.0
Acetone	Ave	0.6091	0.5736		9.42	10.0	-5.8	30.0
Carbon disulfide	Ave	1.595	1.598		10.0	10.0	0.1	30.0
Isopropyl alcohol	Ave	0.6325	0.5726		9.05	10.0	-9.5	30.0
3-Chloropropene	Ave	0.4426	0.4800		10.8	10.0	8.5	30.0
Acetonitrile	Ave	0.2235	0.1987		8.89	10.0	-11.1	30.0
Methylene Chloride	Ave	0.5422	0.5360		9.88	10.0	-1.1	30.0
tert-Butyl alcohol	Ave	1.002	0.9183		9.17	10.0	-8.3	30.0
Methyl tert-butyl ether	Ave	1.566	1.396		8.91	10.0	-10.9	30.0
trans-1,2-Dichloroethene	Ave	0.7744	0.7446		9.61	10.0	-3.9	30.0
Acrylonitrile	Ave	0.2568	0.2321		9.04	10.0	-9.6	30.0
n-Hexane	Ave	0.6405	0.5919		9.24	10.0	-7.6	30.0
1,1-Dichloroethane	Ave	1.053	1.007		9.55	10.0	-4.4	30.0
Vinyl acetate	Ave	0.9314	0.8610		9.24	10.0	-7.6	30.0
cis-1,2-Dichloroethene	Ave	0.7925	0.7663		9.67	10.0	-3.3	30.0
Methyl Ethyl Ketone	Ave	0.2460	0.2086		8.48	10.0	-15.2	30.0
Ethyl acetate	Ave	0.0364	0.0319		8.77	10.0	-12.3	30.0
Tetrahydrofuran	Ave	0.0759	0.0670		8.82	10.0	-11.8	30.0
Chloroform	Ave	1.833	1.771		9.66	10.0	-3.4	30.0
Cyclohexane	Ave	0.1565	0.1435		9.17	10.0	-8.3	30.0
1,1,1-Trichloroethane	Ave	0.3707	0.3496		9.43	10.0	-5.7	30.0
Carbon tetrachloride	Ave	0.4215	0.4174		9.90	10.0	-1.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab Sample ID: CCVIS 200-122057/2 Calibration Date: 10/12/2017 10:34

Instrument ID: CHG.i Calib Start Date: 09/25/2017 20:02

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/26/2017 03:37

Lab File ID: 200-27370-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.5367	0.4799		8.94	10.0	-10.6	30.0
Benzene	Ave	0.4314	0.3953		9.16	10.0	-8.4	30.0
1,2-Dichloroethane	Ave	0.2324	0.2220		9.55	10.0	-4.4	30.0
n-Heptane	Ave	0.1910	0.1703		8.91	10.0	-10.8	30.0
n-Butanol	Ave	0.0665	0.0568		8.55	10.0	-14.5	30.0
Trichloroethene	Ave	0.2972	0.2670		8.98	10.0	-10.2	30.0
1,2-Dichloropropane	Ave	0.1875	0.1754		9.35	10.0	-6.5	30.0
Methyl methacrylate	Ave	0.1477	0.1255		8.50	10.0	-15.0	30.0
1,4-Dioxane	Ave	0.0979	0.0826		8.44	10.0	-15.6	30.0
Dibromomethane	Ave	0.3187	0.3045		9.55	10.0	-4.4	30.0
Bromodichloromethane	Ave	0.4667	0.4506		9.65	10.0	-3.4	30.0
cis-1,3-Dichloropropene	Ave	0.3094	0.2969		9.59	10.0	-4.0	30.0
methyl isobutyl ketone	Ave	0.2580	0.2215		8.58	10.0	-14.2	30.0
Toluene	Ave	0.4415	0.4144		9.38	10.0	-6.1	30.0
n-Octane	Ave	0.2848	0.2592		9.10	10.0	-9.0	30.0
trans-1,3-Dichloropropene	Ave	0.3244	0.2964		9.14	10.0	-8.6	30.0
1,1,2-Trichloroethane	Ave	0.2302	0.2270		9.86	10.0	-1.4	30.0
Tetrachloroethene	Ave	0.5055	0.4981		9.85	10.0	-1.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.2838	0.2419		8.52	10.0	-14.7	30.0
Dibromochloromethane	Ave	0.5930	0.6395		10.8	10.0	7.8	30.0
1,2-Dibromoethane	Ave	0.4745	0.4804		10.1	10.0	1.2	30.0
Chlorobenzene	Ave	0.6437	0.6245		9.70	10.0	-3.0	30.0
Ethylbenzene	Ave	0.9128	0.8353		9.15	10.0	-8.5	30.0
n-Nonane	Ave	0.3289	0.2977		9.05	10.0	-9.5	30.0
m,p-Xylene	Ave	0.3794	0.3410		18.0	20.0	-10.1	30.0
Xylene, o-	Ave	0.4002	0.3612		9.02	10.0	-9.8	30.0
Styrene	Ave	0.5480	0.4991		9.11	10.0	-8.9	30.0
Bromoform	Ave	0.5095	0.6272		12.3	10.0	23.1	30.0
Cumene	Ave	1.052	0.9505		9.04	10.0	-9.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5340	0.4869		9.12	10.0	-8.8	30.0
n-Propylbenzene	Ave	1.148	1.034		9.01	10.0	-9.9	30.0
1,2,3-Trichloropropane	Ave	0.4075	0.3597		8.82	10.0	-11.7	30.0
n-Decane	Ave	0.3129	0.2787		8.91	10.0	-10.9	30.0
2-Chlorotoluene	Ave	0.7606	0.6997		9.20	10.0	-8.0	30.0
4-Ethyltoluene	Ave	0.8770	0.8126		9.26	10.0	-7.3	30.0
1,3,5-Trimethylbenzene	Ave	0.8392	0.7558		9.00	10.0	-9.9	30.0
Alpha Methyl Styrene	Ave	0.4286	0.3981		9.29	10.0	-7.1	30.0
tert-Butylbenzene	Ave	0.8196	0.7367		8.99	10.0	-10.1	30.0
1,2,4-Trimethylbenzene	Ave	0.8169	0.7415		9.07	10.0	-9.2	30.0
sec-Butylbenzene	Ave	1.153	1.047		9.08	10.0	-9.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Lab Sample ID: CCVIS 200-122057/2 Calibration Date: 10/12/2017 10:34

Instrument ID: CHG.i Calib Start Date: 09/25/2017 20:02

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 09/26/2017 03:37

Lab File ID: 200-27370-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.9325	0.8734		9.36	10.0	-6.3	30.0
1,3-Dichlorobenzene	Ave	0.6289	0.6125		9.74	10.0	-2.6	30.0
1,4-Dichlorobenzene	Ave	0.6546	0.6287		9.60	10.0	-4.0	30.0
Benzyl chloride	Ave	0.6532	0.6520		9.98	10.0	-0.2	30.0
n-Butylbenzene	Ave	0.7677	0.7298		9.50	10.0	-4.9	30.0
n-Undecane	Ave	0.3282	0.2714		8.27	10.0	-17.3	30.0
1,2-Dichlorobenzene	Ave	0.6167	0.5875		9.52	10.0	-4.7	30.0
n-Dodecane	Ave	0.2555	0.2016		7.89	10.0	-21.1	30.0
1,2,4-Trichlorobenzene	Ave	0.3912	0.3114		7.96	10.0	-20.4	30.0
Hexachlorobutadiene	Ave	0.3977	0.3499		8.80	10.0	-12.0	30.0
Naphthalene	Ave	0.7285	0.5531		7.59	10.0	-24.1	30.0
1,2,3-Trichlorobenzene	Ave	0.3299	0.2607		7.90	10.0	-21.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab Sample ID: ICV 200-121987/17 Calibration Date: 10/11/2017 06:00

Instrument ID: CHB.i Calib Start Date: 10/10/2017 18:40

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/11/2017 02:31

Lab File ID: 27339-17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.3938	0.3949		10.0	10.0	0.3	30.0
Dichlorodifluoromethane	Ave	1.689	1.725		10.2	10.0	2.1	30.0
Freon 22	Ave	0.8625	0.8843		10.3	10.0	2.5	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.794	2.091		11.7	10.0	16.6	30.0
Chloromethane	Ave	0.5652	0.5562		9.84	10.0	-1.6	30.0
n-Butane	Ave	0.9620	0.9593		9.97	10.0	-0.3	30.0
Vinyl chloride	Ave	0.7238	0.7516		10.4	10.0	3.8	30.0
1,3-Butadiene	Ave	0.5476	0.5476		10.0	10.0	0.0	30.0
Bromomethane	Ave	0.8798	0.9160		10.4	10.0	4.1	30.0
Chloroethane	Ave	0.4834	0.4957		10.3	10.0	2.5	30.0
Isopentane	Ave	0.9226	1.007		10.9	10.0	9.1	30.0
Bromoethene(Vinyl Bromide)	Ave	0.9698	1.007		10.4	10.0	3.8	30.0
Trichlorofluoromethane	Ave	1.988	2.052		10.3	10.0	3.2	30.0
n-Pentane	Ave	1.434	1.594		11.1	10.0	11.1	30.0
Ethanol	Ave	0.4255	0.4006		14.1	15.0	-5.9	30.0
Ethyl ether	Ave	0.6134	0.7076		11.5	10.0	15.4	30.0
Acrolein	Ave	0.2841	0.3660		12.9	10.0	28.8	30.0
Freon TF	Ave	1.834	1.907		10.4	10.0	4.0	30.0
1,1-Dichloroethene	Ave	0.9368	0.9501		10.1	10.0	1.4	30.0
Acetone	Ave	1.092	1.207		11.1	10.0	10.5	30.0
Isopropyl alcohol	Ave	1.317	1.384		10.5	10.0	5.1	30.0
Carbon disulfide	Ave	2.480	2.922		11.8	10.0	17.8	30.0
3-Chloropropene	Ave	1.059	0.7610		7.18	10.0	-28.2	30.0
Acetonitrile	Ave	0.6514	0.7395		11.4	10.0	13.5	30.0
Methylene Chloride	Ave	0.8998	0.9335		10.4	10.0	3.7	30.0
tert-Butyl alcohol	Ave	1.818	1.932		10.6	10.0	6.3	30.0
Methyl tert-butyl ether	Ave	2.559	2.645		10.3	10.0	3.4	30.0
trans-1,2-Dichloroethene	Ave	1.216	1.350		11.1	10.0	11.0	30.0
Acrylonitrile	Ave	0.6505	0.7114		10.9	10.0	9.4	30.0
n-Hexane	Ave	1.463	1.555		10.6	10.0	6.3	30.0
1,1-Dichloroethane	Ave	1.601	1.694		10.6	10.0	5.8	30.0
Vinyl acetate	Ave	2.037	2.296		11.3	10.0	12.7	30.0
Methyl Ethyl Ketone	Ave	0.5221	0.5391		10.3	10.0	3.3	30.0
cis-1,2-Dichloroethene	Ave	1.082	1.108		10.2	10.0	2.3	30.0
Ethyl acetate	Ave	0.0889	0.0993		11.2	10.0	11.8	30.0
Tetrahydrofuran	Ave	0.1983	0.2176		11.0	10.0	9.7	30.0
Chloroform	Ave	1.824	1.903		10.4	10.0	4.4	30.0
1,1,1-Trichloroethane	Ave	0.3621	0.3804		10.5	10.0	5.1	30.0
Cyclohexane	Ave	0.2864	0.3038		10.6	10.0	6.1	30.0
Carbon tetrachloride	Ave	0.3602	0.3919		10.9	10.0	8.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab Sample ID: ICV 200-121987/17 Calibration Date: 10/11/2017 06:00

Instrument ID: CHB.i Calib Start Date: 10/10/2017 18:40

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/11/2017 02:31

Lab File ID: 27339-17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9764	1.015		10.4	10.0	3.9	30.0
Benzene	Ave	0.6485	0.6738		10.4	10.0	3.9	30.0
1,2-Dichloroethane	Ave	0.2026	0.2167		10.7	10.0	6.9	30.0
n-Heptane	Ave	0.3440	0.3510		10.2	10.0	2.0	30.0
n-Butanol	Ave	0.1262	0.1587		12.6	10.0	25.7	30.0
Trichloroethene	Ave	0.2750	0.2937		10.7	10.0	6.8	30.0
1,2-Dichloropropane	Ave	0.2336	0.2452		10.5	10.0	5.0	30.0
Methyl methacrylate	Ave	0.2345	0.2490		10.6	10.0	6.1	30.0
1,4-Dioxane	Ave	0.1337	0.1553		11.6	10.0	16.2	30.0
Dibromomethane	Ave	0.3052	0.3251		10.7	10.0	6.5	30.0
Bromodichloromethane	Ave	0.4147	0.4255		10.3	10.0	2.6	30.0
cis-1,3-Dichloropropene	Ave	0.3450	0.3705		10.7	10.0	7.4	30.0
methyl isobutyl ketone	Ave	0.4348	0.4438		10.2	10.0	2.1	30.0
n-Octane	Ave	0.4725	0.4931		10.4	10.0	4.3	30.0
Toluene	Ave	0.5741	0.5823		10.1	10.0	1.4	30.0
trans-1,3-Dichloropropene	Ave	0.3240	0.3445		10.6	10.0	6.3	30.0
1,1,2-Trichloroethane	Ave	0.2723	0.2826		10.4	10.0	3.8	30.0
Tetrachloroethene	Ave	0.5111	0.5215		10.2	10.0	2.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5110	0.4838		9.47	10.0	-5.3	30.0
Dibromochloromethane	Ave	0.5536	0.5088		9.19	10.0	-8.1	30.0
1,2-Dibromoethane	Ave	0.5080	0.5303		10.4	10.0	4.4	30.0
Chlorobenzene	Ave	0.7845	0.8097		10.3	10.0	3.2	30.0
Ethylbenzene	Ave	1.226	1.240		10.1	10.0	1.1	30.0
n-Nonane	Ave	0.5526	0.5708		10.3	10.0	3.3	30.0
m,p-Xylene	Ave	0.5002	0.5097		20.4	20.0	1.9	30.0
Xylene, o-	Ave	0.5004	0.4982		9.95	10.0	-0.4	30.0
Styrene	Ave	0.7677	0.7977		10.4	10.0	3.9	30.0
Bromoform	Ave	0.5570	0.4169		7.48	10.0	-25.2	30.0
Cumene	Ave	1.391	1.400		10.1	10.0	0.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7067	0.7502		10.6	10.0	6.2	30.0
n-Propylbenzene	Ave	1.618	1.672		10.3	10.0	3.3	30.0
1,2,3-Trichloropropane	Ave	0.5150	0.5251		10.2	10.0	2.0	30.0
n-Decane	Ave	0.6922	0.7204		10.4	10.0	4.1	30.0
4-Ethyltoluene	Ave	1.356	1.426		10.5	10.0	5.2	30.0
2-Chlorotoluene	Ave	1.076	1.093		10.2	10.0	1.6	30.0
1,3,5-Trimethylbenzene	Ave	1.114	1.154		10.4	10.0	3.6	30.0
Alpha Methyl Styrene	Ave	0.5753	0.6211		10.8	10.0	8.0	30.0
tert-Butylbenzene	Ave	1.103	1.128		10.2	10.0	2.2	30.0
1,2,4-Trimethylbenzene	Ave	1.099	1.136		10.3	10.0	3.3	30.0
sec-Butylbenzene	Ave	1.669	1.707		10.2	10.0	2.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab Sample ID: ICV 200-121987/17 Calibration Date: 10/11/2017 06:00

Instrument ID: CHB.i Calib Start Date: 10/10/2017 18:40

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/11/2017 02:31

Lab File ID: 27339-17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.394	1.444		10.4	10.0	3.5	30.0
1,3-Dichlorobenzene	Ave	0.7836	0.8314		10.6	10.0	6.1	30.0
1,4-Dichlorobenzene	Ave	0.7725	0.8210		10.6	10.0	6.3	30.0
Benzyl chloride	Ave	0.8074	0.8262		10.2	10.0	2.3	30.0
n-Undecane	Ave	0.6868	0.7175		10.4	10.0	4.5	30.0
n-Butylbenzene	Ave	1.170	1.204		10.3	10.0	2.9	30.0
1,2-Dichlorobenzene	Ave	0.7338	0.7791		10.6	10.0	6.2	30.0
n-Dodecane	Ave	0.3234	0.3781		11.7	10.0	16.9	30.0
1,2,4-Trichlorobenzene	Ave	0.3315	0.3570		10.8	10.0	7.7	30.0
Hexachlorobutadiene	Ave	0.4771	0.5013		10.5	10.0	5.1	30.0
Naphthalene	Ave	0.6567	0.6774		10.3	10.0	3.1	30.0
1,2,3-Trichlorobenzene	Ave	0.2144	0.2242		10.5	10.0	4.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab Sample ID: CCVIS 200-122350/2 Calibration Date: 10/20/2017 09:50

Instrument ID: CHB.i Calib Start Date: 10/10/2017 18:40

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/11/2017 02:31

Lab File ID: 27498-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.3938	0.4413		11.2	10.0	12.0	30.0
Dichlorodifluoromethane	Ave	1.689	1.795		10.6	10.0	6.3	30.0
Freon 22	Ave	0.8625	0.9276		10.8	10.0	7.5	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.794	1.879		10.5	10.0	4.7	30.0
Chloromethane	Ave	0.5652	0.5788		10.2	10.0	2.4	30.0
n-Butane	Ave	0.9620	0.9572		9.95	10.0	-0.5	30.0
Vinyl chloride	Ave	0.7238	0.7418		10.2	10.0	2.5	30.0
1,3-Butadiene	Ave	0.5476	0.5492		10.0	10.0	0.3	30.0
Bromomethane	Ave	0.8798	0.8299		9.43	10.0	-5.7	30.0
Chloroethane	Ave	0.4834	0.4506		9.32	10.0	-6.8	30.0
Isopentane	Ave	0.9226	0.8693		9.42	10.0	-5.8	30.0
Bromoethene(Vinyl Bromide)	Ave	0.9698	0.8902		9.18	10.0	-8.2	30.0
Trichlorofluoromethane	Ave	1.988	1.929		9.70	10.0	-3.0	30.0
n-Pentane	Ave	1.434	1.343		9.37	10.0	-6.3	30.0
Ethanol	Ave	0.4255	0.4462		15.7	15.0	4.9	30.0
Ethyl ether	Ave	0.6134	0.5854		9.54	10.0	-4.6	30.0
Acrolein	Ave	0.2841	0.2799		9.85	10.0	-1.5	30.0
Freon TF	Ave	1.834	1.703		9.28	10.0	-7.1	30.0
1,1-Dichloroethene	Ave	0.9368	0.8478		9.05	10.0	-9.5	30.0
Acetone	Ave	1.092	1.109		10.2	10.0	1.5	30.0
Isopropyl alcohol	Ave	1.317	1.396		10.6	10.0	6.0	30.0
Carbon disulfide	Ave	2.480	2.308		9.31	10.0	-6.9	30.0
3-Chloropropene	Ave	1.059	1.084		10.2	10.0	2.3	30.0
Acetonitrile	Ave	0.6514	0.6231		9.56	10.0	-4.3	30.0
Methylene Chloride	Ave	0.8998	0.8877		9.86	10.0	-1.3	30.0
tert-Butyl alcohol	Ave	1.818	1.763		9.69	10.0	-3.1	30.0
Methyl tert-butyl ether	Ave	2.559	2.411		9.42	10.0	-5.8	30.0
trans-1,2-Dichloroethene	Ave	1.216	1.186		9.74	10.0	-2.5	30.0
Acrylonitrile	Ave	0.6505	0.6203		9.53	10.0	-4.6	30.0
n-Hexane	Ave	1.463	1.341		9.16	10.0	-8.4	30.0
1,1-Dichloroethane	Ave	1.601	1.563		9.76	10.0	-2.4	30.0
Vinyl acetate	Ave	2.037	2.038		10.0	10.0	0.0	30.0
Methyl Ethyl Ketone	Ave	0.5221	0.4719		9.04	10.0	-9.6	30.0
cis-1,2-Dichloroethene	Ave	1.082	0.999		9.23	10.0	-7.7	30.0
Ethyl acetate	Ave	0.0889	0.0796		8.96	10.0	-10.4	30.0
Tetrahydrofuran	Ave	0.1983	0.1977		9.97	10.0	-0.3	30.0
Chloroform	Ave	1.824	1.739		9.54	10.0	-4.6	30.0
1,1,1-Trichloroethane	Ave	0.3621	0.3452		9.53	10.0	-4.7	30.0
Cyclohexane	Ave	0.2864	0.2666		9.31	10.0	-6.9	30.0
Carbon tetrachloride	Ave	0.3602	0.3579		9.93	10.0	-0.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab Sample ID: CCVIS 200-122350/2 Calibration Date: 10/20/2017 09:50

Instrument ID: CHB.i Calib Start Date: 10/10/2017 18:40

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/11/2017 02:31

Lab File ID: 27498-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.9764	0.9355		9.58	10.0	-4.2	30.0
Benzene	Ave	0.6485	0.5972		9.21	10.0	-7.9	30.0
1,2-Dichloroethane	Ave	0.2026	0.2028		10.0	10.0	0.0	30.0
n-Heptane	Ave	0.3440	0.3301		9.59	10.0	-4.0	30.0
n-Butanol	Ave	0.1262	0.1168		9.25	10.0	-7.5	30.0
Trichloroethene	Ave	0.2750	0.2584		9.39	10.0	-6.1	30.0
1,2-Dichloropropane	Ave	0.2336	0.2267		9.71	10.0	-2.9	30.0
Methyl methacrylate	Ave	0.2345	0.2155		9.19	10.0	-8.1	30.0
1,4-Dioxane	Ave	0.1337	0.1197		8.95	10.0	-10.5	30.0
Dibromomethane	Ave	0.3052	0.2780		9.11	10.0	-8.9	30.0
Bromodichloromethane	Ave	0.4147	0.4027		9.71	10.0	-2.9	30.0
cis-1,3-Dichloropropene	Ave	0.3450	0.3339		9.68	10.0	-3.2	30.0
methyl isobutyl ketone	Ave	0.4348	0.4084		9.39	10.0	-6.1	30.0
n-Octane	Ave	0.4725	0.4642		9.82	10.0	-1.8	30.0
Toluene	Ave	0.5741	0.5224		9.10	10.0	-9.0	30.0
trans-1,3-Dichloropropene	Ave	0.3240	0.3172		9.79	10.0	-2.1	30.0
1,1,2-Trichloroethane	Ave	0.2723	0.2569		9.43	10.0	-5.7	30.0
Tetrachloroethene	Ave	0.5111	0.4624		9.05	10.0	-9.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5110	0.4320		8.45	10.0	-15.5	30.0
Dibromochloromethane	Ave	0.5536	0.5158		9.32	10.0	-6.8	30.0
1,2-Dibromoethane	Ave	0.5080	0.4800		9.45	10.0	-5.5	30.0
Chlorobenzene	Ave	0.7845	0.7256		9.25	10.0	-7.5	30.0
Ethylbenzene	Ave	1.226	1.138		9.28	10.0	-7.2	30.0
n-Nonane	Ave	0.5526	0.5343		9.67	10.0	-3.3	30.0
m,p-Xylene	Ave	0.5002	0.4674		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.5004	0.4613		9.22	10.0	-7.8	30.0
Styrene	Ave	0.7677	0.7184		9.36	10.0	-6.4	30.0
Bromoform	Ave	0.5570	0.4843		8.69	10.0	-13.1	30.0
Cumene	Ave	1.391	1.333		9.58	10.0	-4.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7067	0.6959		9.84	10.0	-1.5	30.0
n-Propylbenzene	Ave	1.618	1.586		9.80	10.0	-2.0	30.0
1,2,3-Trichloropropane	Ave	0.5150	0.5039		9.78	10.0	-2.2	30.0
n-Decane	Ave	0.6922	0.6967		10.1	10.0	0.6	30.0
4-Ethyltoluene	Ave	1.356	1.303		9.61	10.0	-3.9	30.0
2-Chlorotoluene	Ave	1.076	1.051		9.77	10.0	-2.3	30.0
1,3,5-Trimethylbenzene	Ave	1.114	1.081		9.70	10.0	-3.0	30.0
Alpha Methyl Styrene	Ave	0.5753	0.5471		9.51	10.0	-4.9	30.0
tert-Butylbenzene	Ave	1.103	1.076		9.75	10.0	-2.4	30.0
1,2,4-Trimethylbenzene	Ave	1.099	1.082		9.84	10.0	-1.5	30.0
sec-Butylbenzene	Ave	1.669	1.633		9.78	10.0	-2.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Lab Sample ID: CCVIS 200-122350/2 Calibration Date: 10/20/2017 09:50

Instrument ID: CHB.i Calib Start Date: 10/10/2017 18:40

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/11/2017 02:31

Lab File ID: 27498-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.394	1.382		9.91	10.0	-0.9	30.0
1,3-Dichlorobenzene	Ave	0.7836	0.7674		9.79	10.0	-2.1	30.0
1,4-Dichlorobenzene	Ave	0.7725	0.7609		9.85	10.0	-1.5	30.0
Benzyl chloride	Ave	0.8074	0.8567		10.6	10.0	6.1	30.0
n-Undecane	Ave	0.6868	0.7458		10.9	10.0	8.6	30.0
n-Butylbenzene	Ave	1.170	1.211		10.4	10.0	3.6	30.0
1,2-Dichlorobenzene	Ave	0.7338	0.7236		9.86	10.0	-1.4	30.0
n-Dodecane	Ave	0.3234	0.4076		12.6	10.0	26.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3315	0.3709		11.2	10.0	11.9	30.0
Hexachlorobutadiene	Ave	0.4771	0.4763		9.98	10.0	-0.2	30.0
Naphthalene	Ave	0.6567	0.7716		11.7	10.0	17.5	30.0
1,2,3-Trichlorobenzene	Ave	0.2144	0.2556		11.9	10.0	19.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab Sample ID: ICV 200-122137/17 Calibration Date: 10/14/2017 05:16

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27408_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7338	0.7194		9.80	10.0	-2.0	30.0
Dichlorodifluoromethane	Ave	1.841	1.857		10.1	10.0	0.9	30.0
Freon 22	Ave	1.383	1.391		10.1	10.0	0.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.843	2.081		11.3	10.0	12.9	30.0
Chloromethane	Ave	0.7981	0.7704		9.65	10.0	-3.5	30.0
n-Butane	Ave	1.451	1.412		9.73	10.0	-2.7	30.0
Vinyl chloride	Ave	0.7837	0.8090		10.3	10.0	3.2	30.0
1,3-Butadiene	Ave	0.6114	0.6371		10.4	10.0	4.2	30.0
Bromomethane	Ave	0.5837	0.6289		10.8	10.0	7.7	30.0
Chloroethane	Ave	0.3275	0.3374		10.3	10.0	3.0	30.0
Isopentane	Ave	0.8517	0.9101		10.7	10.0	6.9	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5522	0.5625		10.2	10.0	1.9	30.0
Trichlorofluoromethane	Ave	1.519	1.661		10.9	10.0	9.3	30.0
n-Pentane	Ave	1.328	1.610		12.1	10.0	21.3	30.0
Ethanol	Ave	0.3814	0.3836		15.1	15.0	0.6	30.0
Ethyl ether	Ave	0.4818	0.5643		11.7	10.0	17.1	30.0
Acrolein	Ave	0.2026	0.2328		11.5	10.0	14.9	30.0
Freon TF	Ave	1.167	1.228		10.5	10.0	5.2	30.0
1,1-Dichloroethene	Ave	0.5594	0.5889		10.5	10.0	5.3	30.0
Acetone	Ave	1.191	1.389		11.7	10.0	16.6	30.0
Carbon disulfide	Ave	1.746	2.096		12.0	10.0	20.0	30.0
Isopropyl alcohol	Ave	1.244	1.312		10.5	10.0	5.5	30.0
3-Chloropropene	Ave	1.086	0.7803		7.18	10.0	-28.1	30.0
Acetonitrile	Ave	0.6039	0.7386		12.2	10.0	22.3	30.0
Methylene Chloride	Ave	0.8822	0.9277		10.5	10.0	5.2	30.0
tert-Butyl alcohol	Ave	1.556	1.672		10.7	10.0	7.4	30.0
Methyl tert-butyl ether	Ave	1.959	2.072		10.6	10.0	5.8	30.0
trans-1,2-Dichloroethene	Ave	1.066	1.194		11.2	10.0	12.1	30.0
Acrylonitrile	Ave	0.5483	0.6141		11.2	10.0	12.0	30.0
n-Hexane	Ave	1.152	1.256		10.9	10.0	9.0	30.0
1,1-Dichloroethane	Ave	1.321	1.429		10.8	10.0	8.2	30.0
Vinyl acetate	Ave	2.111	2.429		11.5	10.0	15.1	30.0
cis-1,2-Dichloroethene	Ave	0.6626	0.6761		10.2	10.0	2.0	30.0
Methyl Ethyl Ketone	Ave	0.3753	0.3861		10.3	10.0	2.9	30.0
Ethyl acetate	Ave	0.0497	0.0572		11.5	10.0	15.1	30.0
Tetrahydrofuran	Ave	0.2014	0.2276		11.3	10.0	13.0	30.0
Chloroform	Ave	1.435	1.541		10.7	10.0	7.4	30.0
Cyclohexane	Ave	0.1718	0.1906		11.1	10.0	11.0	30.0
1,1,1-Trichloroethane	Ave	0.2694	0.3038		11.3	10.0	12.7	30.0
Carbon tetrachloride	Ave	0.2471	0.2876		11.6	10.0	16.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab Sample ID: ICV 200-122137/17 Calibration Date: 10/14/2017 05:16

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27408_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.7883	0.8628		10.9	10.0	9.5	30.0
Benzene	Ave	0.4256	0.4654		10.9	10.0	9.3	30.0
1,2-Dichloroethane	Ave	0.1966	0.2213		11.3	10.0	12.6	30.0
n-Heptane	Ave	0.3310	0.3570		10.8	10.0	7.9	30.0
n-Butanol	Ave	0.0947	0.1205		12.7	10.0	27.2	30.0
Trichloroethene	Ave	0.1723	0.1871		10.9	10.0	8.6	30.0
1,2-Dichloropropane	Ave	0.1694	0.1796		10.6	10.0	6.0	30.0
Methyl methacrylate	Ave	0.1585	0.1721		10.9	10.0	8.6	30.0
1,4-Dioxane	Ave	0.0781	0.0932		11.9	10.0	19.3	30.0
Dibromomethane	Ave	0.1372	0.1673		12.2	10.0	21.9	30.0
Bromodichloromethane	Ave	0.3026	0.3075		10.2	10.0	1.6	30.0
cis-1,3-Dichloropropene	Ave	0.2410	0.2526		10.5	10.0	4.8	30.0
methyl isobutyl ketone	Ave	0.3989	0.3989		10.0	10.0	-0.0	30.0
Toluene	Ave	0.3186	0.3015		9.46	10.0	-5.4	30.0
n-Octane	Ave	0.4278	0.4397		10.3	10.0	2.8	30.0
trans-1,3-Dichloropropene	Ave	0.2745	0.2567		9.35	10.0	-6.5	30.0
1,1,2-Trichloroethane	Ave	0.1630	0.1549		9.50	10.0	-5.0	30.0
Tetrachloroethene	Ave	0.2385	0.2429		10.2	10.0	1.9	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4457	0.3731		8.37	10.0	-16.3	30.0
Dibromochloromethane	Ave	0.2895	0.2491		8.60	10.0	-14.0	30.0
1,2-Dibromoethane	Ave	0.2760	0.2713		9.83	10.0	-1.7	30.0
Chlorobenzene	Ave	0.3808	0.3867		10.2	10.0	1.6	30.0
Ethylbenzene	Ave	0.6984	0.6760		9.68	10.0	-3.2	30.0
n-Nonane	Ave	0.4046	0.3717		9.19	10.0	-8.1	30.0
m,p-Xylene	Ave	0.2630	0.2601		19.8	20.0	-1.1	30.0
Xylene, o-	Ave	0.2530	0.2525		9.98	10.0	-0.2	30.0
Styrene	Ave	0.3961	0.3988		10.1	10.0	0.7	30.0
Bromoform	Ave	0.2420	0.1783		7.37	10.0	-26.3	30.0
Cumene	Ave	0.7382	0.7434		10.1	10.0	0.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4337	0.4214		9.72	10.0	-2.8	30.0
n-Propylbenzene	Ave	1.002	0.9838		9.82	10.0	-1.8	30.0
1,2,3-Trichloropropane	Ave	0.3739	0.3424		9.16	10.0	-8.4	30.0
4-Ethyltoluene	Ave	0.8144	0.7801		9.58	10.0	-4.2	30.0
n-Decane	Ave	0.5866	0.5540		9.44	10.0	-5.6	30.0
2-Chlorotoluene	Ave	0.7374	0.7008		9.50	10.0	-5.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6498	0.6079		9.35	10.0	-6.4	30.0
Alpha Methyl Styrene	Ave	0.2901	0.2751		9.48	10.0	-5.2	30.0
tert-Butylbenzene	Ave	0.5747	0.5298		9.22	10.0	-7.8	30.0
1,2,4-Trimethylbenzene	Ave	0.6591	0.6134		9.30	10.0	-6.9	30.0
sec-Butylbenzene	Ave	0.9388	0.8768		9.34	10.0	-6.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab Sample ID: ICV 200-122137/17 Calibration Date: 10/14/2017 05:16

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27408_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.7630	0.7073		9.27	10.0	-7.3	30.0
1,3-Dichlorobenzene	Ave	0.4022	0.3615		8.99	10.0	-10.1	30.0
1,4-Dichlorobenzene	Ave	0.3973	0.3491		8.78	10.0	-12.1	30.0
Benzyl chloride	Ave	0.6181	0.5265		8.52	10.0	-14.8	30.0
n-Butylbenzene	Ave	0.8143	0.7559		9.28	10.0	-7.2	30.0
n-Undecane	Ave	0.6390	0.5745		8.99	10.0	-10.1	30.0
1,2-Dichlorobenzene	Ave	0.3720	0.3394		9.12	10.0	-8.8	30.0
n-Dodecane	Ave	0.4485	0.4720		10.5	10.0	5.2	30.0
1,2,4-Trichlorobenzene	Ave	0.2500	0.2229		8.91	10.0	-10.8	30.0
Hexachlorobutadiene	Ave	0.2297	0.2244		9.77	10.0	-2.3	30.0
Naphthalene	Ave	0.5905	0.4585		7.76	10.0	-22.3	30.0
1,2,3-Trichlorobenzene	Ave	0.2178	0.1986		9.11	10.0	-8.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab Sample ID: CCVIS 200-122537/2 Calibration Date: 10/25/2017 10:25

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27580_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7338	0.8481		11.6	10.0	15.6	30.0
Dichlorodifluoromethane	Ave	1.841	2.097		11.4	10.0	13.9	30.0
Freon 22	Ave	1.383	1.540		11.1	10.0	11.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.843	1.977		10.7	10.0	7.2	30.0
Chloromethane	Ave	0.7981	0.8944		11.2	10.0	12.1	30.0
n-Butane	Ave	1.451	1.460		10.1	10.0	0.6	30.0
Vinyl chloride	Ave	0.7837	0.8102		10.3	10.0	3.4	30.0
1,3-Butadiene	Ave	0.6114	0.6371		10.4	10.0	4.2	30.0
Bromomethane	Ave	0.5837	0.6035		10.3	10.0	3.4	30.0
Chloroethane	Ave	0.3275	0.3547		10.8	10.0	8.3	30.0
Isopentane	Ave	0.8517	0.9213		10.8	10.0	8.2	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5522	0.5859		10.6	10.0	6.1	30.0
Trichlorofluoromethane	Ave	1.519	1.725		11.4	10.0	13.5	30.0
n-Pentane	Ave	1.328	1.599		12.0	10.0	20.5	30.0
Ethanol	Ave	0.3814	0.4071		16.0	15.0	6.7	30.0
Ethyl ether	Ave	0.4818	0.5344		11.1	10.0	10.9	30.0
Acrolein	Ave	0.2026	0.2518		12.4	10.0	24.2	30.0
Freon TF	Ave	1.167	1.205		10.3	10.0	3.2	30.0
1,1-Dichloroethene	Ave	0.5594	0.5865		10.5	10.0	4.8	30.0
Acetone	Ave	1.191	1.332		11.2	10.0	11.8	30.0
Carbon disulfide	Ave	1.746	1.849		10.6	10.0	5.9	30.0
Isopropyl alcohol	Ave	1.244	1.473		11.8	10.0	18.4	30.0
3-Chloropropene	Ave	1.086	1.224		11.3	10.0	12.8	30.0
Acetonitrile	Ave	0.6039	0.7030		11.6	10.0	16.4	30.0
Methylene Chloride	Ave	0.8822	0.9750		11.0	10.0	10.5	30.0
tert-Butyl alcohol	Ave	1.556	1.766		11.3	10.0	13.5	30.0
Methyl tert-butyl ether	Ave	1.959	2.117		10.8	10.0	8.1	30.0
trans-1,2-Dichloroethene	Ave	1.066	1.161		10.9	10.0	9.0	30.0
Acrylonitrile	Ave	0.5483	0.6011		11.0	10.0	9.6	30.0
n-Hexane	Ave	1.152	1.221		10.6	10.0	6.0	30.0
1,1-Dichloroethane	Ave	1.321	1.455		11.0	10.0	10.1	30.0
Vinyl acetate	Ave	2.111	2.413		11.4	10.0	14.3	30.0
cis-1,2-Dichloroethene	Ave	0.6626	0.7021		10.6	10.0	6.0	30.0
Methyl Ethyl Ketone	Ave	0.3753	0.3830		10.2	10.0	2.1	30.0
Ethyl acetate	Ave	0.0497	0.0543		10.9	10.0	9.3	30.0
Tetrahydrofuran	Ave	0.2014	0.2164		10.7	10.0	7.5	30.0
Chloroform	Ave	1.435	1.563		10.9	10.0	8.9	30.0
Cyclohexane	Ave	0.1718	0.1791		10.4	10.0	4.3	30.0
1,1,1-Trichloroethane	Ave	0.2694	0.2875		10.7	10.0	6.7	30.0
Carbon tetrachloride	Ave	0.2471	0.2760		11.2	10.0	11.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab Sample ID: CCVIS 200-122537/2 Calibration Date: 10/25/2017 10:25

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27580_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.7883	0.7735		9.81	10.0	-1.9	30.0
Benzene	Ave	0.4256	0.4241		9.96	10.0	-0.4	30.0
1,2-Dichloroethane	Ave	0.1966	0.2003		10.2	10.0	1.9	30.0
n-Heptane	Ave	0.3310	0.3292		9.94	10.0	-0.6	30.0
n-Butanol	Ave	0.0947	0.0916		9.67	10.0	-3.3	30.0
Trichloroethene	Ave	0.1723	0.1731		10.0	10.0	0.5	30.0
1,2-Dichloropropane	Ave	0.1694	0.1677		9.90	10.0	-1.0	30.0
Methyl methacrylate	Ave	0.1585	0.1563		9.86	10.0	-1.4	30.0
1,4-Dioxane	Ave	0.0781	0.0824		10.5	10.0	5.5	30.0
Dibromomethane	Ave	0.1372	0.1549		11.3	10.0	12.9	30.0
Bromodichloromethane	Ave	0.3026	0.3102		10.2	10.0	2.5	30.0
cis-1,3-Dichloropropene	Ave	0.2410	0.2430		10.1	10.0	0.8	30.0
methyl isobutyl ketone	Ave	0.3989	0.4229		10.6	10.0	6.0	30.0
Toluene	Ave	0.3186	0.3170		9.95	10.0	-0.5	30.0
n-Octane	Ave	0.4278	0.4600		10.7	10.0	7.5	30.0
trans-1,3-Dichloropropene	Ave	0.2745	0.2567		9.35	10.0	-6.5	30.0
1,1,2-Trichloroethane	Ave	0.1630	0.1730		10.6	10.0	6.1	30.0
Tetrachloroethene	Ave	0.2385	0.2119		8.88	10.0	-11.1	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4457	0.4748		10.6	10.0	6.5	30.0
Dibromochloromethane	Ave	0.2895	0.2997		10.3	10.0	3.5	30.0
1,2-Dibromoethane	Ave	0.2760	0.2831		10.3	10.0	2.6	30.0
Chlorobenzene	Ave	0.3808	0.3852		10.1	10.0	1.2	30.0
Ethylbenzene	Ave	0.6984	0.7419		10.6	10.0	6.2	30.0
n-Nonane	Ave	0.4046	0.4535		11.2	10.0	12.1	30.0
m,p-Xylene	Ave	0.2630	0.2674		20.3	20.0	1.7	30.0
Xylene, o-	Ave	0.2530	0.2555		10.1	10.0	1.0	30.0
Styrene	Ave	0.3961	0.4033		10.2	10.0	1.8	30.0
Bromoform	Ave	0.2420	0.2693		11.1	10.0	11.3	30.0
Cumene	Ave	0.7382	0.7816		10.6	10.0	5.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4337	0.4623		10.7	10.0	6.6	30.0
n-Propylbenzene	Ave	1.002	1.071		10.7	10.0	6.9	30.0
1,2,3-Trichloropropane	Ave	0.3739	0.3907		10.4	10.0	4.5	30.0
4-Ethyltoluene	Ave	0.8144	0.8673		10.6	10.0	6.5	30.0
2-Chlorotoluene	Ave	0.7374	0.7968		10.8	10.0	8.0	30.0
n-Decane	Ave	0.5866	0.6398		10.9	10.0	9.1	30.0
1,3,5-Trimethylbenzene	Ave	0.6498	0.6918		10.6	10.0	6.5	30.0
Alpha Methyl Styrene	Ave	0.2901	0.3036		10.5	10.0	4.7	30.0
tert-Butylbenzene	Ave	0.5747	0.5986		10.4	10.0	4.2	30.0
1,2,4-Trimethylbenzene	Ave	0.6591	0.6965		10.6	10.0	5.7	30.0
sec-Butylbenzene	Ave	0.9388	0.9897		10.5	10.0	5.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Lab Sample ID: CCVIS 200-122537/2 Calibration Date: 10/25/2017 10:25

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27580_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.7630	0.7935		10.4	10.0	4.0	30.0
1,3-Dichlorobenzene	Ave	0.4022	0.4085		10.2	10.0	1.6	30.0
1,4-Dichlorobenzene	Ave	0.3973	0.4021		10.1	10.0	1.2	30.0
Benzyl chloride	Ave	0.6181	0.7151		11.6	10.0	15.7	30.0
n-Butylbenzene	Ave	0.8143	0.8624		10.6	10.0	5.9	30.0
n-Undecane	Ave	0.6390	0.6447		10.1	10.0	0.9	30.0
1,2-Dichlorobenzene	Ave	0.3720	0.3761		10.1	10.0	1.1	30.0
n-Dodecane	Ave	0.4485	0.5129		11.4	10.0	14.4	30.0
1,2,4-Trichlorobenzene	Ave	0.2500	0.2533		10.1	10.0	1.3	30.0
Hexachlorobutadiene	Ave	0.2297	0.2280		9.93	10.0	-0.7	30.0
Naphthalene	Ave	0.5905	0.6264		10.6	10.0	6.1	30.0
1,2,3-Trichlorobenzene	Ave	0.2178	0.2251		10.3	10.0	3.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab Sample ID: ICV 200-122137/17 Calibration Date: 10/14/2017 05:16

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27408_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7338	0.7194		9.80	10.0	-2.0	30.0
Dichlorodifluoromethane	Ave	1.841	1.857		10.1	10.0	0.9	30.0
Freon 22	Ave	1.383	1.391		10.1	10.0	0.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.843	2.081		11.3	10.0	12.9	30.0
Chloromethane	Ave	0.7981	0.7704		9.65	10.0	-3.5	30.0
n-Butane	Ave	1.451	1.412		9.73	10.0	-2.7	30.0
Vinyl chloride	Ave	0.7837	0.8090		10.3	10.0	3.2	30.0
1,3-Butadiene	Ave	0.6114	0.6371		10.4	10.0	4.2	30.0
Bromomethane	Ave	0.5837	0.6289		10.8	10.0	7.7	30.0
Chloroethane	Ave	0.3275	0.3374		10.3	10.0	3.0	30.0
Isopentane	Ave	0.8517	0.9101		10.7	10.0	6.9	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5522	0.5625		10.2	10.0	1.9	30.0
Trichlorofluoromethane	Ave	1.519	1.661		10.9	10.0	9.3	30.0
n-Pentane	Ave	1.328	1.610		12.1	10.0	21.3	30.0
Ethanol	Ave	0.3814	0.3836		15.1	15.0	0.6	30.0
Ethyl ether	Ave	0.4818	0.5643		11.7	10.0	17.1	30.0
Acrolein	Ave	0.2026	0.2328		11.5	10.0	14.9	30.0
Freon TF	Ave	1.167	1.228		10.5	10.0	5.2	30.0
1,1-Dichloroethene	Ave	0.5594	0.5889		10.5	10.0	5.3	30.0
Acetone	Ave	1.191	1.389		11.7	10.0	16.6	30.0
Carbon disulfide	Ave	1.746	2.096		12.0	10.0	20.0	30.0
Isopropyl alcohol	Ave	1.244	1.312		10.5	10.0	5.5	30.0
3-Chloropropene	Ave	1.086	0.7803		7.18	10.0	-28.1	30.0
Acetonitrile	Ave	0.6039	0.7386		12.2	10.0	22.3	30.0
Methylene Chloride	Ave	0.8822	0.9277		10.5	10.0	5.2	30.0
tert-Butyl alcohol	Ave	1.556	1.672		10.7	10.0	7.4	30.0
Methyl tert-butyl ether	Ave	1.959	2.072		10.6	10.0	5.8	30.0
trans-1,2-Dichloroethene	Ave	1.066	1.194		11.2	10.0	12.1	30.0
Acrylonitrile	Ave	0.5483	0.6141		11.2	10.0	12.0	30.0
n-Hexane	Ave	1.152	1.256		10.9	10.0	9.0	30.0
1,1-Dichloroethane	Ave	1.321	1.429		10.8	10.0	8.2	30.0
Vinyl acetate	Ave	2.111	2.429		11.5	10.0	15.1	30.0
cis-1,2-Dichloroethene	Ave	0.6626	0.6761		10.2	10.0	2.0	30.0
Methyl Ethyl Ketone	Ave	0.3753	0.3861		10.3	10.0	2.9	30.0
Ethyl acetate	Ave	0.0497	0.0572		11.5	10.0	15.1	30.0
Tetrahydrofuran	Ave	0.2014	0.2276		11.3	10.0	13.0	30.0
Chloroform	Ave	1.435	1.541		10.7	10.0	7.4	30.0
Cyclohexane	Ave	0.1718	0.1906		11.1	10.0	11.0	30.0
1,1,1-Trichloroethane	Ave	0.2694	0.3038		11.3	10.0	12.7	30.0
Carbon tetrachloride	Ave	0.2471	0.2876		11.6	10.0	16.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab Sample ID: ICV 200-122137/17 Calibration Date: 10/14/2017 05:16

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27408_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.7883	0.8628		10.9	10.0	9.5	30.0
Benzene	Ave	0.4256	0.4654		10.9	10.0	9.3	30.0
1,2-Dichloroethane	Ave	0.1966	0.2213		11.3	10.0	12.6	30.0
n-Heptane	Ave	0.3310	0.3570		10.8	10.0	7.9	30.0
n-Butanol	Ave	0.0947	0.1205		12.7	10.0	27.2	30.0
Trichloroethene	Ave	0.1723	0.1871		10.9	10.0	8.6	30.0
1,2-Dichloropropane	Ave	0.1694	0.1796		10.6	10.0	6.0	30.0
Methyl methacrylate	Ave	0.1585	0.1721		10.9	10.0	8.6	30.0
1,4-Dioxane	Ave	0.0781	0.0932		11.9	10.0	19.3	30.0
Dibromomethane	Ave	0.1372	0.1673		12.2	10.0	21.9	30.0
Bromodichloromethane	Ave	0.3026	0.3075		10.2	10.0	1.6	30.0
cis-1,3-Dichloropropene	Ave	0.2410	0.2526		10.5	10.0	4.8	30.0
methyl isobutyl ketone	Ave	0.3989	0.3989		10.0	10.0	-0.0	30.0
Toluene	Ave	0.3186	0.3015		9.46	10.0	-5.4	30.0
n-Octane	Ave	0.4278	0.4397		10.3	10.0	2.8	30.0
trans-1,3-Dichloropropene	Ave	0.2745	0.2567		9.35	10.0	-6.5	30.0
1,1,2-Trichloroethane	Ave	0.1630	0.1549		9.50	10.0	-5.0	30.0
Tetrachloroethene	Ave	0.2385	0.2429		10.2	10.0	1.9	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4457	0.3731		8.37	10.0	-16.3	30.0
Dibromochloromethane	Ave	0.2895	0.2491		8.60	10.0	-14.0	30.0
1,2-Dibromoethane	Ave	0.2760	0.2713		9.83	10.0	-1.7	30.0
Chlorobenzene	Ave	0.3808	0.3867		10.2	10.0	1.6	30.0
Ethylbenzene	Ave	0.6984	0.6760		9.68	10.0	-3.2	30.0
n-Nonane	Ave	0.4046	0.3717		9.19	10.0	-8.1	30.0
m,p-Xylene	Ave	0.2630	0.2601		19.8	20.0	-1.1	30.0
Xylene, o-	Ave	0.2530	0.2525		9.98	10.0	-0.2	30.0
Styrene	Ave	0.3961	0.3988		10.1	10.0	0.7	30.0
Bromoform	Ave	0.2420	0.1783		7.37	10.0	-26.3	30.0
Cumene	Ave	0.7382	0.7434		10.1	10.0	0.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4337	0.4214		9.72	10.0	-2.8	30.0
n-Propylbenzene	Ave	1.002	0.9838		9.82	10.0	-1.8	30.0
1,2,3-Trichloropropane	Ave	0.3739	0.3424		9.16	10.0	-8.4	30.0
4-Ethyltoluene	Ave	0.8144	0.7801		9.58	10.0	-4.2	30.0
n-Decane	Ave	0.5866	0.5540		9.44	10.0	-5.6	30.0
2-Chlorotoluene	Ave	0.7374	0.7008		9.50	10.0	-5.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6498	0.6079		9.35	10.0	-6.4	30.0
Alpha Methyl Styrene	Ave	0.2901	0.2751		9.48	10.0	-5.2	30.0
tert-Butylbenzene	Ave	0.5747	0.5298		9.22	10.0	-7.8	30.0
1,2,4-Trimethylbenzene	Ave	0.6591	0.6134		9.30	10.0	-6.9	30.0
sec-Butylbenzene	Ave	0.9388	0.8768		9.34	10.0	-6.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab Sample ID: ICV 200-122137/17 Calibration Date: 10/14/2017 05:16

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27408_17.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.7630	0.7073		9.27	10.0	-7.3	30.0
1,3-Dichlorobenzene	Ave	0.4022	0.3615		8.99	10.0	-10.1	30.0
1,4-Dichlorobenzene	Ave	0.3973	0.3491		8.78	10.0	-12.1	30.0
Benzyl chloride	Ave	0.6181	0.5265		8.52	10.0	-14.8	30.0
n-Butylbenzene	Ave	0.8143	0.7559		9.28	10.0	-7.2	30.0
n-Undecane	Ave	0.6390	0.5745		8.99	10.0	-10.1	30.0
1,2-Dichlorobenzene	Ave	0.3720	0.3394		9.12	10.0	-8.8	30.0
n-Dodecane	Ave	0.4485	0.4720		10.5	10.0	5.2	30.0
1,2,4-Trichlorobenzene	Ave	0.2500	0.2229		8.91	10.0	-10.8	30.0
Hexachlorobutadiene	Ave	0.2297	0.2244		9.77	10.0	-2.3	30.0
Naphthalene	Ave	0.5905	0.4585		7.76	10.0	-22.3	30.0
1,2,3-Trichlorobenzene	Ave	0.2178	0.1986		9.11	10.0	-8.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab Sample ID: CCVIS 200-122611/2 Calibration Date: 10/26/2017 11:48

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27603_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.7338	0.9761		13.3	10.0	33.0*	30.0
Dichlorodifluoromethane	Ave	1.841	2.307		12.5	10.0	25.3	30.0
Freon 22	Ave	1.383	1.746		12.6	10.0	26.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.843	2.111		11.5	10.0	14.5	30.0
Chloromethane	Ave	0.7981	0.9801		12.3	10.0	22.8	30.0
n-Butane	Ave	1.451	1.592		11.0	10.0	9.7	30.0
Vinyl chloride	Ave	0.7837	0.8727		11.1	10.0	11.4	30.0
1,3-Butadiene	Ave	0.6114	0.6709		11.0	10.0	9.7	30.0
Bromomethane	Ave	0.5837	0.5938		10.2	10.0	1.7	30.0
Chloroethane	Ave	0.3275	0.3370		10.3	10.0	2.9	30.0
Isopentane	Ave	0.8517	0.9235		10.8	10.0	8.4	30.0
Bromoethene(Vinyl Bromide)	Ave	0.5522	0.6004		10.9	10.0	8.7	30.0
Trichlorofluoromethane	Ave	1.519	1.786		11.8	10.0	17.6	30.0
n-Pentane	Ave	1.328	1.745		13.1	10.0	31.4*	30.0
Ethanol	Ave	0.3814	0.4432		17.4	15.0	16.2	30.0
Ethyl ether	Ave	0.4818	0.5488		11.4	10.0	13.9	30.0
Acrolein	Ave	0.2026	0.2549		12.6	10.0	25.8	30.0
Freon TF	Ave	1.167	1.219		10.4	10.0	4.4	30.0
1,1-Dichloroethene	Ave	0.5594	0.5838		10.4	10.0	4.4	30.0
Acetone	Ave	1.191	1.529		12.8	10.0	28.3	30.0
Carbon disulfide	Ave	1.746	1.895		10.9	10.0	8.5	30.0
Isopropyl alcohol	Ave	1.244	1.636		13.1	10.0	31.5*	30.0
3-Chloropropene	Ave	1.086	1.349		12.4	10.0	24.2	30.0
Acetonitrile	Ave	0.6039	0.7884		13.1	10.0	30.6*	30.0
Methylene Chloride	Ave	0.8822	1.079		12.2	10.0	22.4	30.0
tert-Butyl alcohol	Ave	1.556	1.864		12.0	10.0	19.8	30.0
Methyl tert-butyl ether	Ave	1.959	2.168		11.1	10.0	10.7	30.0
trans-1,2-Dichloroethene	Ave	1.066	1.253		11.7	10.0	17.5	30.0
Acrylonitrile	Ave	0.5483	0.6494		11.8	10.0	18.4	30.0
n-Hexane	Ave	1.152	1.301		11.3	10.0	13.0	30.0
1,1-Dichloroethane	Ave	1.321	1.556		11.8	10.0	17.7	30.0
Vinyl acetate	Ave	2.111	2.705		12.8	10.0	28.1	30.0
cis-1,2-Dichloroethene	Ave	0.6626	0.6776		10.2	10.0	2.3	30.0
Methyl Ethyl Ketone	Ave	0.3753	0.3856		10.3	10.0	2.8	30.0
Ethyl acetate	Ave	0.0497	0.0492		9.90	10.0	-1.0	30.0
Tetrahydrofuran	Ave	0.2014	0.2317		11.5	10.0	15.0	30.0
Chloroform	Ave	1.435	1.534		10.7	10.0	6.9	30.0
Cyclohexane	Ave	0.1718	0.1783		10.4	10.0	3.8	30.0
1,1,1-Trichloroethane	Ave	0.2694	0.2854		10.6	10.0	5.9	30.0
Carbon tetrachloride	Ave	0.2471	0.2718		11.0	10.0	10.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab Sample ID: CCVIS 200-122611/2 Calibration Date: 10/26/2017 11:48

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27603_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.7883	0.8073		10.2	10.0	2.4	30.0
Benzene	Ave	0.4256	0.4335		10.2	10.0	1.9	30.0
1,2-Dichloroethane	Ave	0.1966	0.2084		10.6	10.0	6.0	30.0
n-Heptane	Ave	0.3310	0.3619		10.9	10.0	9.3	30.0
n-Butanol	Ave	0.0947	0.0974		10.3	10.0	2.8	30.0
Trichloroethene	Ave	0.1723	0.1801		10.4	10.0	4.5	30.0
1,2-Dichloropropane	Ave	0.1694	0.1775		10.5	10.0	4.8	30.0
Methyl methacrylate	Ave	0.1585	0.1635		10.3	10.0	3.2	30.0
1,4-Dioxane	Ave	0.0781	0.0875		11.2	10.0	12.0	30.0
Dibromomethane	Ave	0.1372	0.1571		11.4	10.0	14.5	30.0
Bromodichloromethane	Ave	0.3026	0.3215		10.6	10.0	6.2	30.0
cis-1,3-Dichloropropene	Ave	0.2410	0.2292		9.51	10.0	-4.9	30.0
methyl isobutyl ketone	Ave	0.3989	0.4408		11.0	10.0	10.5	30.0
Toluene	Ave	0.3186	0.3200		10.0	10.0	0.4	30.0
n-Octane	Ave	0.4278	0.4790		11.2	10.0	12.0	30.0
trans-1,3-Dichloropropene	Ave	0.2745	0.2457		8.95	10.0	-10.5	30.0
1,1,2-Trichloroethane	Ave	0.1630	0.1806		11.1	10.0	10.8	30.0
Tetrachloroethene	Ave	0.2385	0.2090		8.76	10.0	-12.4	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4457	0.5407		12.1	10.0	21.3	30.0
Dibromochloromethane	Ave	0.2895	0.3094		10.7	10.0	6.9	30.0
1,2-Dibromoethane	Ave	0.2760	0.2907		10.5	10.0	5.3	30.0
Chlorobenzene	Ave	0.3808	0.3945		10.4	10.0	3.6	30.0
Ethylbenzene	Ave	0.6984	0.7772		11.1	10.0	11.3	30.0
n-Nonane	Ave	0.4046	0.4937		12.2	10.0	22.0	30.0
m,p-Xylene	Ave	0.2630	0.2829		21.5	20.0	7.6	30.0
Xylene, o-	Ave	0.2530	0.2665		10.5	10.0	5.4	30.0
Styrene	Ave	0.3961	0.4191		10.6	10.0	5.8	30.0
Bromoform	Ave	0.2420	0.2876		11.9	10.0	18.9	30.0
Cumene	Ave	0.7382	0.8319		11.3	10.0	12.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4337	0.5152		11.9	10.0	18.8	30.0
n-Propylbenzene	Ave	1.002	1.177		11.7	10.0	17.5	30.0
1,2,3-Trichloropropane	Ave	0.3739	0.4350		11.6	10.0	16.3	30.0
4-Ethyltoluene	Ave	0.8144	0.9550		11.7	10.0	17.3	30.0
2-Chlorotoluene	Ave	0.7374	0.8985		12.2	10.0	21.8	30.0
n-Decane	Ave	0.5866	0.7536		12.8	10.0	28.5	30.0
1,3,5-Trimethylbenzene	Ave	0.6498	0.7461		11.5	10.0	14.8	30.0
Alpha Methyl Styrene	Ave	0.2901	0.3280		11.3	10.0	13.1	30.0
tert-Butylbenzene	Ave	0.5747	0.6515		11.3	10.0	13.4	30.0
1,2,4-Trimethylbenzene	Ave	0.6591	0.7648		11.6	10.0	16.0	30.0
sec-Butylbenzene	Ave	0.9388	1.098		11.7	10.0	17.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Lab Sample ID: CCVIS 200-122611/2 Calibration Date: 10/26/2017 11:48

Instrument ID: CHC.i Calib Start Date: 10/13/2017 17:45

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 10/14/2017 01:45

Lab File ID: 27603_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	0.7630	0.8806		11.5	10.0	15.4	30.0
1,3-Dichlorobenzene	Ave	0.4022	0.4514		11.2	10.0	12.2	30.0
1,4-Dichlorobenzene	Ave	0.3973	0.4394		11.1	10.0	10.6	30.0
Benzyl chloride	Ave	0.6181	0.8015		13.0	10.0	29.7	30.0
n-Butylbenzene	Ave	0.8143	0.9896		12.2	10.0	21.5	30.0
n-Undecane	Ave	0.6390	0.7645		12.0	10.0	19.6	30.0
1,2-Dichlorobenzene	Ave	0.3720	0.4184		11.2	10.0	12.5	30.0
n-Dodecane	Ave	0.4485	0.5959		13.3	10.0	32.8*	30.0
1,2,4-Trichlorobenzene	Ave	0.2500	0.2656		10.6	10.0	6.2	30.0
Hexachlorobutadiene	Ave	0.2297	0.2620		11.4	10.0	14.1	30.0
Naphthalene	Ave	0.5905	0.5672		9.60	10.0	-4.0	30.0
1,2,3-Trichlorobenzene	Ave	0.2178	0.2370		10.9	10.0	8.8	30.0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Instrument ID: CHX.i Start Date: 09/28/2017 16:14

Analysis Batch Number: 121534 End Date: 09/29/2017 07:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-121534/1		09/28/2017 16:14	1	27150_01.D	RTX-624 0.32(mm)
VIBLK 200-121534/2		09/28/2017 16:58	1		RTX-624 0.32(mm)
IC 200-121534/3		09/28/2017 17:49	1	27150_03.D	RTX-624 0.32(mm)
IC 200-121534/4		09/28/2017 18:40	1	27150_04.D	RTX-624 0.32(mm)
ZZZZZ		09/28/2017 19:30	1		RTX-624 0.32(mm)
IC 200-121534/6		09/28/2017 20:20	1	27150_06.D	RTX-624 0.32(mm)
ZZZZZ		09/28/2017 21:10	1		RTX-624 0.32(mm)
IC 200-121534/8		09/28/2017 22:01	1	27150_08.D	RTX-624 0.32(mm)
ICIS 200-121534/9		09/28/2017 22:52	1	27150_09.D	RTX-624 0.32(mm)
IC 200-121534/10		09/28/2017 23:42	1	27150_10.D	RTX-624 0.32(mm)
IC 200-121534/11		09/29/2017 00:33	1	27150_11.D	RTX-624 0.32(mm)
IC 200-121534/12		09/29/2017 01:23	1	27150_12.D	RTX-624 0.32(mm)
ZZZZZ		09/29/2017 02:14	1		RTX-624 0.32(mm)
VIBLK 200-121534/14		09/29/2017 03:05	1		RTX-624 0.32(mm)
VIBLK 200-121534/15		09/29/2017 03:55	1		RTX-624 0.32(mm)
VIBLK 200-121534/16		09/29/2017 04:46	1		RTX-624 0.32(mm)
ICV 200-121534/17		09/29/2017 05:36	1	27150_17.D	RTX-624 0.32(mm)
ZZZZZ		09/29/2017 06:27	1		RTX-624 0.32(mm)
ZZZZZ		09/29/2017 07:17	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40322-1

SDG No.:

Instrument ID: CHX.i Start Date: 10/04/2017 10:29

Analysis Batch Number: 121739 End Date: 10/05/2017 09:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-121739/1		10/04/2017 10:29	1	27236_01.D	RTX-624 0.32(mm)
CCVIS 200-121739/2		10/04/2017 11:24	1	27236_02.D	RTX-624 0.32(mm)
LCS 200-121739/3		10/04/2017 12:15	1	27236_03.D	RTX-624 0.32(mm)
MB 200-121739/4		10/04/2017 13:05	1	27236_04.D	RTX-624 0.32(mm)
ZZZZZ		10/04/2017 13:56	2098		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 14:46	2		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 15:37	2		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 16:27	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 17:18	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 18:09	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 18:59	2		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 19:50	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 20:40	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 21:31	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 22:22	1		RTX-624 0.32(mm)
ZZZZZ		10/04/2017 23:12	1		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 00:04	1		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 00:55	1		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 01:53	0.2		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 02:51	0.2		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 03:50	0.2		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 04:48	0.2		RTX-624 0.32(mm)
200-40322-9		10/05/2017 05:46	0.2	27236_23.D	RTX-624 0.32(mm)
ZZZZZ		10/05/2017 06:49	0.2		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 08:10	8		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 09:01	1		RTX-624 0.32(mm)
ZZZZZ		10/05/2017 09:52	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Instrument ID: CHG.i Start Date: 09/25/2017 16:44

Analysis Batch Number: 121363 End Date: 09/26/2017 09:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-121363/2		09/25/2017 16:44	1	200-27085-002.D	RTX-624 0.32(mm)
VIBLK 200-121363/3		09/25/2017 17:31	1		RTX-624 0.32(mm)
VIBLK 200-121363/4		09/25/2017 18:22	1		RTX-624 0.32(mm)
VIBLK 200-121363/5		09/25/2017 19:12	1		RTX-624 0.32(mm)
IC 200-121363/6		09/25/2017 20:02	1	200-27085-006.D	RTX-624 0.32(mm)
ZZZZZ		09/25/2017 20:53	1		RTX-624 0.32(mm)
IC 200-121363/8		09/25/2017 21:44	1	200-27085-008.D	RTX-624 0.32(mm)
IC 200-121363/9		09/25/2017 22:34	1	200-27085-009.D	RTX-624 0.32(mm)
ZZZZZ		09/25/2017 23:25	1		RTX-624 0.32(mm)
IC 200-121363/11		09/26/2017 00:15	1	200-27085-011.D	RTX-624 0.32(mm)
ICIS 200-121363/12		09/26/2017 01:06	1	200-27085-012.D	RTX-624 0.32(mm)
IC 200-121363/13		09/26/2017 01:56	1	200-27085-013.D	RTX-624 0.32(mm)
IC 200-121363/14		09/26/2017 02:46	1	200-27085-014.D	RTX-624 0.32(mm)
IC 200-121363/15		09/26/2017 03:37	1	200-27085-015.D	RTX-624 0.32(mm)
VIBLK 200-121363/16		09/26/2017 04:28	1		RTX-624 0.32(mm)
VIBLK 200-121363/17		09/26/2017 05:18	1		RTX-624 0.32(mm)
VIBLK 200-121363/18		09/26/2017 06:09	1		RTX-624 0.32(mm)
ICV 200-121363/19		09/26/2017 06:59	1	200-27085-019.D	RTX-624 0.32(mm)
ZZZZZ		09/26/2017 07:49	1		RTX-624 0.32(mm)
ZZZZZ		09/26/2017 08:40	1		RTX-624 0.32(mm)
VIBLK 200-121363/22		09/26/2017 09:31	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40420-1

SDG No.:

Instrument ID: CHG.i Start Date: 10/12/2017 09:46

Analysis Batch Number: 122057 End Date: 10/13/2017 09:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122057/1		10/12/2017 09:46	1	200-27370-001.D	RTX-624 0.32(mm)
CCVIS 200-122057/2		10/12/2017 10:34	1	200-27370-002.D	RTX-624 0.32(mm)
LCS 200-122057/3		10/12/2017 11:24	1	200-27370-003.D	RTX-624 0.32(mm)
ZZZZZ		10/12/2017 12:14	1		RTX-624 0.32(mm)
MB 200-122057/5		10/12/2017 13:05	1	200-27370-005.D	RTX-624 0.32(mm)
ZZZZZ		10/12/2017 13:55	1		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 14:46	4		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 15:37	1		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 16:26	4		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 17:16	1		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 18:07	2		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 18:57	10		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 19:47	2		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 20:37	9.09		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 21:27	2		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 22:18	6.9		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 23:08	1		RTX-624 0.32(mm)
ZZZZZ		10/12/2017 23:58	3		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 00:49	0.2		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 01:41	0.2		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 02:32	0.2		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 03:23	0.2		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 04:14	1		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 05:04	1		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 05:56	0.2		RTX-624 0.32(mm)
ZZZZZ		10/13/2017 06:48	0.2		RTX-624 0.32(mm)
200-40420-6		10/13/2017 07:39	0.2	200-27370-027.D	RTX-624 0.32(mm)
ZZZZZ		10/13/2017 09:16	12.08		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Instrument ID: CHB.i Start Date: 10/10/2017 16:05

Analysis Batch Number: 121987 End Date: 10/11/2017 08:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-121987/1		10/10/2017 16:05	1	27339-01.D	RTX-624 0.32(mm)
VIBLK 200-121987/2		10/10/2017 16:54	1		RTX-624 0.32(mm)
VIBLK 200-121987/3		10/10/2017 17:47	1		RTX-624 0.32(mm)
IC 200-121987/4		10/10/2017 18:40	1	27339-04.D	RTX-624 0.32(mm)
IC 200-121987/5		10/10/2017 19:32	1	27339-05.D	RTX-624 0.32(mm)
ZZZZZ		10/10/2017 20:25	1		RTX-624 0.32(mm)
IC 200-121987/7		10/10/2017 21:17	1	27339-07.D	RTX-624 0.32(mm)
ZZZZZ		10/10/2017 22:10	1		RTX-624 0.32(mm)
IC 200-121987/9		10/10/2017 23:02	1	27339-09.D	RTX-624 0.32(mm)
ICIS 200-121987/10		10/10/2017 23:54	1	27339-10.D	RTX-624 0.32(mm)
IC 200-121987/11		10/11/2017 00:47	1	27339-11.D	RTX-624 0.32(mm)
IC 200-121987/12		10/11/2017 01:39	1	27339-12.D	RTX-624 0.32(mm)
IC 200-121987/13		10/11/2017 02:31	1	27339-13.D	RTX-624 0.32(mm)
VIBLK 200-121987/14		10/11/2017 03:23	1		RTX-624 0.32(mm)
VIBLK 200-121987/15		10/11/2017 04:16	1		RTX-624 0.32(mm)
VIBLK 200-121987/16		10/11/2017 05:08	1		RTX-624 0.32(mm)
ICV 200-121987/17		10/11/2017 06:00	1	27339-17.D	RTX-624 0.32(mm)
ZZZZZ		10/11/2017 06:52	1		RTX-624 0.32(mm)
ZZZZZ		10/11/2017 07:44	1		RTX-624 0.32(mm)
VIBLK 200-121987/20		10/11/2017 08:36	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40531-1

SDG No.:

Instrument ID: CHB.i Start Date: 10/20/2017 09:00

Analysis Batch Number: 122350 End Date: 10/21/2017 00:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122350/1		10/20/2017 09:00	1	27498-01.D	RTX-624 0.32(mm)
CCVIS 200-122350/2		10/20/2017 09:50	1	27498-02.D	RTX-624 0.32(mm)
LCS 200-122350/3		10/20/2017 10:43	1	27498-03.D	RTX-624 0.32(mm)
MB 200-122350/4		10/20/2017 11:36	1	27498-04.D	RTX-624 0.32(mm)
ZZZZZ		10/20/2017 12:54	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 13:47	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 14:40	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 15:32	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 16:26	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 17:18	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 18:11	2		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 19:04	25		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 19:57	297.58		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 20:49	2		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 21:42	1		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 22:34	2		RTX-624 0.32(mm)
ZZZZZ		10/20/2017 23:36	0.2		RTX-624 0.32(mm)
200-40531-5		10/21/2017 00:38	0.2	27498-19.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Instrument ID: CHC.i Start Date: 10/13/2017 14:57

Analysis Batch Number: 122137 End Date: 10/14/2017 07:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122137/1		10/13/2017 14:57	1	27408_01.D	RTX-624 0.32(mm)
VIBLK 200-122137/2		10/13/2017 15:59	1		RTX-624 0.32(mm)
VIBLK 200-122137/3		10/13/2017 16:52	1		RTX-624 0.32(mm)
IC 200-122137/4		10/13/2017 17:45	1	27408_04.D	RTX-624 0.32(mm)
IC 200-122137/5		10/13/2017 18:38	1	27408_05.D	RTX-624 0.32(mm)
ZZZZZ		10/13/2017 19:32	1		RTX-624 0.32(mm)
IC 200-122137/7		10/13/2017 20:25	1	27408_07.D	RTX-624 0.32(mm)
ZZZZZ		10/13/2017 21:18	1		RTX-624 0.32(mm)
IC 200-122137/9		10/13/2017 22:11	1	27408_09.D	RTX-624 0.32(mm)
ICIS 200-122137/10		10/13/2017 23:04	1	27408_10.D	RTX-624 0.32(mm)
IC 200-122137/11		10/13/2017 23:58	1	27408_11.D	RTX-624 0.32(mm)
IC 200-122137/12		10/14/2017 00:51	1	27408_12.D	RTX-624 0.32(mm)
IC 200-122137/13		10/14/2017 01:45	1	27408_13.D	RTX-624 0.32(mm)
VIBLK 200-122137/14		10/14/2017 02:38	1		RTX-624 0.32(mm)
VIBLK 200-122137/15		10/14/2017 03:31	1		RTX-624 0.32(mm)
VIBLK 200-122137/16		10/14/2017 04:23	1		RTX-624 0.32(mm)
ICV 200-122137/17		10/14/2017 05:16	1	27408_17.D	RTX-624 0.32(mm)
ZZZZZ		10/14/2017 06:10	1		RTX-624 0.32(mm)
ZZZZZ		10/14/2017 07:04	1		RTX-624 0.32(mm)
VIBLK 200-122137/20		10/14/2017 07:57	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40547-1

SDG No.:

Instrument ID: CHC.i Start Date: 10/25/2017 09:39

Analysis Batch Number: 122537 End Date: 10/26/2017 09:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122537/1		10/25/2017 09:39	1	27580_01.D	RTX-624 0.32(mm)
CCVIS 200-122537/2		10/25/2017 10:25	1	27580_02.D	RTX-624 0.32(mm)
LCS 200-122537/3		10/25/2017 11:17	1	27580_03.D	RTX-624 0.32(mm)
MB 200-122537/4		10/25/2017 12:10	1	27580_04.D	RTX-624 0.32(mm)
ZZZZZ		10/25/2017 13:04	1		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 13:57	1		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 14:56	0.2		RTX-624 0.32(mm)
200-40547-6		10/25/2017 15:55	0.2	27580_08.D	RTX-624 0.32(mm)
ZZZZZ		10/25/2017 16:47	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 17:40	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 18:34	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 19:27	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 20:20	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 21:13	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 22:06	10		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 22:59	20		RTX-624 0.32(mm)
ZZZZZ		10/25/2017 23:53	97.4		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 00:46	10		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 01:39	15.1		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 02:33	39.8		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 03:27	10		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 04:20	10		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 05:13	21.9		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 06:06	111		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 06:59	1		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 07:52	1		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 08:45	1		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 09:39	10		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Instrument ID: CHC.i Start Date: 10/13/2017 14:57

Analysis Batch Number: 122137 End Date: 10/14/2017 07:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122137/1		10/13/2017 14:57	1	27408_01.D	RTX-624 0.32(mm)
VIBLK 200-122137/2		10/13/2017 15:59	1		RTX-624 0.32(mm)
VIBLK 200-122137/3		10/13/2017 16:52	1		RTX-624 0.32(mm)
IC 200-122137/4		10/13/2017 17:45	1	27408_04.D	RTX-624 0.32(mm)
IC 200-122137/5		10/13/2017 18:38	1	27408_05.D	RTX-624 0.32(mm)
ZZZZZ		10/13/2017 19:32	1		RTX-624 0.32(mm)
IC 200-122137/7		10/13/2017 20:25	1	27408_07.D	RTX-624 0.32(mm)
ZZZZZ		10/13/2017 21:18	1		RTX-624 0.32(mm)
IC 200-122137/9		10/13/2017 22:11	1	27408_09.D	RTX-624 0.32(mm)
ICIS 200-122137/10		10/13/2017 23:04	1	27408_10.D	RTX-624 0.32(mm)
IC 200-122137/11		10/13/2017 23:58	1	27408_11.D	RTX-624 0.32(mm)
IC 200-122137/12		10/14/2017 00:51	1	27408_12.D	RTX-624 0.32(mm)
IC 200-122137/13		10/14/2017 01:45	1	27408_13.D	RTX-624 0.32(mm)
VIBLK 200-122137/14		10/14/2017 02:38	1		RTX-624 0.32(mm)
VIBLK 200-122137/15		10/14/2017 03:31	1		RTX-624 0.32(mm)
VIBLK 200-122137/16		10/14/2017 04:23	1		RTX-624 0.32(mm)
ICV 200-122137/17		10/14/2017 05:16	1	27408_17.D	RTX-624 0.32(mm)
ZZZZZ		10/14/2017 06:10	1		RTX-624 0.32(mm)
ZZZZZ		10/14/2017 07:04	1		RTX-624 0.32(mm)
VIBLK 200-122137/20		10/14/2017 07:57	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-40548-1

SDG No.:

Instrument ID: CHC.i Start Date: 10/26/2017 10:39

Analysis Batch Number: 122611 End Date: 10/26/2017 19:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-122611/1		10/26/2017 10:39	1	27603_01.D	RTX-624 0.32(mm)
CCVIS 200-122611/2		10/26/2017 11:48	1	27603_02.D	RTX-624 0.32(mm)
LCS 200-122611/3		10/26/2017 12:40	1	27603_03.D	RTX-624 0.32(mm)
MB 200-122611/4		10/26/2017 13:33	1	27603_04.D	RTX-624 0.32(mm)
ZZZZZ		10/26/2017 14:26	1		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 15:24	0.2		RTX-624 0.32(mm)
200-40548-2		10/26/2017 16:23	0.2	27603_07.D	RTX-624 0.32(mm)
ZZZZZ		10/26/2017 17:22	0.2		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 18:21	0.2		RTX-624 0.32(mm)
ZZZZZ		10/26/2017 19:19	0.2		RTX-624 0.32(mm)

Shipping and Receiving Documents

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403-6828
Phone: 802 660 1990 Fax: 802 660 1919

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Client Project Manager: Becky Kinal	Samples Collected By: M. Sepsen / T. McClintock	COC No: 1 of 1 COCs
Company Name: AKRF, Inc.	Phone: 914-922-2362		
Address: 440 Park Ave. South	Email: rkinal@akrf.com		For Lab Use Only: Walk-in Client: Lab Sampling:
City/State/Zip: New York, NY 10016			
Phone: 914-922-2362	Site Contact:		
FAX:	Tel/Fax:		Job / SDG No.:
Project Name: St. John Villa	Analysis Turnaround Time		(Sub No on for Addl Bottles)
Site/Location: Staten Island, NY	X Standard (Specify):		
PO #: 39815	Rush (Specify):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard Target List)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 18/16	Other (Please specify in notes section)	Sample Type (A=Ambient Air, SV=Soil Vapor)	Indoor Air/Ambient Air	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-ES 1	11/1/17	10:00	8:30	-30.0	-15.0	5185	2511		X												
IA-ES 1		10:00	18:20	-30.0	-8.5	3719	2536		X												Place "on Hold"
SV-ES 2		9:45	18:04	-30.0	-5.5	3735	5465		X												
IA-ES 2		9:03	16:45	-30.0	-5.5	5168	2595		X												Place "on Hold"
AA-1		9:06	14:35	-30.0	-3.0	2761	4095		X												

233-40653 COC

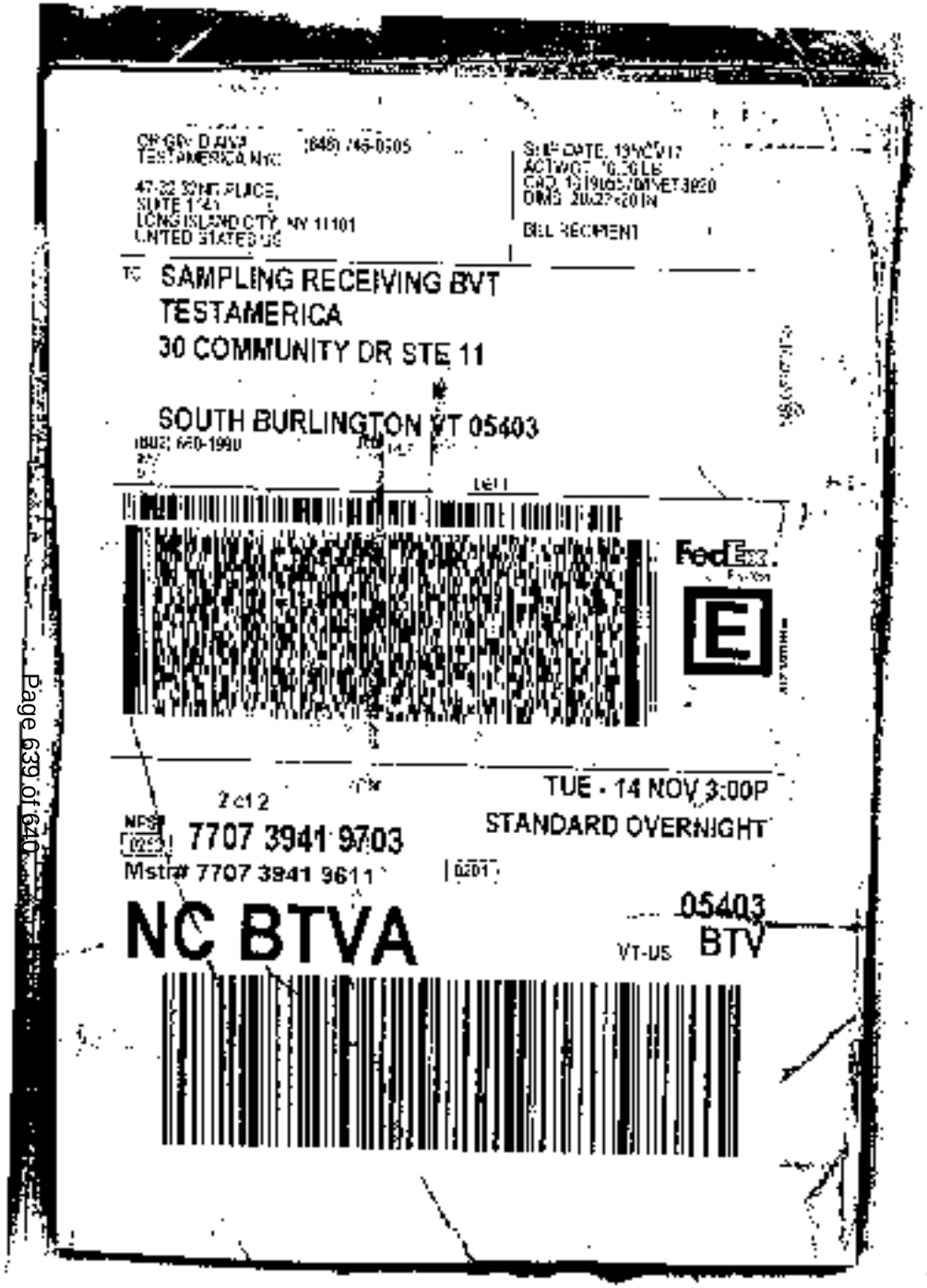
Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop	72°F	30°F

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments:
Use abbreviated TO-15 List (see document attached). Place "IA-ES1" and "IA-ES2" on hold.

Samples Shipped by:	Date / Time:	Samples Received by:
Samples Relinquished by: Mark Sepsen	Date / Time: 11/3/17 14:36	Received by:
Relinquished by:	Date / Time: 11/6 1330	Received by: 1026
Lab Use Only: Shipper Name:	Cooler/ID:	Condition:

Form No. CA-C-WI-003, Rev. 2.5, dated 8/22/2017



ORIGIN ID:JAVA (646) 745-0505
TESTAMERICA NYC
47-32 32ND PLACE
SUITE 124
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 13NOV17
ACTWGT: 10.00 LB
CAD: 1319655/INET3820
DIMS: 20x27x20 IN

BILL RECIPIENT

TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990

REF

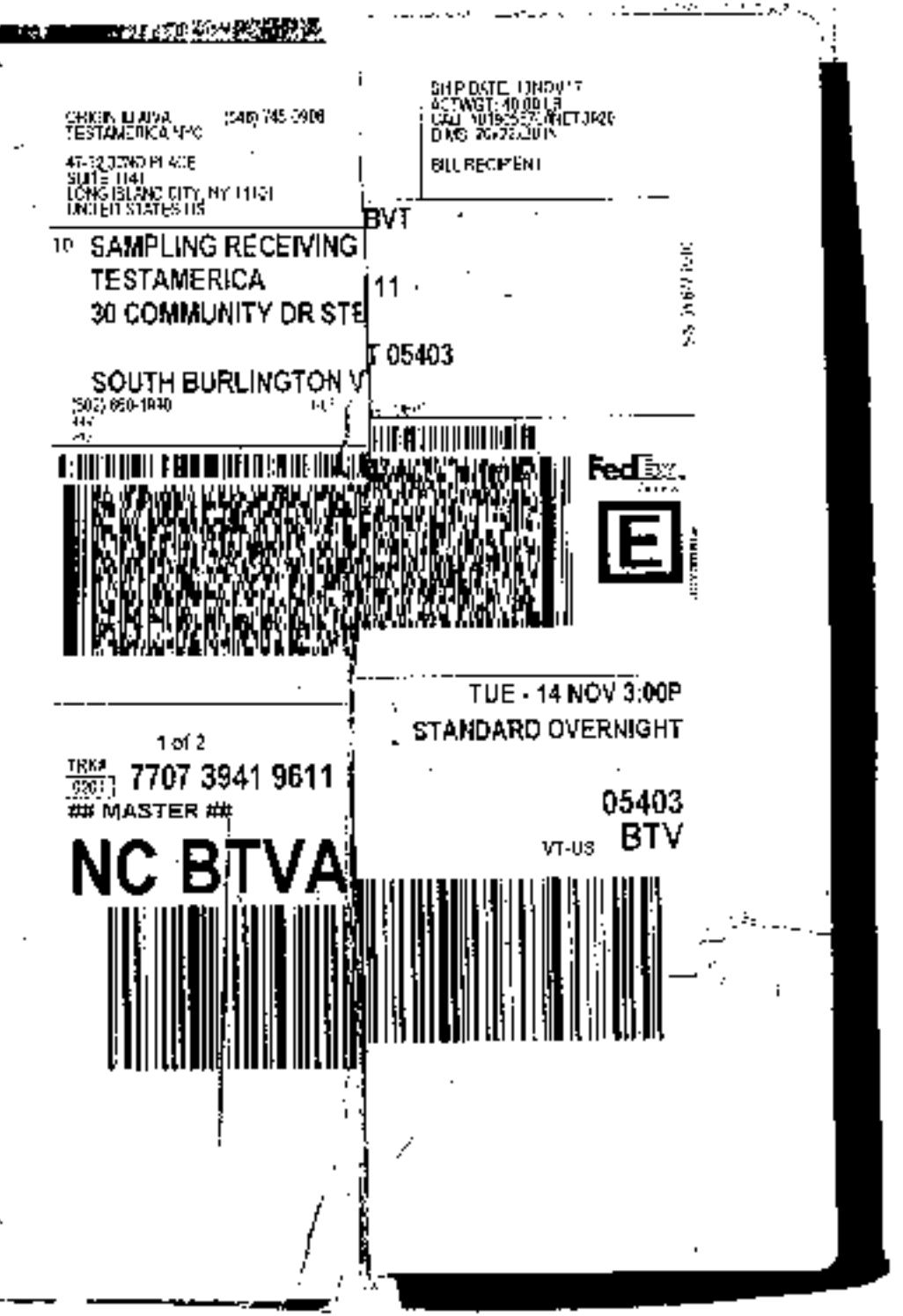
FedEx

2 of 2
MPS# 7707 3941 9703
Mstr# 7707 3941 9611

TUE - 14 NOV 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV



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TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990

REF

FedEx

1 of 2
TRK# 7707 3941 9611
MASTER

TUE - 14 NOV 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 200-40953-1
SDG Number: 200-40953-1

Login Number: 40953
List Number: 1
Creator: Hahl, Victoria L

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	026177, 026178, 026179
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	M. Jepsen, T. McClintock
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

ANALYTICAL REPORT

Job Number: 460-144928-1

Job Description: St. John Villa

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Attention: Becky Kinal

Approved for release.
Melissa Haas
Project Manager I
11/30/2017 3:30 PM

Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
11/30/2017
Revision: 1

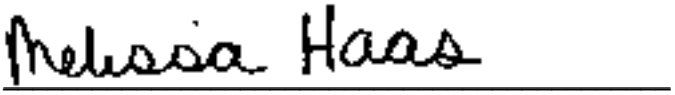
The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-144928-1

Job Description: St. John Villa

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Melissa Haas
Project Manager I
11/30/2017 3:30 PM

Melissa Haas

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CASE NARRATIVE

Client: AKRF Inc

Project: St. John Villa

Report Number: 460-144928-1
Revised Report #1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

REVISED REPORT #1
The following report required a revised narrative to discuss VOC results that were reported with B flags: 460-144928-1 (See **VOLATILE ORGANIC COMPOUNDS (GC-MS)** section of the narrative).

RECEIPT
The samples were received on 11/11/2017 4:27 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples SB-ES1(0-2) (460-144928-1), SB-ES1(8-10) (460-144928-2), SB-ES2(0-2) (460-144928-3), SB-ES2(8-10) (460-144928-4), SB-ES3(0-2) (460-144928-5), SB-ES3(8-10) (460-144928-6), SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9) and SB-GA2(13-15) (460-144928-10) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C. The samples were prepared on 11/11/2017 and analyzed on 11/16/2017.

The continuing calibration verification (CCV) associated with batch 460-477508 recovered above the upper control limit for Chloromethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Surrogate Toluene-d8 (Surr) recovery for the following sample was outside control limits: SB-ES1(0-2) (460-144928-1). The other three system monitoring compounds were within control limits; therefore, re-analysis was not performed.

Several analytes were detected in method blank LB3 460-476400/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The prep blank (LB3-) and associated samples were cross-contaminated by samples from an unrelated job during sample preparation. The reported prep blank and samples have been qualified "B" to reflect the source of the contamination. SB-ES1(0-2) (460-144928-1), SB-ES1(8-10) (460-144928-2), SB-ES2(0-2) (460-144928-3), SB-ES2(8-10) (460-144928-4), SB-ES3(0-2) (460-144928-5), SB-ES3(8-10) (460-144928-6), SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9), SB-GA2(13-15) (460-144928-10) and (LB3 460-476400/1-A)

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES
Samples SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9) and SB-GA2(13-15) (460-144928-10) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 11/13/2017 and analyzed on 11/14/2017.

No difficulties were encountered during the Pesticides analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS
Samples SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9) and SB-GA2(13-15) (460-144928-10) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 11/13/2017 and analyzed on 11/15/2017.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

CHLORINATED HERBICIDES
Samples SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9) and SB-GA2(13-15) (460-144928-10) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 11/14/2017 and analyzed on 11/16/2017.

The continuing calibration verification (CCV) associated with batch 460-477700 recovered above the upper control limit for 2,4,5-T on the primary column. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The surrogate recovery for the LCS associated with batch 477161 was outside the upper control limits. All associated sample surrogates fell within acceptance criteria; therefore, the data have been reported.(LCS 460-477161/2-A)

2,4-Dichlorophenylacetic acid failed the surrogate recovery criteria high for 460-144741-A-1-B MS and460-144741-A-1-C MSD.

Refer to the QC report for details.

No other difficulties were encountered during the herbicides analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9) and SB-GA2(13-15) (460-144928-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 11/13/2017 and analyzed on 11/13/2017 and 11/14/2017.

The surrogate recovery for the blank associated with preparation batch 460-476733 and analytical batch 460-476821 was outside the upper control limits.

Terphenyl-d14 and 2-Fluorophenol surrogates recoveries for the following laboratory control sample (LCS) associated with batch 460-476733 were outside the upper control limits. samples and MS/MSD surrogate were within limits. Sample has been qualified and reported

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for five analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 460-476733 had one analyte (Pyrene) outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Several analytes failed the recovery criteria low for the MS/MSD of sample 460-144918-2 in batch 460-476821 2,4-Dinitrophenol exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE
Samples SB-ES1(0-2) (460-144928-1), SB-ES1(8-10) (460-144928-2), SB-ES2(0-2) (460-144928-3), SB-ES2(8-10) (460-144928-4), SB-ES3(0-2) (460-144928-5), SB-ES3(8-10) (460-144928-6), SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9) and SB-GA2(13-15) (460-144928-10) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 11/13/2017.

The sample duplicate precision for the following sample associated with analytical batch 460-476774 was outside control limits: SB-ES1(0-2) (460-144928-1), SB-ES1(8-10) (460-144928-2), SB-ES2(0-2) (460-144928-3), SB-ES2(8-10) (460-144928-4), SB-ES3(0-2) (460-144928-5), SB-ES3(8-10) (460-144928-6), SB-GA1(0-2) (460-144928-7), SB-GA1(8-10) (460-144928-8), SB-GA2(0-2) (460-144928-9), SB-GA2(13-15) (460-144928-10), (460-144918-D-1), (460-144918-D-1 DU), (460-144918-D-1 MS), (460-144918-D-1 MSD), (460-144918-B-2), (460-144918-B-2 DU), (460-144918-B-2 MS) and (460-144918-B-2 MSD).

Refer to the QC report for details.

No other difficulties were encountered during the %solids/moisture analysis.

All other quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-144928-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-144928-1	**SB-ES1(0-2)**					
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00050	J B	0.0012	mg/Kg	8260C
1,2,4-Trimethylbenzene		0.00016	J B	0.0012	mg/Kg	8260C
Methylcyclohexane		0.00028	J B	0.0012	mg/Kg	8260C
m-Xylene & p-Xylene		0.00059	J B	0.0012	mg/Kg	8260C
o-Xylene		0.00017	J B	0.0012	mg/Kg	8260C
Toluene		0.00091	J B	0.0012	mg/Kg	8260C
Trichloroethene		0.00055	J B	0.0012	mg/Kg	8260C
Xylenes, Total		0.00076	J B	0.0023	mg/Kg	8260C
Percent Moisture		6.3		1.0	%	Moisture
Percent Solids		93.7		1.0	%	Moisture
460-144928-2	**SB-ES1(8-10)**					
1,2,4-Trimethylbenzene		0.00013	J B	0.0013	mg/Kg	8260C
Methylcyclohexane		0.00025	J B	0.0013	mg/Kg	8260C
m-Xylene & p-Xylene		0.00058	J B	0.0013	mg/Kg	8260C
o-Xylene		0.00018	J B	0.0013	mg/Kg	8260C
Toluene		0.00084	J B	0.0013	mg/Kg	8260C
Trichloroethene		0.00046	J B	0.0013	mg/Kg	8260C
Xylenes, Total		0.00076	J B	0.0025	mg/Kg	8260C
Percent Moisture		4.1		1.0	%	Moisture
Percent Solids		95.9		1.0	%	Moisture
460-144928-3	**SB-ES2(0-2)**					
1,2,4-Trimethylbenzene		0.00011	J B	0.00094	mg/Kg	8260C
Ethylbenzene		0.00019	J B	0.00094	mg/Kg	8260C
m-Xylene & p-Xylene		0.00073	J B	0.00094	mg/Kg	8260C
o-Xylene		0.00033	J B	0.00094	mg/Kg	8260C
Trichloroethene		0.00027	J B	0.00094	mg/Kg	8260C
Xylenes, Total		0.0011	J B	0.0019	mg/Kg	8260C
Percent Moisture		12.4		1.0	%	Moisture
Percent Solids		87.6		1.0	%	Moisture
460-144928-4	**SB-ES2(8-10)**					
Methylcyclohexane		0.00019	J B	0.0010	mg/Kg	8260C
m-Xylene & p-Xylene		0.00043	J B	0.0010	mg/Kg	8260C
o-Xylene		0.00011	J B	0.0010	mg/Kg	8260C
Toluene		0.00066	J B	0.0010	mg/Kg	8260C
Trichloroethene		0.00039	J B	0.0010	mg/Kg	8260C
Xylenes, Total		0.00053	J B	0.0021	mg/Kg	8260C
Percent Moisture		10		1.0	%	Moisture
Percent Solids		90.0		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-144928-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-144928-5	**SB-ES3(0-2)**					
Methylcyclohexane		0.00018	J B	0.0011	mg/Kg	8260C
m-Xylene & p-Xylene		0.00049	J B	0.0011	mg/Kg	8260C
o-Xylene		0.00014	J B	0.0011	mg/Kg	8260C
Trichloroethene		0.00040	J B	0.0011	mg/Kg	8260C
Xylenes, Total		0.00063	J B	0.0023	mg/Kg	8260C
Percent Moisture		16.0		1.0	%	Moisture
Percent Solids		84.0		1.0	%	Moisture
460-144928-6	**SB-ES3(8-10)**					
1,2,4-Trimethylbenzene		0.00015	J B	0.0010	mg/Kg	8260C
Ethylbenzene		0.0042	B	0.0010	mg/Kg	8260C
Methylcyclohexane		0.00022	J B	0.0010	mg/Kg	8260C
Methylene Chloride		0.00019	J	0.0010	mg/Kg	8260C
m-Xylene & p-Xylene		0.019	B	0.0010	mg/Kg	8260C
o-Xylene		0.012	B	0.0010	mg/Kg	8260C
Tetrachloroethene		0.00025	J	0.0010	mg/Kg	8260C
Toluene		0.00073	J B	0.0010	mg/Kg	8260C
Trichloroethene		0.00044	J B	0.0010	mg/Kg	8260C
Xylenes, Total		0.031	B	0.0020	mg/Kg	8260C
Percent Moisture		10.0		1.0	%	Moisture
Percent Solids		90.0		1.0	%	Moisture
460-144928-7	**SB-GA1(0-2)**					
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00044	J B	0.0011	mg/Kg	8260C
Methylcyclohexane		0.00023	J B	0.0011	mg/Kg	8260C
m-Xylene & p-Xylene		0.00047	J B	0.0011	mg/Kg	8260C
o-Xylene		0.00015	J B	0.0011	mg/Kg	8260C
Toluene		0.00077	J B	0.0011	mg/Kg	8260C
Trichloroethene		0.00042	J B	0.0011	mg/Kg	8260C
Xylenes, Total		0.00062	J B	0.0023	mg/Kg	8260C
Di-n-butyl phthalate		0.019	J	0.37	mg/Kg	8270D
Aroclor 1260		0.041	J	0.075	mg/Kg	8082A
Polychlorinated biphenyls, Total		0.041	J	0.075	mg/Kg	8082A
Percent Moisture		10.7		1.0	%	Moisture
Percent Solids		89.3		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-144928-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-144928-8	**SB-GA1(8-10)**					
Methylcyclohexane		0.00028	J B	0.0013	mg/Kg	8260C
Methylene Chloride		0.00024	J	0.0013	mg/Kg	8260C
m-Xylene & p-Xylene		0.00059	J B	0.0013	mg/Kg	8260C
o-Xylene		0.00017	J B	0.0013	mg/Kg	8260C
Toluene		0.00084	J B	0.0013	mg/Kg	8260C
Trichloroethene		0.00045	J B	0.0013	mg/Kg	8260C
Xylenes, Total		0.00076	J B	0.0026	mg/Kg	8260C
Chrysene		0.016	J	0.45	mg/Kg	8270D
Fluoranthene		0.028	J	0.45	mg/Kg	8270D
Phenanthrene		0.020	J	0.45	mg/Kg	8270D
Pyrene		0.021	J *	0.45	mg/Kg	8270D
Percent Moisture		27.5		1.0	%	Moisture
Percent Solids		72.5		1.0	%	Moisture
460-144928-9	**SB-GA2(0-2)**					
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00043	J B	0.0011	mg/Kg	8260C
Methylcyclohexane		0.00023	J B	0.0011	mg/Kg	8260C
Methylene Chloride		0.00022	J	0.0011	mg/Kg	8260C
m-Xylene & p-Xylene		0.00047	J B	0.0011	mg/Kg	8260C
o-Xylene		0.00015	J B	0.0011	mg/Kg	8260C
Toluene		0.00081	J B	0.0011	mg/Kg	8260C
Trichloroethene		0.00051	J B	0.0011	mg/Kg	8260C
Xylenes, Total		0.00062	J B	0.0022	mg/Kg	8260C
Percent Moisture		16.2		1.0	%	Moisture
Percent Solids		83.8		1.0	%	Moisture
460-144928-10	**SB-GA2(13-15)**					
Ethylbenzene		0.00025	J B	0.0012	mg/Kg	8260C
Methylcyclohexane		0.00027	J B	0.0012	mg/Kg	8260C
m-Xylene & p-Xylene		0.00069	J B	0.0012	mg/Kg	8260C
o-Xylene		0.00021	J B	0.0012	mg/Kg	8260C
Toluene		0.00088	J B	0.0012	mg/Kg	8260C
Trichloroethene		0.00051	J B	0.0012	mg/Kg	8260C
Xylenes, Total		0.00090	J B	0.0025	mg/Kg	8260C
Percent Moisture		23.6		1.0	%	Moisture
Percent Solids		76.4		1.0	%	Moisture

METHOD SUMMARY

Client: AKRF Inc

Job Number: 460-144928-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Closed System Purge and Trap	TAL EDI		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270D	
Microwave Extraction	TAL EDI		SW846 3546
Organochlorine Pesticides (GC)	TAL EDI	SW846 8081B	
Microwave Extraction	TAL EDI		SW846 3546
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082A	
Microwave Extraction	TAL EDI		SW846 3546
Herbicides (GC)	TAL EDI	SW846 8151A	
Extraction (Herbicides)	TAL EDI		SW846 8151A
Percent Moisture	TAL EDI	EPA Moisture	

Lab References:

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: AKRF Inc

Job Number: 460-144928-1

Method	Analyst	Analyst ID
SW846 8260C	Tupayachi, Audberto	AAT
SW846 8270D	Nimer, Diaa	DAN
SW846 8081B	Kapoor, Sita	SAK
SW846 8082A	Patel, Jignesh	JHP
SW846 8151A	Patel, Jignesh	JHP
EPA Moisture	Callahan, Rory W	RWC

SAMPLE SUMMARY

Client: AKRF Inc

Job Number: 460-144928-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-144928-1	SB-ES1(0-2)	Solid	11/11/2017 1010	11/11/2017 1627
460-144928-2	SB-ES1(8-10)	Solid	11/11/2017 1015	11/11/2017 1627
460-144928-3	SB-ES2(0-2)	Solid	11/11/2017 1110	11/11/2017 1627
460-144928-4	SB-ES2(8-10)	Solid	11/11/2017 1115	11/11/2017 1627
460-144928-5	SB-ES3(0-2)	Solid	11/11/2017 1145	11/11/2017 1627
460-144928-6	SB-ES3(8-10)	Solid	11/11/2017 1150	11/11/2017 1627
460-144928-7	SB-GA1(0-2)	Solid	11/11/2017 1255	11/11/2017 1627
460-144928-8	SB-GA1(8-10)	Solid	11/11/2017 1300	11/11/2017 1627
460-144928-9	SB-GA2(0-2)	Solid	11/11/2017 1330	11/11/2017 1627
460-144928-10	SB-GA2(13-15)	Solid	11/11/2017 1335	11/11/2017 1627

SAMPLE RESULTS

Client Sample ID: SB-ES1(0-2)

Lab Sample ID: 460-144928-1 Date Sampled: 11/11/2017 1010
Client Matrix: Solid % Moisture: 6.3 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 460-477508 Instrument ID: CVOAMS4
Prep Method: 5035 Prep Batch: 460-476400 Lab File ID: D44313.D
Dilution: 1.0 Initial Weight/Volume: 4.60 g
Analysis Date: 11/16/2017 1031 Final Weight/Volume: 5 mL
Prep Date: 11/11/2017 1653

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0012	U	0.00027	0.0012
1,1,2,2-Tetrachloroethane		0.0012	U	0.00025	0.0012
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00050	J B	0.00035	0.0012
1,1,2-Trichloroethane		0.0012	U	0.00021	0.0012
1,1-Dichloroethane		0.0012	U	0.00024	0.0012
1,1-Dichloroethene		0.0012	U	0.00026	0.0012
1,2,3-Trichlorobenzene		0.0012	U	0.00021	0.0012
1,2,4-Trichlorobenzene		0.0012	U	0.00011	0.0012
1,2,4-Trimethylbenzene		0.00016	J B	0.00011	0.0012
1,2-Dibromo-3-Chloropropane		0.0012	U	0.00053	0.0012
1,2-Dichlorobenzene		0.0012	U	0.00017	0.0012
1,2-Dichloroethane		0.0012	U	0.00034	0.0012
1,2-Dichloropropane		0.0012	U	0.00049	0.0012
1,3,5-Trimethylbenzene		0.0012	U	0.00013	0.0012
1,3-Dichlorobenzene		0.0012	U	0.00018	0.0012
1,4-Dichlorobenzene		0.0012	U	0.00012	0.0012
1,4-Dioxane		0.023	U	0.011	0.023
2-Butanone (MEK)		0.0058	U	0.0013	0.0058
2-Hexanone		0.0058	U	0.00091	0.0058
4-Isopropyltoluene		0.0012	U	0.00011	0.0012
4-Methyl-2-pentanone (MIBK)		0.0058	U	0.00077	0.0058
Acetone		0.0058	U	0.0044	0.0058
Benzene		0.0012	U	0.00030	0.0012
Bromoform		0.0012	U	0.00049	0.0012
Bromomethane		0.0012	U	0.00055	0.0012
Carbon disulfide		0.0012	U	0.00031	0.0012
Carbon tetrachloride		0.0012	U	0.00021	0.0012
Chlorobenzene		0.0012	U	0.00021	0.0012
Chlorobromomethane		0.0012	U	0.00033	0.0012
Chlorodibromomethane		0.0012	U	0.00023	0.0012
Chloroethane		0.0012	U	0.00061	0.0012
Chloroform		0.0012	U	0.00037	0.0012
Chloromethane		0.0012	U	0.00050	0.0012
cis-1,2-Dichloroethene		0.0012	U	0.00018	0.0012
cis-1,3-Dichloropropene		0.0012	U	0.00032	0.0012
Cyclohexane		0.0012	U	0.00026	0.0012
Dichlorobromomethane		0.0012	U	0.00030	0.0012
Dichlorodifluoromethane		0.0012	U	0.00039	0.0012
Ethylbenzene		0.0012	U	0.00023	0.0012
Ethylene Dibromide		0.0012	U	0.00021	0.0012
Isopropylbenzene		0.0012	U	0.00015	0.0012
Methyl acetate		0.0058	U	0.0050	0.0058
Methyl tert-butyl ether		0.0012	U	0.00015	0.0012
Methylcyclohexane		0.00028	J B	0.00019	0.0012
Methylene Chloride		0.0012	U	0.00019	0.0012
m-Xylene & p-Xylene		0.00059	J B	0.00020	0.0012

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-ES1(0-2)

Lab Sample ID: 460-144928-1 Date Sampled: 11/11/2017 1010
Client Matrix: Solid % Moisture: 6.3 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44313.D
Dilution:	1.0			Initial Weight/Volume:	4.60 g
Analysis Date:	11/16/2017 1031			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1653				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0012	U	0.00022	0.0012
n-Butylbenzene		0.0012	U	0.00016	0.0012
N-Propylbenzene		0.0012	U	0.00020	0.0012
o-Xylene		0.00017	J B	0.00011	0.0012
sec-Butylbenzene		0.0012	U	0.00010	0.0012
Styrene		0.0012	U	0.00014	0.0012
tert-Butylbenzene		0.0012	U	0.00014	0.0012
Tetrachloroethene		0.0012	U	0.00017	0.0012
Toluene		0.00091	J B	0.00073	0.0012
trans-1,2-Dichloroethene		0.0012	U	0.00029	0.0012
trans-1,3-Dichloropropene		0.0012	U	0.00031	0.0012
Trichloroethene		0.00055	J B	0.00017	0.0012
Trichlorofluoromethane		0.0012	U	0.00047	0.0012
Vinyl chloride		0.0012	U	0.00063	0.0012
Xylenes, Total		0.00076	J B	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	130		78 - 135
4-Bromofluorobenzene	120		67 - 126
Dibromofluoromethane (Surr)	127		61 - 149
Toluene-d8 (Surr)	124	*	73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES1(0-2)**

Lab Sample ID: 460-144928-1
Client Matrix: Solid

% Moisture: 6.3

Date Sampled: 11/11/2017 1010
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44313.D
Dilution:	1.0			Initial Weight/Volume:	4.60 g
Analysis Date:	11/16/2017 1031			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1653				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-ES1(8-10)**

Lab Sample ID: 460-144928-2 | Date Sampled: 11/11/2017 1015
Client Matrix: Solid | % Moisture: 4.1 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44314.D
Dilution:	1.0			Initial Weight/Volume:	4.11 g
Analysis Date:	11/16/2017 1055			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1654				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0013	U	0.00030	0.0013
1,1,2,2-Tetrachloroethane		0.0013	U	0.00027	0.0013
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0013	U	0.00038	0.0013
1,1,2-Trichloroethane		0.0013	U	0.00023	0.0013
1,1-Dichloroethane		0.0013	U	0.00026	0.0013
1,1-Dichloroethene		0.0013	U	0.00029	0.0013
1,2,3-Trichlorobenzene		0.0013	U	0.00023	0.0013
1,2,4-Trichlorobenzene		0.0013	U	0.00012	0.0013
1,2,4-Trimethylbenzene		0.00013	J B	0.00012	0.0013
1,2-Dibromo-3-Chloropropane		0.0013	U	0.00058	0.0013
1,2-Dichlorobenzene		0.0013	U	0.00018	0.0013
1,2-Dichloroethane		0.0013	U	0.00038	0.0013
1,2-Dichloropropane		0.0013	U	0.00054	0.0013
1,3,5-Trimethylbenzene		0.0013	U	0.00015	0.0013
1,3-Dichlorobenzene		0.0013	U	0.00020	0.0013
1,4-Dichlorobenzene		0.0013	U	0.00013	0.0013
1,4-Dioxane		0.025	U	0.012	0.025
2-Butanone (MEK)		0.0063	U	0.0014	0.0063
2-Hexanone		0.0063	U	0.00099	0.0063
4-Isopropyltoluene		0.0013	U	0.00012	0.0013
4-Methyl-2-pentanone (MIBK)		0.0063	U	0.00084	0.0063
Acetone		0.0063	U	0.0048	0.0063
Benzene		0.0013	U	0.00033	0.0013
Bromoform		0.0013	U	0.00054	0.0013
Bromomethane		0.0013	U	0.00060	0.0013
Carbon disulfide		0.0013	U	0.00034	0.0013
Carbon tetrachloride		0.0013	U	0.00023	0.0013
Chlorobenzene		0.0013	U	0.00022	0.0013
Chlorobromomethane		0.0013	U	0.00036	0.0013
Chlorodibromomethane		0.0013	U	0.00025	0.0013
Chloroethane		0.0013	U	0.00066	0.0013
Chloroform		0.0013	U	0.00040	0.0013
Chloromethane		0.0013	U	0.00055	0.0013
cis-1,2-Dichloroethene		0.0013	U	0.00019	0.0013
cis-1,3-Dichloropropene		0.0013	U	0.00035	0.0013
Cyclohexane		0.0013	U	0.00028	0.0013
Dichlorobromomethane		0.0013	U	0.00033	0.0013
Dichlorodifluoromethane		0.0013	U	0.00043	0.0013
Ethylbenzene		0.0013	U	0.00025	0.0013
Ethylene Dibromide		0.0013	U	0.00023	0.0013
Isopropylbenzene		0.0013	U	0.00016	0.0013
Methyl acetate		0.0063	U	0.0055	0.0063
Methyl tert-butyl ether		0.0013	U	0.00016	0.0013
Methylcyclohexane		0.00025	J B	0.00020	0.0013
Methylene Chloride		0.0013	U	0.00021	0.0013
m-Xylene & p-Xylene		0.00058	J B	0.00022	0.0013

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: SB-ES1(8-10)

Lab Sample ID: 460-144928-2 | Date Sampled: 11/11/2017 1015
Client Matrix: Solid | % Moisture: 4.1 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44314.D
Dilution:	1.0			Initial Weight/Volume:	4.11 g
Analysis Date:	11/16/2017 1055			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1654				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0013	U	0.00024	0.0013
n-Butylbenzene		0.0013	U	0.00018	0.0013
N-Propylbenzene		0.0013	U	0.00022	0.0013
o-Xylene		0.00018	J B	0.00012	0.0013
sec-Butylbenzene		0.0013	U	0.00011	0.0013
Styrene		0.0013	U	0.00016	0.0013
tert-Butylbenzene		0.0013	U	0.00016	0.0013
Tetrachloroethene		0.0013	U	0.00018	0.0013
Toluene		0.00084	J B	0.00079	0.0013
trans-1,2-Dichloroethene		0.0013	U	0.00031	0.0013
trans-1,3-Dichloropropene		0.0013	U	0.00034	0.0013
Trichloroethene		0.00046	J B	0.00018	0.0013
Trichlorofluoromethane		0.0013	U	0.00051	0.0013
Vinyl chloride		0.0013	U	0.00069	0.0013
Xylenes, Total		0.00076	J B	0.00032	0.0025

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		78 - 135
4-Bromofluorobenzene	98		67 - 126
Dibromofluoromethane (Surr)	105		61 - 149
Toluene-d8 (Surr)	100		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES1(8-10)**

Lab Sample ID: 460-144928-2
Client Matrix: Solid

% Moisture: 4.1

Date Sampled: 11/11/2017 1015
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44314.D
Dilution:	1.0			Initial Weight/Volume:	4.11 g
Analysis Date:	11/16/2017 1055			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1654				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-ES2(0-2)

Lab Sample ID: 460-144928-3 Date Sampled: 11/11/2017 1110
Client Matrix: Solid % Moisture: 12.4 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44315.D
Dilution:	1.0			Initial Weight/Volume:	6.08 g
Analysis Date:	11/16/2017 1120			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1654				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00094	U	0.00022	0.00094
1,1,2,2-Tetrachloroethane		0.00094	U	0.00020	0.00094
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00094	U	0.00028	0.00094
1,1,2-Trichloroethane		0.00094	U	0.00017	0.00094
1,1-Dichloroethane		0.00094	U	0.00019	0.00094
1,1-Dichloroethene		0.00094	U	0.00021	0.00094
1,2,3-Trichlorobenzene		0.00094	U	0.00017	0.00094
1,2,4-Trichlorobenzene		0.00094	U	0.000086	0.00094
1,2,4-Trimethylbenzene		0.00011	J B	0.000088	0.00094
1,2-Dibromo-3-Chloropropane		0.00094	U	0.00043	0.00094
1,2-Dichlorobenzene		0.00094	U	0.00014	0.00094
1,2-Dichloroethane		0.00094	U	0.00028	0.00094
1,2-Dichloropropane		0.00094	U	0.00040	0.00094
1,3,5-Trimethylbenzene		0.00094	U	0.00011	0.00094
1,3-Dichlorobenzene		0.00094	U	0.00015	0.00094
1,4-Dichlorobenzene		0.00094	U	0.000094	0.00094
1,4-Dioxane		0.019	U	0.0086	0.019
2-Butanone (MEK)		0.0047	U	0.0010	0.0047
2-Hexanone		0.0047	U	0.00073	0.0047
4-Isopropyltoluene		0.00094	U	0.000092	0.00094
4-Methyl-2-pentanone (MIBK)		0.0047	U	0.00062	0.0047
Acetone		0.0047	U	0.0036	0.0047
Benzene		0.00094	U	0.00024	0.00094
Bromoform		0.00094	U	0.00040	0.00094
Bromomethane		0.00094	U	0.00044	0.00094
Carbon disulfide		0.00094	U	0.00025	0.00094
Carbon tetrachloride		0.00094	U	0.00017	0.00094
Chlorobenzene		0.00094	U	0.00017	0.00094
Chlorobromomethane		0.00094	U	0.00026	0.00094
Chlorodibromomethane		0.00094	U	0.00018	0.00094
Chloroethane		0.00094	U	0.00049	0.00094
Chloroform		0.00094	U	0.00030	0.00094
Chloromethane		0.00094	U	0.00041	0.00094
cis-1,2-Dichloroethene		0.00094	U	0.00014	0.00094
cis-1,3-Dichloropropene		0.00094	U	0.00026	0.00094
Cyclohexane		0.00094	U	0.00021	0.00094
Dichlorobromomethane		0.00094	U	0.00024	0.00094
Dichlorodifluoromethane		0.00094	U	0.00032	0.00094
Ethylbenzene		0.00019	J B	0.00019	0.00094
Ethylene Dibromide		0.00094	U	0.00017	0.00094
Isopropylbenzene		0.00094	U	0.00012	0.00094
Methyl acetate		0.0047	U	0.0040	0.0047
Methyl tert-butyl ether		0.00094	U	0.00012	0.00094
Methylcyclohexane		0.00094	U	0.00015	0.00094
Methylene Chloride		0.00094	U	0.00015	0.00094
m-Xylene & p-Xylene		0.00073	J B	0.00016	0.00094

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES2(0-2)**

Lab Sample ID: 460-144928-3
Client Matrix: Solid
% Moisture: 12.4

Date Sampled: 11/11/2017 1110
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44315.D
Dilution:	1.0			Initial Weight/Volume:	6.08 g
Analysis Date:	11/16/2017 1120			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1654				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00094	U	0.00018	0.00094
n-Butylbenzene		0.00094	U	0.00013	0.00094
N-Propylbenzene		0.00094	U	0.00016	0.00094
o-Xylene		0.00033	J B	0.000089	0.00094
sec-Butylbenzene		0.00094	U	0.000083	0.00094
Styrene		0.00094	U	0.00012	0.00094
tert-Butylbenzene		0.00094	U	0.00012	0.00094
Tetrachloroethene		0.00094	U	0.00013	0.00094
Toluene		0.00094	U	0.00059	0.00094
trans-1,2-Dichloroethene		0.00094	U	0.00023	0.00094
trans-1,3-Dichloropropene		0.00094	U	0.00025	0.00094
Trichloroethene		0.00027	J B	0.00014	0.00094
Trichlorofluoromethane		0.00094	U	0.00038	0.00094
Vinyl chloride		0.00094	U	0.00051	0.00094
Xylenes, Total		0.0011	J B	0.00024	0.0019

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		78 - 135
4-Bromofluorobenzene	92		67 - 126
Dibromofluoromethane (Surr)	95		61 - 149
Toluene-d8 (Surr)	93		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES2(0-2)**

Lab Sample ID: 460-144928-3
Client Matrix: Solid

% Moisture: 12.4

Date Sampled: 11/11/2017 1110
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44315.D
Dilution:	1.0			Initial Weight/Volume:	6.08 g
Analysis Date:	11/16/2017 1120			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1654				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-ES2(8-10)**

Lab Sample ID: 460-144928-4 | Date Sampled: 11/11/2017 1115
Client Matrix: Solid | % Moisture: 10.0 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44316.D
Dilution:	1.0			Initial Weight/Volume:	5.33 g
Analysis Date:	11/16/2017 1144			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1655				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00019	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000096	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000098	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00048	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00031	0.0010
1,2-Dichloropropane		0.0010	U	0.00044	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00017	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.021	U	0.0096	0.021
2-Butanone (MEK)		0.0052	U	0.0012	0.0052
2-Hexanone		0.0052	U	0.00081	0.0052
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0052	U	0.00069	0.0052
Acetone		0.0052	U	0.0039	0.0052
Benzene		0.0010	U	0.00027	0.0010
Bromoform		0.0010	U	0.00044	0.0010
Bromomethane		0.0010	U	0.00049	0.0010
Carbon disulfide		0.0010	U	0.00028	0.0010
Carbon tetrachloride		0.0010	U	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00054	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00045	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00027	0.0010
Dichlorodifluoromethane		0.0010	U	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00021	0.0010
Ethylene Dibromide		0.0010	U	0.00019	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0052	U	0.0045	0.0052
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.00019	J B	0.00017	0.0010
Methylene Chloride		0.0010	U	0.00017	0.0010
m-Xylene & p-Xylene		0.00043	J B	0.00018	0.0010

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-ES2(8-10)

Lab Sample ID: 460-144928-4 Date Sampled: 11/11/2017 1115
Client Matrix: Solid % Moisture: 10.0 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44316.D
Dilution:	1.0			Initial Weight/Volume:	5.33 g
Analysis Date:	11/16/2017 1144			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1655				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00020	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.00011	J B	0.000099	0.0010
sec-Butylbenzene		0.0010	U	0.000092	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.00066	J B	0.00065	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00026	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Trichloroethene		0.00039	J B	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00057	0.0010
Xylenes, Total		0.00053	J B	0.00026	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		78 - 135
4-Bromofluorobenzene	102		67 - 126
Dibromofluoromethane (Surr)	106		61 - 149
Toluene-d8 (Surr)	103		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES2(8-10)**

Lab Sample ID: 460-144928-4
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 11/11/2017 1115
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44316.D
Dilution:	1.0			Initial Weight/Volume:	5.33 g
Analysis Date:	11/16/2017 1144			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1655				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-ES3(0-2)**

Lab Sample ID: 460-144928-5 | Date Sampled: 11/11/2017 1145
Client Matrix: Solid | % Moisture: 16.0 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44317.D
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	11/16/2017 1208			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1656				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00026	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00034	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00023	0.0011
1,1-Dichloroethene		0.0011	U	0.00026	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00021	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00011	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00052	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00034	0.0011
1,2-Dichloropropane		0.0011	U	0.00048	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.023	U	0.010	0.023
2-Butanone (MEK)		0.0057	U	0.0013	0.0057
2-Hexanone		0.0057	U	0.00088	0.0057
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0057	U	0.00075	0.0057
Acetone		0.0057	U	0.0043	0.0057
Benzene		0.0011	U	0.00029	0.0011
Bromoform		0.0011	U	0.00048	0.0011
Bromomethane		0.0011	U	0.00054	0.0011
Carbon disulfide		0.0011	U	0.00030	0.0011
Carbon tetrachloride		0.0011	U	0.00021	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00032	0.0011
Chlorodibromomethane		0.0011	U	0.00022	0.0011
Chloroethane		0.0011	U	0.00059	0.0011
Chloroform		0.0011	U	0.00036	0.0011
Chloromethane		0.0011	U	0.00049	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00031	0.0011
Cyclohexane		0.0011	U	0.00025	0.0011
Dichlorobromomethane		0.0011	U	0.00029	0.0011
Dichlorodifluoromethane		0.0011	U	0.00038	0.0011
Ethylbenzene		0.0011	U	0.00023	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0057	U	0.0049	0.0057
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.00018	J B	0.00018	0.0011
Methylene Chloride		0.0011	U	0.00018	0.0011
m-Xylene & p-Xylene		0.00049	J B	0.00020	0.0011

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES3(0-2)**

Lab Sample ID: 460-144928-5
Client Matrix: Solid
% Moisture: 16.0

Date Sampled: 11/11/2017 1145
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44317.D
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	11/16/2017 1208			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1656				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00022	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00020	0.0011
o-Xylene		0.00014	J B	0.00011	0.0011
sec-Butylbenzene		0.0011	U	0.00010	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00071	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00028	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Trichloroethene		0.00040	J B	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00046	0.0011
Vinyl chloride		0.0011	U	0.00062	0.0011
Xylenes, Total		0.00063	J B	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		78 - 135
4-Bromofluorobenzene	84		67 - 126
Dibromofluoromethane (Surr)	89		61 - 149
Toluene-d8 (Surr)	85		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-ES3(0-2)**

Lab Sample ID: 460-144928-5
Client Matrix: Solid

% Moisture: 16.0

Date Sampled: 11/11/2017 1145
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44317.D
Dilution:	1.0			Initial Weight/Volume:	5.25 g
Analysis Date:	11/16/2017 1208			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1656				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-ES3(8-10)**

Lab Sample ID: 460-144928-6 | Date Sampled: 11/11/2017 1150
Client Matrix: Solid | % Moisture: 10.0 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44318.D
Dilution:	1.0			Initial Weight/Volume:	5.54 g
Analysis Date:	11/16/2017 1233			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1656				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene		0.00015	J B	0.000094	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00014	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.020	U	0.0092	0.020
2-Butanone (MEK)		0.0050	U	0.0011	0.0050
2-Hexanone		0.0050	U	0.00078	0.0050
4-Isopropyltoluene		0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)		0.0050	U	0.00067	0.0050
Acetone		0.0050	U	0.0038	0.0050
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00043	0.0010
Bromomethane		0.0010	U	0.00048	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00018	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00028	0.0010
Chlorodibromomethane		0.0010	U	0.00019	0.0010
Chloroethane		0.0010	U	0.00052	0.0010
Chloroform		0.0010	U	0.00032	0.0010
Chloromethane		0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Cyclohexane		0.0010	U	0.00022	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00034	0.0010
Ethylbenzene		0.0042	B	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0050	U	0.0043	0.0050
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.00022	J B	0.00016	0.0010
Methylene Chloride		0.00019	J	0.00016	0.0010
m-Xylene & p-Xylene		0.019	B	0.00017	0.0010

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-ES3(8-10)

Lab Sample ID: 460-144928-6 Date Sampled: 11/11/2017 1150
Client Matrix: Solid % Moisture: 10.0 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44318.D
Dilution:	1.0			Initial Weight/Volume:	5.54 g
Analysis Date:	11/16/2017 1233			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1656				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00014	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.012	B	0.000095	0.0010
sec-Butylbenzene		0.0010	U	0.000088	0.0010
Styrene		0.0010	U	0.00012	0.0010
tert-Butylbenzene		0.0010	U	0.00012	0.0010
Tetrachloroethene		0.00025	J	0.00014	0.0010
Toluene		0.00073	J B	0.00063	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.00044	J B	0.00014	0.0010
Trichlorofluoromethane		0.0010	U	0.00041	0.0010
Vinyl chloride		0.0010	U	0.00055	0.0010
Xylenes, Total		0.031	B	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		78 - 135
4-Bromofluorobenzene	104		67 - 126
Dibromofluoromethane (Surr)	108		61 - 149
Toluene-d8 (Surr)	106		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-ES3(8-10)

Lab Sample ID: 460-144928-6
Client Matrix: Solid

% Moisture: 10.0

Date Sampled: 11/11/2017 1150
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44318.D
Dilution:	1.0			Initial Weight/Volume:	5.54 g
Analysis Date:	11/16/2017 1233			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1656				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7 Date Sampled: 11/11/2017 1255
Client Matrix: Solid % Moisture: 10.7 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44319.D
Dilution:	1.0			Initial Weight/Volume:	4.89 g
Analysis Date:	11/16/2017 1257			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1657				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00027	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00044	J B	0.00034	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00024	0.0011
1,1-Dichloroethene		0.0011	U	0.00026	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00021	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00011	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00011	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00053	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00034	0.0011
1,2-Dichloropropane		0.0011	U	0.00048	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.023	U	0.011	0.023
2-Butanone (MEK)		0.0057	U	0.0013	0.0057
2-Hexanone		0.0057	U	0.00089	0.0057
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0057	U	0.00076	0.0057
Acetone		0.0057	U	0.0043	0.0057
Benzene		0.0011	U	0.00030	0.0011
Bromoform		0.0011	U	0.00049	0.0011
Bromomethane		0.0011	U	0.00054	0.0011
Carbon disulfide		0.0011	U	0.00030	0.0011
Carbon tetrachloride		0.0011	U	0.00021	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00032	0.0011
Chlorodibromomethane		0.0011	U	0.00022	0.0011
Chloroethane		0.0011	U	0.00060	0.0011
Chloroform		0.0011	U	0.00037	0.0011
Chloromethane		0.0011	U	0.00050	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00031	0.0011
Cyclohexane		0.0011	U	0.00025	0.0011
Dichlorobromomethane		0.0011	U	0.00029	0.0011
Dichlorodifluoromethane		0.0011	U	0.00039	0.0011
Ethylbenzene		0.0011	U	0.00023	0.0011
Ethylene Dibromide		0.0011	U	0.00021	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0057	U	0.0049	0.0057
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.00023	J B	0.00018	0.0011
Methylene Chloride		0.0011	U	0.00019	0.0011
m-Xylene & p-Xylene		0.00047	J B	0.00020	0.0011

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-GA1(0-2)**

Lab Sample ID: 460-144928-7 | Date Sampled: 11/11/2017 1255
Client Matrix: Solid | % Moisture: 10.7 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44319.D
Dilution:	1.0			Initial Weight/Volume:	4.89 g
Analysis Date:	11/16/2017 1257			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1657				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00022	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00020	0.0011
o-Xylene		0.00015	J B	0.00011	0.0011
sec-Butylbenzene		0.0011	U	0.00010	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.00077	J B	0.00072	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00028	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Trichloroethene		0.00042	J B	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00046	0.0011
Vinyl chloride		0.0011	U	0.00063	0.0011
Xylenes, Total		0.00062	J B	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		78 - 135
4-Bromofluorobenzene	102		67 - 126
Dibromofluoromethane (Surr)	108		61 - 149
Toluene-d8 (Surr)	105		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(0-2)**

Lab Sample ID: 460-144928-7
Client Matrix: Solid
% Moisture: 10.7

Date Sampled: 11/11/2017 1255
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44319.D
Dilution:	1.0			Initial Weight/Volume:	4.89 g
Analysis Date:	11/16/2017 1257			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1657				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8 | Date Sampled: 11/11/2017 1300
Client Matrix: Solid | % Moisture: 27.5 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44320.D
Dilution:	1.0			Initial Weight/Volume:	5.31 g
Analysis Date:	11/16/2017 1322			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1658				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0013	U	0.00030	0.0013
1,1,2,2-Tetrachloroethane		0.0013	U	0.00028	0.0013
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0013	U	0.00039	0.0013
1,1,2-Trichloroethane		0.0013	U	0.00023	0.0013
1,1-Dichloroethane		0.0013	U	0.00027	0.0013
1,1-Dichloroethene		0.0013	U	0.00029	0.0013
1,2,3-Trichlorobenzene		0.0013	U	0.00024	0.0013
1,2,4-Trichlorobenzene		0.0013	U	0.00012	0.0013
1,2,4-Trimethylbenzene		0.0013	U	0.00012	0.0013
1,2-Dibromo-3-Chloropropane		0.0013	U	0.00060	0.0013
1,2-Dichlorobenzene		0.0013	U	0.00019	0.0013
1,2-Dichloroethane		0.0013	U	0.00038	0.0013
1,2-Dichloropropane		0.0013	U	0.00055	0.0013
1,3,5-Trimethylbenzene		0.0013	U	0.00015	0.0013
1,3-Dichlorobenzene		0.0013	U	0.00021	0.0013
1,4-Dichlorobenzene		0.0013	U	0.00013	0.0013
1,4-Dioxane		0.026	U	0.012	0.026
2-Butanone (MEK)		0.0065	U	0.0014	0.0065
2-Hexanone		0.0065	U	0.0010	0.0065
4-Isopropyltoluene		0.0013	U	0.00013	0.0013
4-Methyl-2-pentanone (MIBK)		0.0065	U	0.00086	0.0065
Acetone		0.0065	U	0.0049	0.0065
Benzene		0.0013	U	0.00034	0.0013
Bromoform		0.0013	U	0.00055	0.0013
Bromomethane		0.0013	U	0.00062	0.0013
Carbon disulfide		0.0013	U	0.00035	0.0013
Carbon tetrachloride		0.0013	U	0.00024	0.0013
Chlorobenzene		0.0013	U	0.00023	0.0013
Chlorobromomethane		0.0013	U	0.00036	0.0013
Chlorodibromomethane		0.0013	U	0.00025	0.0013
Chloroethane		0.0013	U	0.00068	0.0013
Chloroform		0.0013	U	0.00041	0.0013
Chloromethane		0.0013	U	0.00057	0.0013
cis-1,2-Dichloroethene		0.0013	U	0.00020	0.0013
cis-1,3-Dichloropropene		0.0013	U	0.00035	0.0013
Cyclohexane		0.0013	U	0.00029	0.0013
Dichlorobromomethane		0.0013	U	0.00033	0.0013
Dichlorodifluoromethane		0.0013	U	0.00044	0.0013
Ethylbenzene		0.0013	U	0.00026	0.0013
Ethylene Dibromide		0.0013	U	0.00023	0.0013
Isopropylbenzene		0.0013	U	0.00016	0.0013
Methyl acetate		0.0065	U	0.0056	0.0065
Methyl tert-butyl ether		0.0013	U	0.00016	0.0013
Methylcyclohexane		0.00028	J B	0.00021	0.0013
Methylene Chloride		0.00024	J	0.00021	0.0013
m-Xylene & p-Xylene		0.00059	J B	0.00023	0.0013

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-GA1(8-10)

Lab Sample ID: 460-144928-8 Date Sampled: 11/11/2017 1300
Client Matrix: Solid % Moisture: 27.5 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44320.D
Dilution:	1.0			Initial Weight/Volume:	5.31 g
Analysis Date:	11/16/2017 1322			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1658				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0013	U	0.00025	0.0013
n-Butylbenzene		0.0013	U	0.00018	0.0013
N-Propylbenzene		0.0013	U	0.00023	0.0013
o-Xylene		0.00017	J B	0.00012	0.0013
sec-Butylbenzene		0.0013	U	0.00011	0.0013
Styrene		0.0013	U	0.00016	0.0013
tert-Butylbenzene		0.0013	U	0.00016	0.0013
Tetrachloroethene		0.0013	U	0.00019	0.0013
Toluene		0.00084	J B	0.00081	0.0013
trans-1,2-Dichloroethene		0.0013	U	0.00032	0.0013
trans-1,3-Dichloropropene		0.0013	U	0.00035	0.0013
Trichloroethene		0.00045	J B	0.00019	0.0013
Trichlorofluoromethane		0.0013	U	0.00053	0.0013
Vinyl chloride		0.0013	U	0.00071	0.0013
Xylenes, Total		0.00076	J B	0.00033	0.0026

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		78 - 135
4-Bromofluorobenzene	96		67 - 126
Dibromofluoromethane (Surr)	100		61 - 149
Toluene-d8 (Surr)	99		73 - 121

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8 | Date Sampled: 11/11/2017 1300
Client Matrix: Solid | % Moisture: 27.5 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44320.D
Dilution:	1.0			Initial Weight/Volume:	5.31 g
Analysis Date:	11/16/2017 1322			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1658				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9 Date Sampled: 11/11/2017 1330
Client Matrix: Solid % Moisture: 16.2 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44321.D
Dilution:	1.0			Initial Weight/Volume:	5.46 g
Analysis Date:	11/16/2017 1347			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1658				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00043	J B	0.00033	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00023	0.0011
1,1-Dichloroethene		0.0011	U	0.00025	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00050	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00032	0.0011
1,2-Dichloropropane		0.0011	U	0.00046	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0055	U	0.0012	0.0055
2-Hexanone		0.0055	U	0.00085	0.0055
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0055	U	0.00073	0.0055
Acetone		0.0055	U	0.0041	0.0055
Benzene		0.0011	U	0.00028	0.0011
Bromoform		0.0011	U	0.00046	0.0011
Bromomethane		0.0011	U	0.00052	0.0011
Carbon disulfide		0.0011	U	0.00029	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00031	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00057	0.0011
Chloroform		0.0011	U	0.00035	0.0011
Chloromethane		0.0011	U	0.00048	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Cyclohexane		0.0011	U	0.00024	0.0011
Dichlorobromomethane		0.0011	U	0.00028	0.0011
Dichlorodifluoromethane		0.0011	U	0.00037	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0055	U	0.0047	0.0055
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.00023	J B	0.00017	0.0011
Methylene Chloride		0.00022	J	0.00018	0.0011
m-Xylene & p-Xylene		0.00047	J B	0.00019	0.0011

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9 Date Sampled: 11/11/2017 1330
Client Matrix: Solid % Moisture: 16.2 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44321.D
Dilution:	1.0			Initial Weight/Volume:	5.46 g
Analysis Date:	11/16/2017 1347			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1658				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.00015	J B	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000096	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.00081	J B	0.00068	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00027	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Trichloroethene		0.00051	J B	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00044	0.0011
Vinyl chloride		0.0011	U	0.00060	0.0011
Xylenes, Total		0.00062	J B	0.00028	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	119		78 - 135
4-Bromofluorobenzene	111		67 - 126
Dibromofluoromethane (Surr)	118		61 - 149
Toluene-d8 (Surr)	115		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(0-2)**

Lab Sample ID: 460-144928-9
Client Matrix: Solid
% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44321.D
Dilution:	1.0			Initial Weight/Volume:	5.46 g
Analysis Date:	11/16/2017 1347			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1658				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10 | Date Sampled: 11/11/2017 1335
Client Matrix: Solid | % Moisture: 23.6 | Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44322.D
Dilution:	1.0			Initial Weight/Volume:	5.29 g
Analysis Date:	11/16/2017 1411			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1659				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0012	U	0.00029	0.0012
1,1,2,2-Tetrachloroethane		0.0012	U	0.00026	0.0012
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0012	U	0.00037	0.0012
1,1,2-Trichloroethane		0.0012	U	0.00022	0.0012
1,1-Dichloroethane		0.0012	U	0.00025	0.0012
1,1-Dichloroethene		0.0012	U	0.00028	0.0012
1,2,3-Trichlorobenzene		0.0012	U	0.00022	0.0012
1,2,4-Trichlorobenzene		0.0012	U	0.00011	0.0012
1,2,4-Trimethylbenzene		0.0012	U	0.00012	0.0012
1,2-Dibromo-3-Chloropropane		0.0012	U	0.00057	0.0012
1,2-Dichlorobenzene		0.0012	U	0.00018	0.0012
1,2-Dichloroethane		0.0012	U	0.00037	0.0012
1,2-Dichloropropane		0.0012	U	0.00052	0.0012
1,3,5-Trimethylbenzene		0.0012	U	0.00014	0.0012
1,3-Dichlorobenzene		0.0012	U	0.00020	0.0012
1,4-Dichlorobenzene		0.0012	U	0.00012	0.0012
1,4-Dioxane		0.025	U	0.011	0.025
2-Butanone (MEK)		0.0062	U	0.0014	0.0062
2-Hexanone		0.0062	U	0.00096	0.0062
4-Isopropyltoluene		0.0012	U	0.00012	0.0012
4-Methyl-2-pentanone (MIBK)		0.0062	U	0.00082	0.0062
Acetone		0.0062	U	0.0047	0.0062
Benzene		0.0012	U	0.00032	0.0012
Bromoform		0.0012	U	0.00053	0.0012
Bromomethane		0.0012	U	0.00059	0.0012
Carbon disulfide		0.0012	U	0.00033	0.0012
Carbon tetrachloride		0.0012	U	0.00022	0.0012
Chlorobenzene		0.0012	U	0.00022	0.0012
Chlorobromomethane		0.0012	U	0.00035	0.0012
Chlorodibromomethane		0.0012	U	0.00024	0.0012
Chloroethane		0.0012	U	0.00065	0.0012
Chloroform		0.0012	U	0.00039	0.0012
Chloromethane		0.0012	U	0.00054	0.0012
cis-1,2-Dichloroethene		0.0012	U	0.00019	0.0012
cis-1,3-Dichloropropene		0.0012	U	0.00034	0.0012
Cyclohexane		0.0012	U	0.00027	0.0012
Dichlorobromomethane		0.0012	U	0.00032	0.0012
Dichlorodifluoromethane		0.0012	U	0.00042	0.0012
Ethylbenzene		0.00025	J B	0.00025	0.0012
Ethylene Dibromide		0.0012	U	0.00022	0.0012
Isopropylbenzene		0.0012	U	0.00016	0.0012
Methyl acetate		0.0062	U	0.0053	0.0062
Methyl tert-butyl ether		0.0012	U	0.00015	0.0012
Methylcyclohexane		0.00027	J B	0.00020	0.0012
Methylene Chloride		0.0012	U	0.00020	0.0012
m-Xylene & p-Xylene		0.00069	J B	0.00022	0.0012

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-GA2(13-15)

Lab Sample ID: 460-144928-10 Date Sampled: 11/11/2017 1335
Client Matrix: Solid % Moisture: 23.6 Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44322.D
Dilution:	1.0			Initial Weight/Volume:	5.29 g
Analysis Date:	11/16/2017 1411			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1659				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0012	U	0.00023	0.0012
n-Butylbenzene		0.0012	U	0.00018	0.0012
N-Propylbenzene		0.0012	U	0.00022	0.0012
o-Xylene		0.00021	J B	0.00012	0.0012
sec-Butylbenzene		0.0012	U	0.00011	0.0012
Styrene		0.0012	U	0.00015	0.0012
tert-Butylbenzene		0.0012	U	0.00015	0.0012
Tetrachloroethene		0.0012	U	0.00018	0.0012
Toluene		0.00088	J B	0.00077	0.0012
trans-1,2-Dichloroethene		0.0012	U	0.00030	0.0012
trans-1,3-Dichloropropene		0.0012	U	0.00033	0.0012
Trichloroethene		0.00051	J B	0.00018	0.0012
Trichlorofluoromethane		0.0012	U	0.00050	0.0012
Vinyl chloride		0.0012	U	0.00068	0.0012
Xylenes, Total		0.00090	J B	0.00031	0.0025

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		78 - 135
4-Bromofluorobenzene	103		67 - 126
Dibromofluoromethane (Surr)	104		61 - 149
Toluene-d8 (Surr)	105		73 - 121

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Prep Method:	5035	Prep Batch:	460-476400	Lab File ID:	D44322.D
Dilution:	1.0			Initial Weight/Volume:	5.29 g
Analysis Date:	11/16/2017 1411			Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1659				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7 Date Sampled: 11/11/2017 1255
Client Matrix: Solid % Moisture: 10.7 Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38203.D
Dilution:	1.0			Initial Weight/Volume:	15.0108 g
Analysis Date:	11/13/2017 2356			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.032	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.028	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0087	0.15
2,4-Dimethylphenol		0.37	U	0.081	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.075	U	0.015	0.075
2,6-Dinitrotoluene		0.075	U	0.020	0.075
2-Chloronaphthalene		0.37	U	0.0084	0.37
2-Chlorophenol		0.37	U	0.0094	0.37
2-Methylnaphthalene		0.37	U	0.0082	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.012	0.37
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.099	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0095	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.75	U	0.18	0.75
Acenaphthene		0.37	U	0.0090	0.37
Acenaphthylene		0.37	U	0.0095	0.37
Acetophenone		0.37	U	0.0081	0.37
Anthracene		0.37	U	0.035	0.37
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		0.037	U	0.031	0.037
Benzo[a]pyrene		0.037	U	0.011	0.037
Benzo[b]fluoranthene		0.037	U	0.014	0.037
Benzo[g,h,i]perylene		0.37	U	0.021	0.37
Benzo[k]fluoranthene		0.037	U	0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.012	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0087	0.037
Bis(2-ethylhexyl) phthalate		0.37	U	0.014	0.37
Butyl benzyl phthalate		0.37	U	0.011	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.37	U	0.0092	0.37
Chrysene		0.37	U	0.010	0.37
Dibenz(a,h)anthracene		0.037	U	0.019	0.037

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7 | Date Sampled: 11/11/2017 1255
Client Matrix: Solid | % Moisture: 10.7 | Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38203.D
Dilution:	1.0			Initial Weight/Volume:	15.0108 g
Analysis Date:	11/13/2017 2356			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.37	U	0.011	0.37
Diethyl phthalate		0.37	U	0.011	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.019	J	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.37	U	0.011	0.37
Fluorene		0.37	U	0.0081	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.075	U	0.010	0.075
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.014	0.037
Indeno[1,2,3-cd]pyrene		0.037	U	0.025	0.037
Isophorone		0.15	U	0.0079	0.15
Naphthalene		0.37	U	0.0094	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.012	0.037
N-Nitrosodiphenylamine		0.37	U	0.034	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		0.37	U	0.0098	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.37	U *	0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	50		10 - 103
2-Fluorobiphenyl	80		38 - 95
2-Fluorophenol (Surr)	61		25 - 92
Nitrobenzene-d5 (Surr)	68		37 - 94
Phenol-d5 (Surr)	57		32 - 91
Terphenyl-d14 (Surr)	62		24 - 109

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(0-2)**

Lab Sample ID: 460-144928-7
Client Matrix: Solid
% Moisture: 10.7

Date Sampled: 11/11/2017 1255
Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38203.D
Dilution:	1.0			Initial Weight/Volume:	15.0108 g
Analysis Date:	11/13/2017 2356			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-GA1(8-10)

Lab Sample ID: 460-144928-8 Date Sampled: 11/11/2017 1300
Client Matrix: Solid % Moisture: 27.5 Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38206.D
Dilution:	1.0			Initial Weight/Volume:	15.0144 g
Analysis Date:	11/14/2017 0102			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.45	U	0.039	0.45
1,2,4,5-Tetrachlorobenzene		0.45	U	0.034	0.45
2,2'-oxybis[1-chloropropane]		0.45	U	0.019	0.45
2,3,4,6-Tetrachlorophenol		0.45	U	0.043	0.45
2,4,5-Trichlorophenol		0.45	U	0.045	0.45
2,4,6-Trichlorophenol		0.18	U	0.013	0.18
2,4-Dichlorophenol		0.18	U	0.011	0.18
2,4-Dimethylphenol		0.45	U	0.10	0.45
2,4-Dinitrophenol		0.37	U	0.34	0.37
2,4-Dinitrotoluene		0.092	U	0.018	0.092
2,6-Dinitrotoluene		0.092	U	0.024	0.092
2-Chloronaphthalene		0.45	U	0.010	0.45
2-Chlorophenol		0.45	U	0.012	0.45
2-Methylnaphthalene		0.45	U	0.010	0.45
2-Methylphenol		0.45	U	0.020	0.45
2-Nitroaniline		0.45	U	0.015	0.45
2-Nitrophenol		0.45	U	0.015	0.45
3,3'-Dichlorobenzidine		0.18	U	0.051	0.18
3-Nitroaniline		0.45	U	0.014	0.45
4,6-Dinitro-2-methylphenol		0.37	U	0.12	0.37
4-Bromophenyl phenyl ether		0.45	U	0.014	0.45
4-Chloro-3-methylphenol		0.45	U	0.020	0.45
4-Chloroaniline		0.45	U	0.012	0.45
4-Chlorophenyl phenyl ether		0.45	U	0.014	0.45
4-Methylphenol		0.45	U	0.012	0.45
4-Nitroaniline		0.45	U	0.017	0.45
4-Nitrophenol		0.92	U	0.22	0.92
Acenaphthene		0.45	U	0.011	0.45
Acenaphthylene		0.45	U	0.012	0.45
Acetophenone		0.45	U	0.0099	0.45
Anthracene		0.45	U	0.043	0.45
Atrazine		0.18	U	0.020	0.18
Benzaldehyde		0.45	U	0.035	0.45
Benzo[a]anthracene		0.045	U	0.038	0.045
Benzo[a]pyrene		0.045	U	0.014	0.045
Benzo[b]fluoranthene		0.045	U	0.018	0.045
Benzo[g,h,i]perylene		0.45	U	0.026	0.45
Benzo[k]fluoranthene		0.045	U	0.020	0.045
Bis(2-chloroethoxy)methane		0.45	U	0.014	0.45
Bis(2-chloroethyl)ether		0.045	U	0.011	0.045
Bis(2-ethylhexyl) phthalate		0.45	U	0.018	0.45
Butyl benzyl phthalate		0.45	U	0.014	0.45
Caprolactam		0.45	U	0.033	0.45
Carbazole		0.45	U	0.011	0.45
Chrysene		0.016	J	0.012	0.45
Dibenz(a,h)anthracene		0.045	U	0.024	0.045

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: SB-GA1(8-10)

Lab Sample ID: 460-144928-8 | Date Sampled: 11/11/2017 1300
Client Matrix: Solid | % Moisture: 27.5 | Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38206.D
Dilution:	1.0			Initial Weight/Volume:	15.0144 g
Analysis Date:	11/14/2017 0102			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.45	U	0.014	0.45
Diethyl phthalate		0.45	U	0.013	0.45
Dimethyl phthalate		0.45	U	0.013	0.45
Di-n-butyl phthalate		0.45	U	0.014	0.45
Di-n-octyl phthalate		0.45	U	0.023	0.45
Fluoranthene		0.028	J	0.014	0.45
Fluorene		0.45	U	0.0099	0.45
Hexachlorobenzene		0.045	U	0.018	0.045
Hexachlorobutadiene		0.092	U	0.013	0.092
Hexachlorocyclopentadiene		0.45	U	0.028	0.45
Hexachloroethane		0.045	U	0.017	0.045
Indeno[1,2,3-cd]pyrene		0.045	U	0.030	0.045
Isophorone		0.18	U	0.0098	0.18
Naphthalene		0.45	U	0.012	0.45
Nitrobenzene		0.045	U	0.014	0.045
N-Nitrosodi-n-propylamine		0.045	U	0.015	0.045
N-Nitrosodiphenylamine		0.45	U	0.041	0.45
Pentachlorophenol		0.37	U	0.055	0.37
Phenanthrene		0.020	J	0.012	0.45
Phenol		0.45	U	0.015	0.45
Pyrene		0.021	J *	0.021	0.45

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	64		10 - 103
2-Fluorobiphenyl	86		38 - 95
2-Fluorophenol (Surr)	72		25 - 92
Nitrobenzene-d5 (Surr)	80		37 - 94
Phenol-d5 (Surr)	68		32 - 91
Terphenyl-d14 (Surr)	74		24 - 109

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-GA1(8-10)

Lab Sample ID: 460-144928-8 Date Sampled: 11/11/2017 1300
Client Matrix: Solid % Moisture: 27.5 Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38206.D
Dilution:	1.0			Initial Weight/Volume:	15.0144 g
Analysis Date:	11/14/2017 0102			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-GA2(0-2)**

Lab Sample ID: 460-144928-9 | Date Sampled: 11/11/2017 1330
Client Matrix: Solid | % Moisture: 16.2 | Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38204.D
Dilution:	1.0			Initial Weight/Volume:	15.0102 g
Analysis Date:	11/14/2017 0018			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.39	U	0.034	0.39
1,2,4,5-Tetrachlorobenzene		0.39	U	0.029	0.39
2,2'-oxybis[1-chloropropane]		0.39	U	0.016	0.39
2,3,4,6-Tetrachlorophenol		0.39	U	0.037	0.39
2,4,5-Trichlorophenol		0.39	U	0.039	0.39
2,4,6-Trichlorophenol		0.16	U	0.011	0.16
2,4-Dichlorophenol		0.16	U	0.0093	0.16
2,4-Dimethylphenol		0.39	U	0.087	0.39
2,4-Dinitrophenol		0.32	U	0.30	0.32
2,4-Dinitrotoluene		0.080	U	0.016	0.080
2,6-Dinitrotoluene		0.080	U	0.021	0.080
2-Chloronaphthalene		0.39	U	0.0089	0.39
2-Chlorophenol		0.39	U	0.010	0.39
2-Methylnaphthalene		0.39	U	0.0087	0.39
2-Methylphenol		0.39	U	0.017	0.39
2-Nitroaniline		0.39	U	0.013	0.39
2-Nitrophenol		0.39	U	0.013	0.39
3,3'-Dichlorobenzidine		0.16	U	0.044	0.16
3-Nitroaniline		0.39	U	0.012	0.39
4,6-Dinitro-2-methylphenol		0.32	U	0.11	0.32
4-Bromophenyl phenyl ether		0.39	U	0.012	0.39
4-Chloro-3-methylphenol		0.39	U	0.017	0.39
4-Chloroaniline		0.39	U	0.010	0.39
4-Chlorophenyl phenyl ether		0.39	U	0.012	0.39
4-Methylphenol		0.39	U	0.011	0.39
4-Nitroaniline		0.39	U	0.015	0.39
4-Nitrophenol		0.80	U	0.19	0.80
Acenaphthene		0.39	U	0.0095	0.39
Acenaphthylene		0.39	U	0.010	0.39
Acetophenone		0.39	U	0.0086	0.39
Anthracene		0.39	U	0.037	0.39
Atrazine		0.16	U	0.018	0.16
Benzaldehyde		0.39	U	0.030	0.39
Benzo[a]anthracene		0.039	U	0.033	0.039
Benzo[a]pyrene		0.039	U	0.012	0.039
Benzo[b]fluoranthene		0.039	U	0.015	0.039
Benzo[g,h,i]perylene		0.39	U	0.023	0.39
Benzo[k]fluoranthene		0.039	U	0.017	0.039
Bis(2-chloroethoxy)methane		0.39	U	0.012	0.39
Bis(2-chloroethyl)ether		0.039	U	0.0093	0.039
Bis(2-ethylhexyl) phthalate		0.39	U	0.015	0.39
Butyl benzyl phthalate		0.39	U	0.012	0.39
Caprolactam		0.39	U	0.028	0.39
Carbazole		0.39	U	0.0098	0.39
Chrysene		0.39	U	0.011	0.39
Dibenz(a,h)anthracene		0.039	U	0.021	0.039

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9 | Date Sampled: 11/11/2017 1330
Client Matrix: Solid | % Moisture: 16.2 | Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38204.D
Dilution:	1.0			Initial Weight/Volume:	15.0102 g
Analysis Date:	11/14/2017 0018			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.39	U	0.012	0.39
Diethyl phthalate		0.39	U	0.011	0.39
Dimethyl phthalate		0.39	U	0.011	0.39
Di-n-butyl phthalate		0.39	U	0.012	0.39
Di-n-octyl phthalate		0.39	U	0.020	0.39
Fluoranthene		0.39	U	0.012	0.39
Fluorene		0.39	U	0.0086	0.39
Hexachlorobenzene		0.039	U	0.016	0.039
Hexachlorobutadiene		0.080	U	0.011	0.080
Hexachlorocyclopentadiene		0.39	U	0.025	0.39
Hexachloroethane		0.039	U	0.014	0.039
Indeno[1,2,3-cd]pyrene		0.039	U	0.026	0.039
Isophorone		0.16	U	0.0085	0.16
Naphthalene		0.39	U	0.010	0.39
Nitrobenzene		0.039	U	0.012	0.039
N-Nitrosodi-n-propylamine		0.039	U	0.013	0.039
N-Nitrosodiphenylamine		0.39	U	0.036	0.39
Pentachlorophenol		0.32	U	0.048	0.32
Phenanthrene		0.39	U	0.010	0.39
Phenol		0.39	U	0.013	0.39
Pyrene		0.39	U *	0.018	0.39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	31		10 - 103
2-Fluorobiphenyl	81		38 - 95
2-Fluorophenol (Surr)	57		25 - 92
Nitrobenzene-d5 (Surr)	74		37 - 94
Phenol-d5 (Surr)	59		32 - 91
Terphenyl-d14 (Surr)	67		24 - 109

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9
Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38204.D
Dilution:	1.0			Initial Weight/Volume:	15.0102 g
Analysis Date:	11/14/2017 0018			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	5.81	1.8	J
	Unknown	6.14	0.48	J

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10 Date Sampled: 11/11/2017 1335
Client Matrix: Solid % Moisture: 23.6 Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38205.D
Dilution:	1.0			Initial Weight/Volume:	15.0187 g
Analysis Date:	11/14/2017 0040			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.43	U	0.037	0.43
1,2,4,5-Tetrachlorobenzene		0.43	U	0.032	0.43
2,2'-oxybis[1-chloropropane]		0.43	U	0.018	0.43
2,3,4,6-Tetrachlorophenol		0.43	U	0.041	0.43
2,4,5-Trichlorophenol		0.43	U	0.043	0.43
2,4,6-Trichlorophenol		0.17	U	0.012	0.17
2,4-Dichlorophenol		0.17	U	0.010	0.17
2,4-Dimethylphenol		0.43	U	0.095	0.43
2,4-Dinitrophenol		0.35	U	0.33	0.35
2,4-Dinitrotoluene		0.088	U	0.017	0.088
2,6-Dinitrotoluene		0.088	U	0.023	0.088
2-Chloronaphthalene		0.43	U	0.0098	0.43
2-Chlorophenol		0.43	U	0.011	0.43
2-Methylnaphthalene		0.43	U	0.0095	0.43
2-Methylphenol		0.43	U	0.019	0.43
2-Nitroaniline		0.43	U	0.014	0.43
2-Nitrophenol		0.43	U	0.015	0.43
3,3'-Dichlorobenzidine		0.17	U	0.048	0.17
3-Nitroaniline		0.43	U	0.013	0.43
4,6-Dinitro-2-methylphenol		0.35	U	0.12	0.35
4-Bromophenyl phenyl ether		0.43	U	0.014	0.43
4-Chloro-3-methylphenol		0.43	U	0.019	0.43
4-Chloroaniline		0.43	U	0.011	0.43
4-Chlorophenyl phenyl ether		0.43	U	0.013	0.43
4-Methylphenol		0.43	U	0.012	0.43
4-Nitroaniline		0.43	U	0.016	0.43
4-Nitrophenol		0.88	U	0.21	0.88
Acenaphthene		0.43	U	0.010	0.43
Acenaphthylene		0.43	U	0.011	0.43
Acetophenone		0.43	U	0.0094	0.43
Anthracene		0.43	U	0.041	0.43
Atrazine		0.17	U	0.019	0.17
Benzaldehyde		0.43	U	0.033	0.43
Benzo[a]anthracene		0.043	U	0.036	0.043
Benzo[a]pyrene		0.043	U	0.013	0.043
Benzo[b]fluoranthene		0.043	U	0.017	0.043
Benzo[g,h,i]perylene		0.43	U	0.025	0.43
Benzo[k]fluoranthene		0.043	U	0.019	0.043
Bis(2-chloroethoxy)methane		0.43	U	0.013	0.43
Bis(2-chloroethyl)ether		0.043	U	0.010	0.043
Bis(2-ethylhexyl) phthalate		0.43	U	0.017	0.43
Butyl benzyl phthalate		0.43	U	0.013	0.43
Caprolactam		0.43	U	0.031	0.43
Carbazole		0.43	U	0.011	0.43
Chrysene		0.43	U	0.012	0.43
Dibenz(a,h)anthracene		0.043	U	0.022	0.043

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-GA2(13-15)

Lab Sample ID: 460-144928-10 Date Sampled: 11/11/2017 1335
Client Matrix: Solid % Moisture: 23.6 Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38205.D
Dilution:	1.0			Initial Weight/Volume:	15.0187 g
Analysis Date:	11/14/2017 0040			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.43	U	0.013	0.43
Diethyl phthalate		0.43	U	0.012	0.43
Dimethyl phthalate		0.43	U	0.013	0.43
Di-n-butyl phthalate		0.43	U	0.013	0.43
Di-n-octyl phthalate		0.43	U	0.022	0.43
Fluoranthene		0.43	U	0.013	0.43
Fluorene		0.43	U	0.0094	0.43
Hexachlorobenzene		0.043	U	0.018	0.043
Hexachlorobutadiene		0.088	U	0.012	0.088
Hexachlorocyclopentadiene		0.43	U	0.027	0.43
Hexachloroethane		0.043	U	0.016	0.043
Indeno[1,2,3-cd]pyrene		0.043	U	0.029	0.043
Isophorone		0.17	U	0.0093	0.17
Naphthalene		0.43	U	0.011	0.43
Nitrobenzene		0.043	U	0.014	0.043
N-Nitrosodi-n-propylamine		0.043	U	0.015	0.043
N-Nitrosodiphenylamine		0.43	U	0.039	0.43
Pentachlorophenol		0.35	U	0.052	0.35
Phenanthrene		0.43	U	0.011	0.43
Phenol		0.43	U	0.014	0.43
Pyrene		0.43	U *	0.020	0.43

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	49		10 - 103
2-Fluorobiphenyl	80		38 - 95
2-Fluorophenol (Surr)	63		25 - 92
Nitrobenzene-d5 (Surr)	72		37 - 94
Phenol-d5 (Surr)	58		32 - 91
Terphenyl-d14 (Surr)	66		24 - 109

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Prep Method:	3546	Prep Batch:	460-476733	Lab File ID:	f38205.D
Dilution:	1.0			Initial Weight/Volume:	15.0187 g
Analysis Date:	11/14/2017 0040			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-144928-1

Client Sample ID: **SB-GA1(0-2)**

Lab Sample ID: 460-144928-7 | Date Sampled: 11/11/2017 1255
Client Matrix: Solid | % Moisture: 10.7 | Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1034			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0075	U	0.0013	0.0075
4,4'-DDE		0.0075	U	0.00088	0.0075
4,4'-DDT		0.0075	U	0.0014	0.0075
Aldrin		0.0075	U	0.0011	0.0075
alpha-BHC		0.0022	U	0.00076	0.0022
beta-BHC		0.0022	U	0.00084	0.0022
Chlordane (technical)		0.075	U	0.018	0.075
delta-BHC		0.0022	U	0.00046	0.0022
Dieldrin		0.0022	U	0.00097	0.0022
Endosulfan I		0.0075	U	0.0011	0.0075
Endosulfan II		0.0075	U	0.0019	0.0075
Endosulfan sulfate		0.0075	U	0.00094	0.0075
Endrin		0.0075	U	0.0011	0.0075
Endrin aldehyde		0.0075	U	0.0018	0.0075
Endrin ketone		0.0075	U	0.0015	0.0075
gamma-BHC (Lindane)		0.0022	U	0.00069	0.0022
Heptachlor		0.0075	U	0.00088	0.0075
Heptachlor epoxide		0.0075	U	0.0011	0.0075
Methoxychlor		0.0075	U	0.0017	0.0075
Toxaphene		0.075	U	0.027	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	100		50 - 150
Tetrachloro-m-xylene	111		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7
Client Matrix: Solid
% Moisture: 10.7

Date Sampled: 11/11/2017 1255
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1034			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	99		50 - 150
Tetrachloro-m-xylene	104		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8
Client Matrix: Solid
% Moisture: 27.5

Date Sampled: 11/11/2017 1300
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1046			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0092	U	0.0016	0.0092
4,4'-DDE		0.0092	U	0.0011	0.0092
4,4'-DDT		0.0092	U	0.0017	0.0092
Aldrin		0.0092	U	0.0014	0.0092
alpha-BHC		0.0028	U	0.00094	0.0028
beta-BHC		0.0028	U	0.0010	0.0028
Chlordane (technical)		0.092	U	0.022	0.092
delta-BHC		0.0028	U	0.00057	0.0028
Dieldrin		0.0028	U	0.0012	0.0028
Endosulfan I		0.0092	U	0.0014	0.0092
Endosulfan II		0.0092	U	0.0024	0.0092
Endosulfan sulfate		0.0092	U	0.0012	0.0092
Endrin		0.0092	U	0.0013	0.0092
Endrin aldehyde		0.0092	U	0.0022	0.0092
Endrin ketone		0.0092	U	0.0018	0.0092
gamma-BHC (Lindane)		0.0028	U	0.00086	0.0028
Heptachlor		0.0092	U	0.0011	0.0092
Heptachlor epoxide		0.0092	U	0.0014	0.0092
Methoxychlor		0.0092	U	0.0021	0.0092
Toxaphene		0.092	U	0.033	0.092

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8
Client Matrix: Solid
% Moisture: 27.5

Date Sampled: 11/11/2017 1300
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1046			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(0-2)**

Lab Sample ID: 460-144928-9
Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0144 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1059			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0080	U	0.0014	0.0080
4,4'-DDE		0.0080	U	0.00094	0.0080
4,4'-DDT		0.0080	U	0.0015	0.0080
Aldrin		0.0080	U	0.0012	0.0080
alpha-BHC		0.0024	U	0.00081	0.0024
beta-BHC		0.0024	U	0.00089	0.0024
Chlordane (technical)		0.080	U	0.019	0.080
delta-BHC		0.0024	U	0.00049	0.0024
Dieldrin		0.0024	U	0.0010	0.0024
Endosulfan I		0.0080	U	0.0012	0.0080
Endosulfan II		0.0080	U	0.0020	0.0080
Endosulfan sulfate		0.0080	U	0.0010	0.0080
Endrin		0.0080	U	0.0011	0.0080
Endrin aldehyde		0.0080	U	0.0019	0.0080
Endrin ketone		0.0080	U	0.0015	0.0080
gamma-BHC (Lindane)		0.0024	U	0.00074	0.0024
Heptachlor		0.0080	U	0.00094	0.0080
Heptachlor epoxide		0.0080	U	0.0012	0.0080
Methoxychlor		0.0080	U	0.0018	0.0080
Toxaphene		0.080	U	0.029	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	91		50 - 150
Tetrachloro-m-xylene	96		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9
Client Matrix: Solid
% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0144 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1059			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	90		50 - 150
Tetrachloro-m-xylene	94		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0097 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1112			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0088	U	0.0015	0.0088
4,4'-DDE		0.0088	U	0.0010	0.0088
4,4'-DDT		0.0088	U	0.0016	0.0088
Aldrin		0.0088	U	0.0013	0.0088
alpha-BHC		0.0026	U	0.00089	0.0026
beta-BHC		0.0026	U	0.00098	0.0026
Chlordane (technical)		0.088	U	0.021	0.088
delta-BHC		0.0026	U	0.00054	0.0026
Dieldrin		0.0026	U	0.0011	0.0026
Endosulfan I		0.0088	U	0.0013	0.0088
Endosulfan II		0.0088	U	0.0022	0.0088
Endosulfan sulfate		0.0088	U	0.0011	0.0088
Endrin		0.0088	U	0.0013	0.0088
Endrin aldehyde		0.0088	U	0.0021	0.0088
Endrin ketone		0.0088	U	0.0017	0.0088
gamma-BHC (Lindane)		0.0026	U	0.00081	0.0026
Heptachlor		0.0088	U	0.0010	0.0088
Heptachlor epoxide		0.0088	U	0.0013	0.0088
Methoxychlor		0.0088	U	0.0020	0.0088
Toxaphene		0.088	U	0.032	0.088

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	104		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-476877	Initial Weight/Volume:	+15.0097 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/14/2017 1112			Injection Volume:	1 uL
Prep Date:	11/13/2017 2111			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	103		50 - 150
Tetrachloro-m-xylene	108		47 - 150

Client: AKRF Inc Job Number: 460-144928-1

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7 Date Sampled: 11/11/2017 1255
Client Matrix: Solid % Moisture: 10.7 Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0125			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.075	U	0.010	0.075
Aroclor 1221		0.075	U	0.010	0.075
Aroclor 1232		0.075	U	0.010	0.075
Aroclor 1242		0.075	U	0.010	0.075
Aroclor 1248		0.075	U	0.010	0.075
Aroclor 1254		0.075	U	0.010	0.075
Aroclor 1260		0.041	J	0.010	0.075
Aroclor 1268		0.075	U	0.010	0.075
Aroclor-1262		0.075	U	0.010	0.075
Polychlorinated biphenyls, Total		0.041	J	0.010	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	140		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7
Client Matrix: Solid
% Moisture: 10.7

Date Sampled: 11/11/2017 1255
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0125			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	129		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8
Client Matrix: Solid
% Moisture: 27.5

Date Sampled: 11/11/2017 1300
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0139			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.092	U	0.012	0.092
Aroclor 1221		0.092	U	0.012	0.092
Aroclor 1232		0.092	U	0.012	0.092
Aroclor 1242		0.092	U	0.012	0.092
Aroclor 1248		0.092	U	0.012	0.092
Aroclor 1254		0.092	U	0.013	0.092
Aroclor 1260		0.092	U	0.013	0.092
Aroclor 1268		0.092	U	0.013	0.092
Aroclor-1262		0.092	U	0.013	0.092
Polychlorinated biphenyls, Total		0.092	U	0.013	0.092

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	131		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8
Client Matrix: Solid
% Moisture: 27.5

Date Sampled: 11/11/2017 1300
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0139			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	127		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9
Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0144 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0154			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.080	U	0.011	0.080
Aroclor 1221		0.080	U	0.011	0.080
Aroclor 1232		0.080	U	0.011	0.080
Aroclor 1242		0.080	U	0.011	0.080
Aroclor 1248		0.080	U	0.011	0.080
Aroclor 1254		0.080	U	0.011	0.080
Aroclor 1260		0.080	U	0.011	0.080
Aroclor 1268		0.080	U	0.011	0.080
Aroclor-1262		0.080	U	0.011	0.080
Polychlorinated biphenyls, Total		0.080	U	0.011	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	135		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9
Client Matrix: Solid

% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0144 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0154			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	120		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0097 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0208			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.088	U	0.012	0.088
Aroclor 1221		0.088	U	0.012	0.088
Aroclor 1232		0.088	U	0.012	0.088
Aroclor 1242		0.088	U	0.012	0.088
Aroclor 1248		0.088	U	0.012	0.088
Aroclor 1254		0.088	U	0.012	0.088
Aroclor 1260		0.088	U	0.012	0.088
Aroclor 1268		0.088	U	0.012	0.088
Aroclor-1262		0.088	U	0.012	0.088
Polychlorinated biphenyls, Total		0.088	U	0.012	0.088

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	141		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: SB-GA2(13-15)

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-476881	Initial Weight/Volume:	+15.0097 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/15/2017 0208			Injection Volume:	1 uL
Prep Date:	11/13/2017 2126			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	130		35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(0-2)**

Lab Sample ID: 460-144928-7
Client Matrix: Solid
% Moisture: 10.7

Date Sampled: 11/11/2017 1255
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0427 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1540			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0087	0.019
2,4-D		0.019	U	0.0087	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	130		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(0-2)**

Lab Sample ID: 460-144928-7
Client Matrix: Solid
% Moisture: 10.7

Date Sampled: 11/11/2017 1255
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0427 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1540			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	123		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8
Client Matrix: Solid
% Moisture: 27.5

Date Sampled: 11/11/2017 1300
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0294 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1555			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.023	U	0.011	0.023
2,4-D		0.023	U	0.011	0.023
Silvex (2,4,5-TP)		0.023	U	0.016	0.023

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	126		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA1(8-10)**

Lab Sample ID: 460-144928-8
Client Matrix: Solid
% Moisture: 27.5

Date Sampled: 11/11/2017 1300
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0294 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1555			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(0-2)**

Lab Sample ID: 460-144928-9
Client Matrix: Solid
% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0319 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1609			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0093	0.020
2,4-D		0.020	U	0.0093	0.020
Silvex (2,4,5-TP)		0.020	U	0.014	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	125		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(0-2)**

Lab Sample ID: 460-144928-9
Client Matrix: Solid
% Moisture: 16.2

Date Sampled: 11/11/2017 1330
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0319 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1609			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	123		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0374 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1624			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.022	U	0.010	0.022
2,4-D		0.022	U	0.010	0.022
Silvex (2,4,5-TP)		0.022	U	0.015	0.022

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	124		80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Client Sample ID: **SB-GA2(13-15)**

Lab Sample ID: 460-144928-10
Client Matrix: Solid
% Moisture: 23.6

Date Sampled: 11/11/2017 1335
Date Received: 11/11/2017 1627

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-477161	Initial Weight/Volume:	30.0374 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	11/16/2017 1624			Injection Volume:	1 uL
Prep Date:	11/14/2017 2240			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	120		80 - 141

General Chemistry

Client Sample ID: SB-ES1(0-2)

Lab Sample ID: 460-144928-1 Date Sampled: 11/11/2017 1010
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	93.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-ES1(8-10)**

Lab Sample ID: 460-144928-2 Date Sampled: 11/11/2017 1015
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	95.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-ES2(0-2)**

Lab Sample ID: 460-144928-3 Date Sampled: 11/11/2017 1110
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	87.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-ES2(8-10)

Lab Sample ID: 460-144928-4 Date Sampled: 11/11/2017 1115
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	90.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-ES3(0-2)

Lab Sample ID: 460-144928-5 Date Sampled: 11/11/2017 1145
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	84.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-ES3(8-10)

Lab Sample ID: 460-144928-6 Date Sampled: 11/11/2017 1150
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	90.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-GA1(0-2)

Lab Sample ID: 460-144928-7 Date Sampled: 11/11/2017 1255
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	89.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-GA1(8-10)

Lab Sample ID: 460-144928-8 Date Sampled: 11/11/2017 1300
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	27.5		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	72.5		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-GA2(0-2)

Lab Sample ID: 460-144928-9 Date Sampled: 11/11/2017 1330
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	83.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-GA2(13-15)

Lab Sample ID: 460-144928-10 Date Sampled: 11/11/2017 1335
Client Matrix: Solid Date Received: 11/11/2017 1627

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	23.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N
Percent Solids	76.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-476774	Analysis Date: 11/13/2017 1534						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: AKRF Inc Job Number: 460-144928-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate is outside acceptance limits.
	B	The analyte was found in an associated blank, as well as in the sample.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	LCS or LCSD is outside acceptance limits.
	*	MS or MSD is outside acceptance limits.
	*	Surrogate is outside acceptance limits.
	A	The tentatively identified compound is a suspected aldol-condensation product.
GC Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	*	Surrogate is outside acceptance limits.
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

QUALITY CONTROL RESULTS

Client: AKRF Inc

Job Number: 460-144928-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-476400					
LB3 460-476400/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	5035	
460-144928-1	SB-ES1(0-2)	T	Solid	5035	
460-144928-2	SB-ES1(8-10)	T	Solid	5035	
460-144928-3	SB-ES2(0-2)	T	Solid	5035	
460-144928-4	SB-ES2(8-10)	T	Solid	5035	
460-144928-5	SB-ES3(0-2)	T	Solid	5035	
460-144928-6	SB-ES3(8-10)	T	Solid	5035	
460-144928-7	SB-GA1(0-2)	T	Solid	5035	
460-144928-8	SB-GA1(8-10)	T	Solid	5035	
460-144928-9	SB-GA2(0-2)	T	Solid	5035	
460-144928-10	SB-GA2(13-15)	T	Solid	5035	
Analysis Batch:460-477508					
LCS 460-477508/4	Lab Control Sample	T	Solid	8260C	
LCSD 460-477508/5	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-477508/8	Method Blank	T	Solid	8260C	
LB3 460-476400/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	8260C	460-476400
460-144928-1	SB-ES1(0-2)	T	Solid	8260C	460-476400
460-144928-2	SB-ES1(8-10)	T	Solid	8260C	460-476400
460-144928-3	SB-ES2(0-2)	T	Solid	8260C	460-476400
460-144928-4	SB-ES2(8-10)	T	Solid	8260C	460-476400
460-144928-5	SB-ES3(0-2)	T	Solid	8260C	460-476400
460-144928-6	SB-ES3(8-10)	T	Solid	8260C	460-476400
460-144928-7	SB-GA1(0-2)	T	Solid	8260C	460-476400
460-144928-8	SB-GA1(8-10)	T	Solid	8260C	460-476400
460-144928-9	SB-GA2(0-2)	T	Solid	8260C	460-476400
460-144928-10	SB-GA2(13-15)	T	Solid	8260C	460-476400

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-144928-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 460-476733					
LCS 460-476733/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-476733/3-A	Lab Control Sample	T	Solid	3546	
MB 460-476733/1-A	Method Blank	T	Solid	3546	
460-144918-B-2-A MS	Matrix Spike	T	Solid	3546	
460-144918-B-2-B MSD	Matrix Spike Duplicate	T	Solid	3546	
460-144928-7	SB-GA1(0-2)	T	Solid	3546	
460-144928-8	SB-GA1(8-10)	T	Solid	3546	
460-144928-9	SB-GA2(0-2)	T	Solid	3546	
460-144928-10	SB-GA2(13-15)	T	Solid	3546	
Analysis Batch:460-476821					
LCS 460-476733/2-A	Lab Control Sample	T	Solid	8270D	460-476733
LCS 460-476733/3-A	Lab Control Sample	T	Solid	8270D	460-476733
MB 460-476733/1-A	Method Blank	T	Solid	8270D	460-476733
460-144918-B-2-A MS	Matrix Spike	T	Solid	8270D	460-476733
460-144918-B-2-B MSD	Matrix Spike Duplicate	T	Solid	8270D	460-476733
460-144928-7	SB-GA1(0-2)	T	Solid	8270D	460-476733
460-144928-8	SB-GA1(8-10)	T	Solid	8270D	460-476733
460-144928-9	SB-GA2(0-2)	T	Solid	8270D	460-476733
460-144928-10	SB-GA2(13-15)	T	Solid	8270D	460-476733

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-144928-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:460-476657					
LCS 460-476877/2-A	Lab Control Sample	T	Solid	8081B	460-476877
MB 460-476877/1-A	Method Blank	T	Solid	8081B	460-476877
460-144928-7	SB-GA1(0-2)	T	Solid	8081B	460-476877
460-144928-8	SB-GA1(8-10)	T	Solid	8081B	460-476877
460-144928-9	SB-GA2(0-2)	T	Solid	8081B	460-476877
460-144928-10	SB-GA2(13-15)	T	Solid	8081B	460-476877
460-144947-A-6-D MS	Matrix Spike	T	Solid	8081B	460-476877
460-144947-A-6-E MSD	Matrix Spike Duplicate	T	Solid	8081B	460-476877
Prep Batch: 460-476877					
LCS 460-476877/2-A	Lab Control Sample	T	Solid	3546	
MB 460-476877/1-A	Method Blank	T	Solid	3546	
460-144928-7	SB-GA1(0-2)	T	Solid	3546	
460-144928-8	SB-GA1(8-10)	T	Solid	3546	
460-144928-9	SB-GA2(0-2)	T	Solid	3546	
460-144928-10	SB-GA2(13-15)	T	Solid	3546	
460-144947-A-6-D MS	Matrix Spike	T	Solid	3546	
460-144947-A-6-E MSD	Matrix Spike Duplicate	T	Solid	3546	
Prep Batch: 460-476881					
LCS 460-476881/2-A	Lab Control Sample	T	Solid	3546	
MB 460-476881/1-A	Method Blank	T	Solid	3546	
460-144918-A-2-D MS	Matrix Spike	T	Solid	3546	
460-144918-A-2-E MSD	Matrix Spike Duplicate	T	Solid	3546	
460-144928-7	SB-GA1(0-2)	T	Solid	3546	
460-144928-8	SB-GA1(8-10)	T	Solid	3546	
460-144928-9	SB-GA2(0-2)	T	Solid	3546	
460-144928-10	SB-GA2(13-15)	T	Solid	3546	
Analysis Batch:460-477109					
LCS 460-476881/2-A	Lab Control Sample	T	Solid	8082A	460-476881
MB 460-476881/1-A	Method Blank	T	Solid	8082A	460-476881
460-144918-A-2-D MS	Matrix Spike	T	Solid	8082A	460-476881
460-144918-A-2-E MSD	Matrix Spike Duplicate	T	Solid	8082A	460-476881
460-144928-7	SB-GA1(0-2)	T	Solid	8082A	460-476881
460-144928-8	SB-GA1(8-10)	T	Solid	8082A	460-476881
460-144928-9	SB-GA2(0-2)	T	Solid	8082A	460-476881
460-144928-10	SB-GA2(13-15)	T	Solid	8082A	460-476881

Client: AKRF Inc

Job Number: 460-144928-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-477161					
LCS 460-477161/2-A	Lab Control Sample	T	Solid	8151A	
MB 460-477161/1-A	Method Blank	T	Solid	8151A	
460-144741-A-1-B MS	Matrix Spike	T	Solid	8151A	
460-144741-A-1-C MSD	Matrix Spike Duplicate	T	Solid	8151A	
460-144928-7	SB-GA1(0-2)	T	Solid	8151A	
460-144928-8	SB-GA1(8-10)	T	Solid	8151A	
460-144928-9	SB-GA2(0-2)	T	Solid	8151A	
460-144928-10	SB-GA2(13-15)	T	Solid	8151A	
Analysis Batch:460-477700					
LCS 460-477161/2-A	Lab Control Sample	T	Solid	8151A	460-477161
MB 460-477161/1-A	Method Blank	T	Solid	8151A	460-477161
460-144741-A-1-B MS	Matrix Spike	T	Solid	8151A	460-477161
460-144741-A-1-C MSD	Matrix Spike Duplicate	T	Solid	8151A	460-477161
460-144928-7	SB-GA1(0-2)	T	Solid	8151A	460-477161
460-144928-8	SB-GA1(8-10)	T	Solid	8151A	460-477161
460-144928-9	SB-GA2(0-2)	T	Solid	8151A	460-477161
460-144928-10	SB-GA2(13-15)	T	Solid	8151A	460-477161

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-144928-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-476774					
460-144918-B-2 DU	Duplicate	T	Solid	Moisture	
460-144918-B-2 MS	Matrix Spike	T	Solid	Moisture	
460-144918-B-2 MSD	Matrix Spike Duplicate	T	Solid	Moisture	
460-144928-1	SB-ES1(0-2)	T	Solid	Moisture	
460-144928-2	SB-ES1(8-10)	T	Solid	Moisture	
460-144928-3	SB-ES2(0-2)	T	Solid	Moisture	
460-144928-4	SB-ES2(8-10)	T	Solid	Moisture	
460-144928-5	SB-ES3(0-2)	T	Solid	Moisture	
460-144928-6	SB-ES3(8-10)	T	Solid	Moisture	
460-144928-7	SB-GA1(0-2)	T	Solid	Moisture	
460-144928-8	SB-GA1(8-10)	T	Solid	Moisture	
460-144928-9	SB-GA2(0-2)	T	Solid	Moisture	
460-144928-10	SB-GA2(13-15)	T	Solid	Moisture	
Analysis Batch:460-476847					
460-144642-A-12 DU	Duplicate	T	Solid	Moisture	
460-144928-9	SB-GA2(0-2)	T	Solid	Moisture	

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-144928-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	DBFM %Rec	TOL %Rec
460-144928-1	SB-ES1(0-2)	130	120	127	124*
460-144928-2	SB-ES1(8-10)	107	98	105	100
460-144928-3	SB-ES2(0-2)	95	92	95	93
460-144928-4	SB-ES2(8-10)	108	102	106	103
460-144928-5	SB-ES3(0-2)	91	84	89	85
460-144928-6	SB-ES3(8-10)	109	104	108	106
460-144928-7	SB-GA1(0-2)	109	102	108	105
460-144928-8	SB-GA1(8-10)	99	96	100	99
460-144928-9	SB-GA2(0-2)	119	111	118	115
460-144928-10	SB-GA2(13-15)	104	103	104	105
MB 460-477508/8		100	101	104	106
LB3 460-476400/1-A		103	103	105	106
LCS 460-477508/4		98	93	104	96
LCSD 460-477508/5		99	97	106	98

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
BFB = 4-Bromofluorobenzene	67-126
DBFM = Dibromofluoromethane (Surr)	61-149
TOL = Toluene-d8 (Surr)	73-121

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPHL %Rec
460-144928-7	SB-GA1(0-2)	50	80	61	68	57	62
460-144928-8	SB-GA1(8-10)	64	86	72	80	68	74
460-144928-9	SB-GA2(0-2)	31	81	57	74	59	67
460-144928-10	SB-GA2(13-15)	49	80	63	72	58	66
MB 460-476733/1-A		75	90	89	90	87	111*
LCS 460-476733/2-A		80	99*	92	94	90	111*
LCS 460-476733/3-A		71	90	89	91	87	111*
460-144918-B-2-A MS		59	83	70	73	64	77
460-144918-B-2-B MSD		53	76	57	61	53	65

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol (Surr)	10-103
FBP = 2-Fluorobiphenyl	38-95
2FP = 2-Fluorophenol (Surr)	25-92
NBZ = Nitrobenzene-d5 (Surr)	37-94
PHL = Phenol-d5 (Surr)	32-91
TPHL = Terphenyl-d14 (Surr)	24-109

Surrogate Recovery Report

8081B Organochlorine Pesticides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec	TCX1 %Rec	TCX2 %Rec
460-144928-7	SB-GA1(0-2)	100	99	111	104
460-144928-8	SB-GA1(8-10)	106	106	114	110
460-144928-9	SB-GA2(0-2)	90	91	96	94
460-144928-10	SB-GA2(13-15)	103	104	110	108
MB 460-476877/1-A		95	100	109	107
LCS 460-476877/2-A		77	77	84	82
460-144947-A-6-D MS		81	82	3567* 8	84p
460-144947-A-6-E MSD		77	78	3480* 6	79p

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	50-150
TCX = Tetrachloro-m-xylene	47-150

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec
460-144928-7	SB-GA1(0-2)	129	140
460-144928-8	SB-GA1(8-10)	127	131
460-144928-9	SB-GA2(0-2)	120	135
460-144928-10	SB-GA2(13-15)	130	141
MB 460-476881/1-A		128	134
LCS 460-476881/2-A		109	131
460-144918-A-2-D MS		120	137
460-144918-A-2-E MSD		125	135

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	35-150

Surrogate Recovery Report

8151A Herbicides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCPAA1 %Rec	DCPAA2 %Rec
460-144928-7	SB-GA1(0-2)	123	130
460-144928-8	SB-GA1(8-10)	126	122
460-144928-9	SB-GA2(0-2)	125	123
460-144928-10	SB-GA2(13-15)	124	120
MB 460-477161/1-A		125	130
LCS 460-477161/2-A		143*	152*
460-144741-A-1-B MS		138	146*
460-144741-A-1-C MSD		138	147*

Surrogate	Acceptance Limits
DCPAA = 2,4-Dichlorophenylacetic acid	80-141

Neutral Leach or MeOH Extraction Blank - Batch: 460-476400

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-476400/1-A	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	460-476400	Lab File ID:	D44312.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	11/16/2017 1006	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1653				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.000408	J	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.000153	J	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.000211	J	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.000246	J	0.00016	0.0010
Methylene Chloride	0.0010	U	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-144928-1

Neutral Leach or MeOH Extraction Blank - Batch: 460-476400

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-476400/1-A	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	460-476400	Lab File ID:	D44312.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	11/16/2017 1006	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	11/11/2017 1653				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.000602	J	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.000187	J	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.000778	J	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.000471	J	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.000789	J	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	78 - 135
4-Bromofluorobenzene	103	67 - 126
Dibromofluoromethane (Surr)	105	61 - 149
Toluene-d8 (Surr)	106	73 - 121

Method Blank TICs- Batch: 460-476400

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Method Blank - Batch: 460-477508

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-477508/8	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	D44305.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/16/2017 0715	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.0010	U	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-144928-1

Method Blank - Batch: 460-477508

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-477508/8	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	D44305.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/16/2017 0715	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	78 - 135
4-Bromofluorobenzene	101	67 - 126
Dibromofluoromethane (Surr)	104	61 - 149
Toluene-d8 (Surr)	106	73 - 121

Method Blank TICs- Batch: 460-477508

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-477508

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-477508/4	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	D44301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/16/2017 0525	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-477508/5	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	D44302.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/16/2017 0550	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	106	95	80 - 125	11	30		
1,1,2,2-Tetrachloroethane	99	94	72 - 131	6	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	110	100	78 - 132	10	30		
1,1,2-Trichloroethane	97	91	76 - 124	6	30		
1,1-Dichloroethane	111	99	80 - 124	11	30		
1,1-Dichloroethene	107	97	79 - 132	10	30		
1,2,3-Trichlorobenzene	96	90	75 - 123	6	30		
1,2,4-Trichlorobenzene	97	90	74 - 124	7	30		
1,2,4-Trimethylbenzene	99	92	77 - 123	8	30		
1,2-Dibromo-3-Chloropropane	87	84	65 - 129	3	30		
1,2-Dichlorobenzene	96	89	80 - 121	7	30		
1,2-Dichloroethane	101	96	68 - 120	6	30		
1,2-Dichloropropane	109	99	77 - 124	10	30		
1,3,5-Trimethylbenzene	100	90	76 - 126	10	30		
1,3-Dichlorobenzene	98	90	79 - 124	8	30		
1,4-Dichlorobenzene	95	88	79 - 121	8	30		
1,4-Dioxane	91	89	67 - 150	2	30		
2-Butanone (MEK)	95	95	61 - 140	0	30		
2-Hexanone	92	91	78 - 120	1	30		
4-Isopropyltoluene	103	93	79 - 125	10	30		
4-Methyl-2-pentanone (MIBK)	93	93	80 - 120	1	30		
Acetone	96	97	75 - 120	1	30		
Benzene	100	91	75 - 127	10	30		
Bromoform	91	85	19 - 150	7	30		
Bromomethane	102	90	59 - 136	13	30		
Carbon disulfide	104	93	74 - 130	11	30		
Carbon tetrachloride	109	97	77 - 138	12	30		
Chlorobenzene	100	91	80 - 120	9	30		
Chlorobromomethane	107	100	80 - 125	7	30		
Chlorodibromomethane	95	88	67 - 143	8	30		
Chloroethane	104	89	50 - 139	15	30		
Chloroform	105	97	80 - 122	9	30		
Chloromethane	103	88	66 - 128	15	30		
cis-1,2-Dichloroethene	103	94	80 - 123	9	30		
cis-1,3-Dichloropropene	96	88	75 - 124	8	30		

Client: AKRF Inc

Job Number: 460-144928-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-477508

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-477508/4	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	D44301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/16/2017 0525	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-477508/5	Analysis Batch:	460-477508	Instrument ID:	CVOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	D44302.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	11/16/2017 0550	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	112	100	67 - 135	11	30		
Dichlorobromomethane	99	91	76 - 129	9	30		
Dichlorodifluoromethane	91	78	72 - 127	15	30		
Ethylbenzene	102	92	79 - 124	10	30		
Ethylene Dibromide	94	88	80 - 122	7	30		
Isopropylbenzene	104	94	80 - 125	10	30		
Methyl acetate	108	102	73 - 123	5	30		
Methyl tert-butyl ether	102	96	80 - 120	6	30		
Methylcyclohexane	114	102	71 - 137	11	30		
Methylene Chloride	104	97	79 - 128	7	30		
m-Xylene & p-Xylene	101	90	79 - 121	11	30		
Naphthalene	89	84	76 - 120	5	30		
n-Butylbenzene	103	94	75 - 131	10	30		
N-Propylbenzene	103	94	75 - 132	9	30		
o-Xylene	102	92	79 - 123	10	30		
sec-Butylbenzene	103	94	78 - 130	9	30		
Styrene	98	89	78 - 123	9	30		
tert-Butylbenzene	99	90	77 - 123	9	30		
Tetrachloroethene	101	90	73 - 130	11	30		
Toluene	93	84	75 - 122	10	30		
trans-1,2-Dichloroethene	106	96	80 - 129	11	30		
trans-1,3-Dichloropropene	89	85	72 - 121	4	30		
Trichloroethene	101	92	79 - 122	10	30		
Trichlorofluoromethane	95	83	68 - 136	14	30		
Vinyl chloride	113	96	70 - 134	17	30		
Xylenes, Total	101	91	79 - 122	10	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	99	78 - 135
4-Bromofluorobenzene	93	97	67 - 126
Dibromofluoromethane (Surr)	104	106	61 - 149
Toluene-d8 (Surr)	96	98	73 - 121

Method Blank - Batch: 460-476733

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-476733/1-A	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38193.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	11/13/2017 2017	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Client: AKRF Inc

Job Number: 460-144928-1

Method Blank - Batch: 460-476733

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-476733/1-A	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38193.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	11/13/2017 2017	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	75		10 - 103
2-Fluorobiphenyl	90		38 - 95
2-Fluorophenol (Surr)	89		25 - 92
Nitrobenzene-d5 (Surr)	90		37 - 94
Phenol-d5 (Surr)	87		32 - 91
Terphenyl-d14 (Surr)	111	*	24 - 109

Method Blank TICs- Batch: 460-476733

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Aldol condensation product	3.46	33.9	A J

Lab Control Sample - Batch: 460-476733

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-476733/2-A	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38194.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	11/13/2017 2039	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	3.49	105	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	3.65	109	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.66	80	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	2.82	85	60 - 114	
2,4,5-Trichlorophenol	3.33	3.13	94	60 - 106	
2,4,6-Trichlorophenol	3.33	3.35	100	62 - 110	
2,4-Dichlorophenol	3.33	3.16	95	61 - 103	
2,4-Dimethylphenol	3.33	3.17	95	63 - 101	
2,4-Dinitrophenol	6.67	5.39	81	56 - 122	
2,4-Dinitrotoluene	3.33	2.77	83	66 - 122	
2,6-Dinitrotoluene	3.33	3.09	93	70 - 114	
2-Chloronaphthalene	3.33	3.43	103	63 - 107	
2-Chlorophenol	3.33	3.15	94	62 - 97	
2-Methylnaphthalene	3.33	3.04	91	65 - 104	
2-Methylphenol	3.33	3.08	93	61 - 103	
2-Nitroaniline	3.33	3.00	90	57 - 114	
2-Nitrophenol	3.33	3.29	99	65 - 104	
3,3'-Dichlorobenzidine	3.33	2.63	79	18 - 88	
3-Nitroaniline	3.33	1.41	42	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	6.61	99	67 - 120	
4-Bromophenyl phenyl ether	3.33	3.73	112	59 - 122	
4-Chloro-3-methylphenol	3.33	2.80	84	62 - 111	
4-Chloroaniline	3.33	1.15	34	18 - 94	
4-Chlorophenyl phenyl ether	3.33	3.00	90	66 - 110	
4-Methylphenol	3.33	3.01	90	61 - 105	
4-Nitroaniline	3.33	2.35	71	49 - 118	
4-Nitrophenol	6.67	4.85	73	43 - 141	
Acenaphthene	3.33	3.02	91	62 - 108	
Acenaphthylene	3.33	3.22	97	67 - 107	
Acetophenone	3.33	2.89	87	60 - 109	
Anthracene	3.33	3.28	98	69 - 111	
Benzo[a]anthracene	3.33	3.25	98	68 - 110	
Benzo[a]pyrene	3.33	3.49	105	72 - 115	
Benzo[b]fluoranthene	3.33	3.51	105	69 - 119	
Benzo[g,h,i]perylene	3.33	3.34	100	54 - 128	
Benzo[k]fluoranthene	3.33	3.45	103	70 - 115	
Bis(2-chloroethoxy)methane	3.33	3.20	96	65 - 106	
Bis(2-chloroethyl)ether	3.33	3.11	93	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	3.48	104	63 - 125	
Butyl benzyl phthalate	3.33	3.69	111	65 - 125	
Carbazole	3.33	2.96	89	66 - 115	

Client: AKRF Inc

Job Number: 460-144928-1

Lab Control Sample - Batch: 460-476733

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-476733/2-A	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38194.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	11/13/2017 2039	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	3.27	98	70 - 111	
Dibenz(a,h)anthracene	3.33	3.45	103	60 - 130	
Dibenzofuran	3.33	3.09	93	67 - 107	
Diethyl phthalate	3.33	2.67	80	66 - 117	
Dimethyl phthalate	3.33	2.90	87	68 - 112	
Di-n-butyl phthalate	3.33	2.95	89	67 - 119	
Di-n-octyl phthalate	3.33	3.76	113	57 - 138	
Fluoranthene	3.33	2.66	80	64 - 114	
Fluorene	3.33	2.93	88	66 - 110	
Hexachlorobenzene	3.33	3.75	112	57 - 128	
Hexachlorobutadiene	3.33	3.32	100	60 - 108	
Hexachlorocyclopentadiene	3.33	4.28	128	50 - 129	
Hexachloroethane	3.33	3.15	95	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	3.47	104	53 - 137	
Isophorone	3.33	3.05	91	68 - 111	
Naphthalene	3.33	3.21	96	65 - 102	
Nitrobenzene	3.33	3.32	100	66 - 108	
N-Nitrosodi-n-propylamine	3.33	3.23	97	63 - 117	
N-Nitrosodiphenylamine	3.33	3.68	110	65 - 114	
Pentachlorophenol	6.67	6.08	91	56 - 116	
Phenanthrene	3.33	3.26	98	68 - 111	
Phenol	3.33	3.10	93	58 - 103	
Pyrene	3.33	4.05	122	64 - 121	*

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	80		10 - 103
2-Fluorobiphenyl	99	*	38 - 95
2-Fluorophenol (Surr)	92		25 - 92
Nitrobenzene-d5 (Surr)	94		37 - 94
Phenol-d5 (Surr)	90		32 - 91
Terphenyl-d14 (Surr)	111	*	24 - 109

Client: AKRF Inc

Job Number: 460-144928-1

Lab Control Sample - Batch: 460-476733

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-476733/3-A	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38195.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	11/13/2017 2101	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	6.87	103	62 - 137	
Benzaldehyde	6.67	6.28	94	52 - 113	
Caprolactam	6.67	7.09	106	53 - 148	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	71		10 - 103
2-Fluorobiphenyl	90		38 - 95
2-Fluorophenol (Surr)	89		25 - 92
Nitrobenzene-d5 (Surr)	91		37 - 94
Phenol-d5 (Surr)	87		32 - 91
Terphenyl-d14 (Surr)	111	*	24 - 109

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476733

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-144918-B-2-A MS	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38197.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0210 g
Analysis Date:	11/13/2017 2145			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-144918-B-2-B MSD	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38198.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0258 g
Analysis Date:	11/13/2017 2206			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	71	76	64 - 108	7	30		
1,2,4,5-Tetrachlorobenzene	75	77	57 - 112	3	30		
2,2'-oxybis[1-chloropropane]	46	42	39 - 122	10	30		
2,3,4,6-Tetrachlorophenol	47	46	60 - 114	1	30	*	*
2,4,5-Trichlorophenol	58	63	60 - 106	8	30	*	
2,4,6-Trichlorophenol	64	69	62 - 110	6	30		
2,4-Dichlorophenol	57	60	61 - 103	5	30	*	*
2,4-Dimethylphenol	59	62	63 - 101	6	30	*	*
2,4-Dinitrophenol	13	9	56 - 122	34	30	*	*
2,4-Dinitrotoluene	58	64	66 - 122	10	30	*	*
2,6-Dinitrotoluene	66	71	70 - 114	7	30	*	
2-Chloronaphthalene	70	74	63 - 107	6	30		
2-Chlorophenol	57	58	62 - 97	1	30	*	*
2-Methylnaphthalene	58	62	65 - 104	7	30	*	*
2-Methylphenol	53	55	61 - 103	3	30	*	*
2-Nitroaniline	60	64	57 - 114	7	30		
2-Nitrophenol	63	62	65 - 104	2	30	*	*
3,3'-Dichlorobenzidine	54	60	18 - 88	11	30		
3-Nitroaniline	48	53	30 - 94	10	30		
4,6-Dinitro-2-methylphenol	32	25	67 - 120	25	30	*	*
4-Bromophenyl phenyl ether	74	78	59 - 122	5	30		
4-Chloro-3-methylphenol	49	54	62 - 111	8	30	*	*
4-Chloroaniline	35	36	18 - 94	2	30		
4-Chlorophenyl phenyl ether	60	66	66 - 110	9	30	*	
4-Methylphenol	53	54	61 - 105	2	30	*	*
4-Nitroaniline	47	54	49 - 118	14	30	*	
4-Nitrophenol	41	46	43 - 141	12	30	*	
Acenaphthene	60	62	62 - 108	3	30	*	
Acenaphthylene	65	68	67 - 107	4	30	*	
Acetophenone	52	53	60 - 109	2	30	*	*
Anthracene	67	72	69 - 111	6	30	*	
Atrazine	72	84	62 - 137	16	30		

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476733

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-144918-B-2-A MS	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38197.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0210 g
Analysis Date:	11/13/2017 2145			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-144918-B-2-B MSD	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38198.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0258 g
Analysis Date:	11/13/2017 2206			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	62	62	52 - 113	1	30		
Benzo[a]anthracene	69	73	68 - 110	6	30		
Benzo[a]pyrene	71	74	72 - 115	5	30	*	
Benzo[b]fluoranthene	65	67	69 - 119	2	30	*	*
Benzo[g,h,i]perylene	93	93	54 - 128	0	30		
Benzo[k]fluoranthene	64	69	70 - 115	6	30	*	*
Bis(2-chloroethoxy)methane	62	64	65 - 106	3	30	*	*
Bis(2-chloroethyl)ether	59	58	64 - 105	1	30	*	*
Bis(2-ethylhexyl) phthalate	71	75	63 - 125	4	30		
Butyl benzyl phthalate	71	74	65 - 125	3	30		
Caprolactam	52	53	53 - 148	1	30	*	
Carbazole	60	70	66 - 115	16	30	*	
Chrysene	68	76	70 - 111	11	30	*	
Dibenz(a,h)anthracene	94	94	60 - 130	0	30		
Dibenzofuran	62	66	67 - 107	5	30	*	*
Diethyl phthalate	58	65	66 - 117	12	30	*	*
Dimethyl phthalate	64	67	68 - 112	5	30	*	*
Di-n-butyl phthalate	64	70	67 - 119	10	30	*	
Di-n-octyl phthalate	61	61	57 - 138	0	30		
Fluoranthene	55	61	64 - 114	11	30	*	*
Fluorene	58	64	66 - 110	10	30	*	*
Hexachlorobenzene	76	79	57 - 128	3	30		
Hexachlorobutadiene	66	68	60 - 108	4	30		
Hexachlorocyclopentadiene	65	59	50 - 129	10	30		
Hexachloroethane	58	59	63 - 99	2	30	*	*
Indeno[1,2,3-cd]pyrene	95	94	53 - 137	1	30		
Isophorone	58	60	68 - 111	2	30	*	*
Naphthalene	63	65	65 - 102	3	30	*	
Nitrobenzene	65	65	66 - 108	1	30	*	*
N-Nitrosodi-n-propylamine	59	58	63 - 117	1	30	*	*
N-Nitrosodiphenylamine	77	82	65 - 114	7	30		
Pentachlorophenol	41	40	56 - 116	3	30	*	*

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476733

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-144918-B-2-A MS	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38197.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0210 g
Analysis Date:	11/13/2017 2145			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-144918-B-2-B MSD	Analysis Batch:	460-476821	Instrument ID:	CBNAMS15
Client Matrix:	Solid	Prep Batch:	460-476733	Lab File ID:	f38198.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0258 g
Analysis Date:	11/13/2017 2206			Final Weight/Volume:	1 mL
Prep Date:	11/13/2017 1141			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	67	72	68 - 111	6	30	*	
Phenol	55	55	58 - 103	1	30	*	*
Pyrene	69	67	64 - 121	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	59	53	10 - 103
2-Fluorobiphenyl	83	76	38 - 95
2-Fluorophenol (Surr)	70	57	25 - 92
Nitrobenzene-d5 (Surr)	73	61	37 - 94
Phenol-d5 (Surr)	64	53	32 - 91
Terphenyl-d14 (Surr)	77	65	24 - 109

Method Blank - Batch: 460-476877

Method: 8081B
Preparation: 3546

Lab Sample ID:	MB 460-476877/1-A	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914498.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 0904	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.0067	U	0.0011	0.0067
4,4'-DDE	0.0067	U	0.00079	0.0067
4,4'-DDT	0.0067	U	0.0012	0.0067
Aldrin	0.0067	U	0.0010	0.0067
alpha-BHC	0.0020	U	0.00068	0.0020
beta-BHC	0.0020	U	0.00075	0.0020
Chlordane (technical)	0.067	U	0.016	0.067
delta-BHC	0.0020	U	0.00041	0.0020
Dieldrin	0.0020	U	0.00087	0.0020
Endosulfan I	0.0067	U	0.0010	0.0067
Endosulfan II	0.0067	U	0.0017	0.0067
Endosulfan sulfate	0.0067	U	0.00084	0.0067
Endrin	0.0067	U	0.00096	0.0067
Endrin aldehyde	0.0067	U	0.0016	0.0067
Endrin ketone	0.0067	U	0.0013	0.0067
gamma-BHC (Lindane)	0.0020	U	0.00062	0.0020
Heptachlor	0.0067	U	0.00079	0.0067
Heptachlor epoxide	0.0067	U	0.0010	0.0067
Methoxychlor	0.0067	U	0.0015	0.0067
Toxaphene	0.067	U	0.024	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	100	50 - 150
Tetrachloro-m-xylene	109	47 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	95	50 - 150
Tetrachloro-m-xylene	107	47 - 150

Lab Control Sample - Batch: 460-476877

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-476877/2-A	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914499.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 0917	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.0947	71	64 - 129	
4,4'-DDE	0.133	0.101	75	65 - 129	
4,4'-DDT	0.133	0.0922	69	59 - 124	
Aldrin	0.133	0.103	77	66 - 127	
alpha-BHC	0.133	0.112	84	69 - 131	
beta-BHC	0.133	0.103	77	69 - 127	
delta-BHC	0.133	0.105	79	64 - 129	
Dieldrin	0.133	0.101	76	65 - 128	
Endosulfan I	0.133	0.104	78	66 - 126	
Endosulfan II	0.133	0.108	81	64 - 124	
Endosulfan sulfate	0.133	0.100	75	62 - 123	
Endrin	0.133	0.0942	71	58 - 126	
Endrin aldehyde	0.133	0.102	76	69 - 131	
Endrin ketone	0.133	0.101	76	62 - 125	
gamma-BHC (Lindane)	0.133	0.105	78	67 - 126	
Heptachlor	0.133	0.0997	75	63 - 125	
Heptachlor epoxide	0.133	0.0978	73	64 - 125	
Methoxychlor	0.133	0.0820	62	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	77	50 - 150
Tetrachloro-m-xylene	84	47 - 150

Lab Control Sample - Batch: 460-476877

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-476877/2-A	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914499.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 0917	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.0923	69	64 - 129	
4,4'-DDE	0.133	0.0885	66	65 - 129	
4,4'-DDT	0.133	0.0895	67	59 - 124	
Aldrin	0.133	0.101	76	66 - 127	
alpha-BHC	0.133	0.108	81	69 - 131	
beta-BHC	0.133	0.0999	75	69 - 127	

Client: AKRF Inc

Job Number: 460-144928-1

Lab Control Sample - Batch: 460-476877

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-476877/2-A	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914499.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 0917	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
delta-BHC	0.133	0.102	76	64 - 129	
Dieldrin	0.133	0.0978	73	65 - 128	
Endosulfan I	0.133	0.104	78	66 - 126	
Endosulfan II	0.133	0.0999	75	64 - 124	
Endosulfan sulfate	0.133	0.0942	71	62 - 123	
Endrin	0.133	0.0906	68	58 - 126	
Endrin aldehyde	0.133	0.0954	72	69 - 131	
Endrin ketone	0.133	0.0969	73	62 - 125	
gamma-BHC (Lindane)	0.133	0.102	76	67 - 126	
Heptachlor	0.133	0.0975	73	63 - 125	
Heptachlor epoxide	0.133	0.0964	72	64 - 125	
Methoxychlor	0.133	0.0761	57	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	77	50 - 150
Tetrachloro-m-xylene	82	47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476877

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-144947-A-6-D MS	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914500.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0057 g
Analysis Date:	11/14/2017 0929			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-144947-A-6-E MSD	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0085 g
Analysis Date:	11/14/2017 0942			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	76	72	64 - 129	6	30		
4,4'-DDE	81	77	65 - 129	5	30		
4,4'-DDT	76	71	59 - 124	6	30		
Aldrin	90	85	66 - 127	5	30		
alpha-BHC	100	91	69 - 131	9	30		
beta-BHC	82	71	69 - 127	14	30		
delta-BHC	94	88	64 - 129	7	30		
Dieldrin	80	76	65 - 128	5	30		
Endosulfan I	80	76	66 - 126	5	30		
Endosulfan II	82	77	64 - 124	7	30		
Endosulfan sulfate	77	71	62 - 123	8	30		
Endrin	72	69	58 - 126	5	30		
Endrin aldehyde	79	74	69 - 131	7	30		
Endrin ketone	79	74	62 - 125	7	30		
gamma-BHC (Lindane)	85	80	67 - 126	7	30		
Heptachlor	78	73	63 - 125	7	30		
Heptachlor epoxide	77	72	64 - 125	6	30		
Methoxychlor	70	65	56 - 123	6	30		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
DCB Decachlorobiphenyl	82		78		50 - 150
Tetrachloro-m-xylene	84	p	79	p	47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476877

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-144947-A-6-D MS	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914500.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0057 g
Analysis Date:	11/14/2017 0929			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-144947-A-6-E MSD	Analysis Batch:	460-476657	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-476877	Lab File ID:	5F914501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0085 g
Analysis Date:	11/14/2017 0942			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2111			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	73	69	64 - 129	6	30		
4,4'-DDE	74	70	65 - 129	5	30		
4,4'-DDT	71	68	59 - 124	5	30		
Aldrin	80	76	66 - 127	6	30		
alpha-BHC	88	82	69 - 131	7	30		
beta-BHC	76	71	69 - 127	7	30		
delta-BHC	86	81	64 - 129	6	30		
Dieldrin	77	72	65 - 128	7	30		
Endosulfan I	74	70	66 - 126	6	30		
Endosulfan II	75	71	64 - 124	5	30		
Endosulfan sulfate	71	66	62 - 123	7	30		
Endrin	70	66	58 - 126	6	30		
Endrin aldehyde	73	69	69 - 131	6	30		
Endrin ketone	77	71	62 - 125	7	30		
gamma-BHC (Lindane)	84	76	67 - 126	10	30		
Heptachlor	75	71	63 - 125	6	30		
Heptachlor epoxide	74	70	64 - 125	5	30		
Methoxychlor	66	62	56 - 123	7	30		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
DCB Decachlorobiphenyl	81		77		50 - 150
Tetrachloro-m-xylene	35678	*	34806	*	47 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Method Blank - Batch: 460-476881

Method: 8082A
Preparation: 3546

Lab Sample ID:	MB 460-476881/1-A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136633.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 2033	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	0.067	U	0.0089	0.067
Aroclor 1221	0.067	U	0.0089	0.067
Aroclor 1232	0.067	U	0.0089	0.067
Aroclor 1242	0.067	U	0.0089	0.067
Aroclor 1248	0.067	U	0.0089	0.067
Aroclor 1254	0.067	U	0.0092	0.067
Aroclor 1260	0.067	U	0.0092	0.067
Aroclor 1268	0.067	U	0.0092	0.067
Aroclor-1262	0.067	U	0.0092	0.067
Polychlorinated biphenyls, Total	0.067	U	0.0092	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	134	35 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	128	35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Lab Control Sample - Batch: 460-476881

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-476881/2-A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136634.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 2047	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.325	98	77 - 150	
Aroclor 1260	0.333	0.324	97	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	131	35 - 150

Lab Control Sample - Batch: 460-476881

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-476881/2-A	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136634.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	11/14/2017 2047	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.319	96	77 - 150	
Aroclor 1260	0.333	0.287	86	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	109	35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476881

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-144918-A-2-D MS	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136635.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0005 g
Analysis Date:	11/14/2017 2102			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-144918-A-2-E MSD	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136636.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0017 g
Analysis Date:	11/14/2017 2116			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	103	104	77 - 150	0	30		
Aroclor 1260	97	98	79 - 150	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	137	135	35 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-476881

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-144918-A-2-D MS	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136635.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0005 g
Analysis Date:	11/14/2017 2102			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-144918-A-2-E MSD	Analysis Batch:	460-477109	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-476881	Lab File ID:	T136636.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0017 g
Analysis Date:	11/14/2017 2116			Final Weight/Volume:	10 mL
Prep Date:	11/13/2017 2126			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	100	101	77 - 150	1	30		
Aroclor 1260	101	101	79 - 150	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	120	125	35 - 150

Client: AKRF Inc

Job Number: 460-144928-1

Method Blank - Batch: 460-477161

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 460-477161/1-A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149077.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	11/16/2017 1312	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	0.017	U	0.0078	0.017
2,4-D	0.017	U	0.0078	0.017
Silvex (2,4,5-TP)	0.017	U	0.011	0.017

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	130	80 - 141

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	125	80 - 141

Lab Control Sample - Batch: 460-477161

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-477161/2-A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149078.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	11/16/2017 1326	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.107	128	53 - 134	
2,4-D	0.333	0.345	103	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.116	139	58 - 150	

Surrogate	% Rec		Acceptance Limits
2,4-Dichlorophenylacetic acid	152	*	80 - 141

Lab Control Sample - Batch: 460-477161

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-477161/2-A	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149078.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	11/16/2017 1326	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.103	123	53 - 134	
2,4-D	0.333	0.336	101	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.116	139	58 - 150	

Surrogate	% Rec		Acceptance Limits
2,4-Dichlorophenylacetic acid	143	*	80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-477161

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-144741-A-1-B MS	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149079.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0458 g
Analysis Date:	11/16/2017 1341			Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-144741-A-1-C MSD	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149080.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0412 g
Analysis Date:	11/16/2017 1356			Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	123	123	53 - 134	0	30		
2,4-D	103	100	39 - 119	3	30	E	
Silvex (2,4,5-TP)	136	134	58 - 150	1	30		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
2,4-Dichlorophenylacetic acid	146	*	147	*	80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-477161

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-144741-A-1-B MS	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149079.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0458 g
Analysis Date:	11/16/2017 1341			Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-144741-A-1-C MSD	Analysis Batch:	460-477700	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-477161	Lab File ID:	ZR149080.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0412 g
Analysis Date:	11/16/2017 1356			Final Weight/Volume:	10 mL
Prep Date:	11/14/2017 2240			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	118	117	53 - 134	1	30		
2,4-D	101	97	39 - 119	4	30		
Silvex (2,4,5-TP)	134	133	58 - 150	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	138	138	80 - 141

Client: AKRF Inc

Job Number: 460-144928-1

Duplicate - Batch: 460-476774

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-144918-B-2 DU	Analysis Batch:	460-476774	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/13/2017 1534	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	17.9	17.9	0	20	
Percent Solids	82.1	82.1	0	20	

Client: AKRF Inc

Job Number: 460-144928-1

Duplicate - Batch: 460-476847

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-144642-A-12 DU	Analysis Batch:	460-476847	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	11/13/2017 1853	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	10.8	11.0	1	20	
Percent Solids	89.2	89.0	0.2	20	

777 New Durham Road
Edison, New Jersey 08817
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name: (for report and invoice) Rebecca Kinal	Samplers Name: (Printed) M. Jepsen Tim McClusky	Site/Project Identification St. John Villa
Company AKRF, Inc.	P.O.# 89215	State (Location of site): NJ ☐ NY ☒ Other
Address 440 Park Ave. South, 7th Fl	Analysis Turnaround Time: Standard ☒	Regulatory Program
City New York State NY	Rush Charges Authorized For: 1 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 914-922-2362 FAX		Job No: 144928

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL+CP-51 VOCs+TICs	TCL+CP-51 SVOCs+TICs	Pest. 8081	Herb. 8151	PCBs 8082	Sample Numbers
SB-ES1 (0-2)	11/11/17	1010	So	4	X					1
SB-ES1 (8-10)		1015	So	4	X					2
SB-ES2 (0-2)		1110	So	4	X					3
SB-ES2 (8-10)		1115	So	4	X					4
SB-ES3 (0-2)		1145	So	4	X					5
SB-ES3 (8-10)		1150	So	4	X					6
SB-GA1 (0-2)		1255	So	5	X	X	X	X	X	7
SB-GA1 (8-10)		1300	So	5	X	X	X	X	X	8
SB-GA2 (0-2)		1330	So	5	X	X	X	X	X	9
SB-GA2 (13-15)	↓	1335	So	5	X	X	X	X	X	10

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil: 1 1 1 1 1
6 = Other _____, 7 = Other _____ — Water

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) R McClusky	AKRF	11/11/17 1627	1)	A&D
Relinquished by 2)	Company	Date / Time	Received by 2)	Company 1.29 4.5°C
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (No. 578)

YAL - 3816 (0614)

144928 Chain of Custody

11/30/2017

TestAmerica Edison

Page ___ of ___

Receipt Temperature and pH Log

Job Number: 14492

Number of Coolers: 1

IR Gun #: 9

Cooler Temperatures

	Raw	Corrected		Raw	Corrected
Cooler #1:	°C	°C	Cooler #4:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or O&G (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be notified at least 24 hours prior to analysis*

Initials: CP Date: 11/1/2017

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-144928-1

Login Number: 144928
List Number: 1
Creator: Villanueva, Angelica P

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 460-138369-2

Job Description: St John Villa; #89215

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Attention: Becky Kinal

Approved for release.
Allison L Bennett
Project Manager I
9/13/2017 11:14 AM

Designee for
Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
09/13/2017

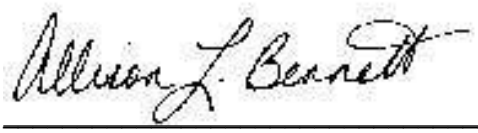
The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-138369-2

Job Description: St John Villa; #89215

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Allison L Bennett
Project Manager I
9/13/2017 11:14 AM

Designee for
Melissa Haas

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CASE NARRATIVE

Client: AKRF Inc

Project: St John Villa; #89215

Report Number: 460-138369-2

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/2/2017 1:00 PM and 8/3/2017 12:11 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9º C and 2.4º C.

Receipt Exceptions

Containers were received without labels, only on the plastic bags they were grouped in.

The following samples were activated for TCLP lead analysis by the client on 9/7/17: SB-16(1-3') (460-138369-7), SB-19(3-5') (460-138465-4) and SB-11(1-3') (460-138465-9). This analysis was not originally requested on the chain-of-custody (COC).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

TCLP METALS

Samples SB-19(3-5') (460-138465-4), SB-16(1-3') (460-138369-7) and SB-11(1-3') (460-138465-9) were analyzed for TCLP metals in accordance with EPA SW-846 Methods 1311/ 6010C. The samples were leached on 09/07/2017, prepared on 09/08/2017 and 09/09/2017 and analyzed on 09/09/2017 and 09/10/2017.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138369-2

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-7	**SB-16(1-3')**					
TCLP						
Lead		833		50.0	ug/L	6010C
460-138465-4	**SB-19(3-5')**					
TCLP						
Lead		33.1	J	50.0	ug/L	6010C
460-138465-9	**SB-11(1-3')**					
TCLP						
Lead		33.2	J	50.0	ug/L	6010C

METHOD SUMMARY

Client: AKRF Inc

Job Number: 460-138369-2

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Metals (ICP)	TAL EDI	SW846 6010C	
TCLP Extraction	TAL EDI		SW846 1311
Preparation, Total Metals	TAL EDI		SW846 3010A

Lab References:

TAL EDI = TestAmerica Edison

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: AKRF Inc

Job Number: 460-138369-2

Method	Analyst	Analyst ID
SW846 6010C	Chang, Churn Der	CDC

SAMPLE SUMMARY

Client: AKRF Inc

Job Number: 460-138369-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-138369-7	SB-16(1-3')	Solid	08/01/2017 1200	08/02/2017 1300
460-138465-4	SB-19(3-5')	Solid	08/02/2017 1055	08/03/2017 1211
460-138465-9	SB-11(1-3')	Solid	08/02/2017 1242	08/03/2017 1211

SAMPLE RESULTS

Client: AKRF Inc

Job Number: 460-138369-2

Client Sample ID: **SB-16(1-3')**

Lab Sample ID: 460-138369-7
Client Matrix: Solid

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

6010C Metals (ICP)-TCLP

Analysis Method:	6010C	Analysis Batch:	460-461770	Instrument ID:	ICP5
Prep Method:	3010A	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	5.0	Leach Batch:	460-461362	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1419			Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	09/07/2017 1430				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Lead		833		20.4	50.0

Client: AKRF Inc

Job Number: 460-138369-2

Client Sample ID: **SB-19(3-5')**

Lab Sample ID: 460-138465-4
Client Matrix: Solid

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

6010C Metals (ICP)-TCLP

Analysis Method:	6010C	Analysis Batch:	460-461859	Instrument ID:	ICP5
Prep Method:	3010A	Prep Batch:	460-461797	Lab File ID:	461832D1.asc
Dilution:	5.0	Leach Batch:	460-461362	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 1628			Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	09/07/2017 1430				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Lead		33.1	J	20.4	50.0

Client: AKRF Inc

Job Number: 460-138369-2

Client Sample ID: **SB-11(1-3')**

Lab Sample ID: 460-138465-9
Client Matrix: Solid

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

6010C Metals (ICP)-TCLP

Analysis Method:	6010C	Analysis Batch:	460-461770	Instrument ID:	ICP5
Prep Method:	3010A	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	5.0	Leach Batch:	460-461362	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1803			Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	09/07/2017 1430				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Lead		33.2	J	20.4	50.0

DATA REPORTING QUALIFIERS

Client: AKRF Inc Job Number: 460-138369-2

Lab Section	Qualifier	Description
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

QUALITY CONTROL RESULTS

Client: AKRF Inc

Job Number: 460-138369-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-460847					
LB 460-460847/1-D ^5	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-140248-B-6-F DU ^5	Duplicate	P	Solid	1311	
460-140248-B-6-G MS ^5	Matrix Spike	P	Solid	1311	
Prep Batch: 460-461362					
LB 460-461362/1-B ^5	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 460-461362/1-C ^5	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-138369-7	SB-16(1-3')	P	Solid	1311	
460-138465-4	SB-19(3-5')	P	Solid	1311	
460-138465-9	SB-11(1-3')	P	Solid	1311	
Prep Batch: 460-461628					
LB 460-461628/1-C ^5	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-140465-B-1-D DU ^5	Duplicate	P	Solid	1311	
460-140465-B-1-E MS ^5	Matrix Spike	P	Solid	1311	
Prep Batch: 460-461704					
LCS 460-461704/2-A ^2	Lab Control Sample	T	Water	3010A	
MB 460-461704/1-A	Method Blank	T	Water	3010A	
LB 460-460847/1-D ^5	TCLP SPLPE Leachate Blank	P	Solid	3010A	460-460847
LB 460-461362/1-B ^5	TCLP SPLPE Leachate Blank	P	Solid	3010A	460-461362
460-138369-7	SB-16(1-3')	P	Solid	3010A	460-461362
460-138465-9	SB-11(1-3')	P	Solid	3010A	460-461362
460-140248-B-6-F DU ^5	Duplicate	P	Solid	3010A	460-460847
460-140248-B-6-G MS ^5	Matrix Spike	P	Solid	3010A	460-460847
Analysis Batch:460-461770					
LB 460-460847/1-D ^5	TCLP SPLPE Leachate Blank	P	Solid	6010C	460-461704
LB 460-461362/1-B ^5	TCLP SPLPE Leachate Blank	P	Solid	6010C	460-461704
LCS 460-461704/2-A ^2	Lab Control Sample	T	Water	6010C	460-461704
MB 460-461704/1-A	Method Blank	T	Water	6010C	460-461704
460-138369-7	SB-16(1-3')	P	Solid	6010C	460-461704
460-138465-9	SB-11(1-3')	P	Solid	6010C	460-461704
460-140248-B-6-F DU ^5	Duplicate	P	Solid	6010C	460-461704
460-140248-B-6-G MS ^5	Matrix Spike	P	Solid	6010C	460-461704
Prep Batch: 460-461797					
LCS 460-461797/2-A ^2	Lab Control Sample	T	Water	3010A	
MB 460-461797/1-A	Method Blank	T	Water	3010A	
LB 460-461362/1-C ^5	TCLP SPLPE Leachate Blank	P	Solid	3010A	460-461362
LB 460-461628/1-C ^5	TCLP SPLPE Leachate Blank	P	Solid	3010A	460-461628
460-138465-4	SB-19(3-5')	P	Solid	3010A	460-461362
460-140465-B-1-D DU ^5	Duplicate	P	Solid	3010A	460-461628
460-140465-B-1-E MS ^5	Matrix Spike	P	Solid	3010A	460-461628

Client: AKRF Inc

Job Number: 460-138369-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:460-461859					
LB 460-461362/1-C ^5	TCLP SPLPE Leachate Blank	P	Solid	6010C	460-461797
LCS 460-461797/2-A ^2	Lab Control Sample	T	Water	6010C	460-461797
MB 460-461797/1-A	Method Blank	T	Water	6010C	460-461797
460-138465-4	SB-19(3-5')	P	Solid	6010C	460-461797
460-140465-B-1-D DU ^5	Duplicate	P	Solid	6010C	460-461797
460-140465-B-1-E MS ^5	Matrix Spike	P	Solid	6010C	460-461797
Analysis Batch:460-462076					
LB 460-461628/1-C ^5	TCLP SPLPE Leachate Blank	P	Solid	6010C	460-461797
460-138465-4	SB-19(3-5')	P	Solid	6010C	460-461797

Report Basis
P = TCLP
T = Total

Method Blank - Batch: 460-461704

Method: 6010C
Preparation: 3010A

Lab Sample ID:	MB 460-461704/1-A	Analysis Batch:	460-461770	Instrument ID:	ICP5
Client Matrix:	Water	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1344	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Lead	10.0	U	4.1	10.0

TCLP SPLPE Leachate Blank - Batch: 460-461704

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	LB 460-460847/1-D ^5	Analysis Batch:	460-461770	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	5.0	Leach Batch:	460-460847	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1844	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	09/05/2017 1330				

Analyte	Result	Qual	MDL	RL
Lead	50.0	U	20.4	50.0

TCLP SPLPE Leachate Blank - Batch: 460-461704

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	LB 460-461362/1-B ^5	Analysis Batch:	460-461770	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	5.0	Leach Batch:	460-461362	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1856	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	09/07/2017 1430				

Analyte	Result	Qual	MDL	RL
Lead	50.0	U	20.4	50.0

Client: AKRF Inc

Job Number: 460-138369-2

Lab Control Sample - Batch: 460-461704

Method: 6010C
Preparation: 3010A

Lab Sample ID:	LCS 460-461704/2-A ^2	Analysis Batch:	460-461770	Instrument ID:	ICP5
Client Matrix:	Water	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1348	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Lead	5000	5262	105	80 - 120	

Matrix Spike - Batch: 460-461704

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	460-140248-B-6-G MS ^5	Analysis Batch:	460-461770	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	5.0	Leach Batch:	460-460847	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1355	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	09/05/2017 1330				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Lead	50.0	U	5000	5285	106	75 - 125	

Duplicate - Batch: 460-461704

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	460-140248-B-6-F DU ^5	Analysis Batch:	460-461770	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461704	Lab File ID:	461720D1.asc
Dilution:	5.0	Leach Batch:	460-460847	Initial Weight/Volume:	50 mL
Analysis Date:	09/09/2017 1359	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/08/2017 2220				
Leach Date:	09/05/2017 1330				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Lead	50.0	U	50.0	NC	20	U

Client: AKRF Inc

Job Number: 460-138369-2

Method Blank - Batch: 460-461797

Method: 6010C
Preparation: 3010A

Lab Sample ID:	MB 460-461797/1-A	Analysis Batch:	460-461859	Instrument ID:	ICP5
Client Matrix:	Water	Prep Batch:	460-461797	Lab File ID:	461832D1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 1425	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Lead	10.0	U	4.1	10.0

TCLP SPLPE Leachate Blank - Batch: 460-461797

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	LB 460-461362/1-C ^5	Analysis Batch:	460-461859	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461797	Lab File ID:	461832D1.asc
Dilution:	5.0	Leach Batch:	460-461362	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 1632	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	09/07/2017 1430				

Analyte	Result	Qual	MDL	RL
Lead	50.0	U	20.4	50.0

TCLP SPLPE Leachate Blank - Batch: 460-461797

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	LB 460-461628/1-C ^5	Analysis Batch:	460-462076	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461797	Lab File ID:	461798.asc
Dilution:	5.0	Leach Batch:	460-461628	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 2328	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	09/08/2017 1420				

Analyte	Result	Qual	MDL	RL
Lead	50.0	U	20.4	50.0

Lab Control Sample - Batch: 460-461797

Method: 6010C
Preparation: 3010A

Lab Sample ID:	LCS 460-461797/2-A ^2	Analysis Batch:	460-461859	Instrument ID:	ICP5
Client Matrix:	Water	Prep Batch:	460-461797	Lab File ID:	461832D1.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 1429	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Lead	5000	4976	100	80 - 120	

Matrix Spike - Batch: 460-461797

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	460-140465-B-1-E MS ^5	Analysis Batch:	460-461859	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461797	Lab File ID:	461832D1.asc
Dilution:	5.0	Leach Batch:	460-461628	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 1437	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	09/08/2017 1420				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Lead	50.0	U	5000	4712	94	75 - 125	

Duplicate - Batch: 460-461797

Method: 6010C
Preparation: 3010A
TCLP

Lab Sample ID:	460-140465-B-1-D DU ^5	Analysis Batch:	460-461859	Instrument ID:	ICP5
Client Matrix:	Solid	Prep Batch:	460-461797	Lab File ID:	461832D1.asc
Dilution:	5.0	Leach Batch:	460-461628	Initial Weight/Volume:	50 mL
Analysis Date:	09/10/2017 1440	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	09/09/2017 1840				
Leach Date:	09/08/2017 1420				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Lead	50.0	U	50.0	NC	20	U

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THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / A

480-138369 Chain of Custody

Name (for report and invoice) Rebecca Kindal	Samplers Name (Printed) Jacob mewkew	Site/Project Identification St. John's Villa phase II
Company AMRF, INC.	P O # 8925	State (Location of site): NJ ☐ NY ☒ Other
Address 140 Parkside S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP ☐
City NY State NY	Rush Charges Authorized for: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 914-922-0362 Fax		Lab No: 138369

Analysis Requested (please circle or write below and complete list)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	SVOC + TICs	Pest.	Herb.	PCBs	TAL metals	Sample Numbers
SB-1 (1-3)'	8/1/17	855	Soil	6	X	X	X	X	X	X	1
SB-1 (10-12')		910			X	X	X	X	X	X	2
SB-14 (1-3')		1020			X	X	X	X	X	X	3
SB-14 (10-12')		1030			X	X	X	X	X	X	4
SB-15 (1-3')		1055			X	X	X	X	X	X	5
SB-15 (10-12')		1055			X	X	X	X	X	X	6
SB-16 (1-3')		1200			X	X	X	X	X	X	7
SB-16 (10-12')		1235			X	X	X	X	X	X	8
SB-17 (1-3')		1345			X	X	X	X	X	X	9
SB-17 (10-12')		1350			X	X	X	X	X	X	10

Preservation Used: 1 = Ice, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH; 6 = Other _____, 7 = Other _____

Soil: 1 1 1 1 1 1

Water:

Special Instructions CAT. A, TCL+CP-51 Table 3

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Jacob Mewkew	AMRF	8/2/17 1000	1)	TA
2)	TA	8/2/17 1300	2)	TA Edison
3)			3)	8/2/17
4)			4)	1300

SHORT HOLD

Laboratory Certifications: New Jersey (...urk (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (...

1-9 (Rt 8 NJ CT

09/13/2017

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 2 of 2

Name (for report and invoice): Rebecca Kinal	Sampler's Name (Printed): Jacob Menken	Site/Project Identification: St. Johns Villa Phase II
Company: AKRF	P.O.#: 89215	State (Location of site): NJ ☐ NY ☒ Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: NY State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone: 914-925-2362 Fax:		Job No: 138369

Sample Identification	Date	Time	Matrix	No. of Cont.	Cyanide	DRO/GRO TPH	Hex. chrom.	VOC	SVOC	TAL metals filtered					Sample Numbers
SB-1 WC	8/1/17	900	Soil	3	X	X	X								11
SB-15 WC	↓	1100	↓	↓	X	X	X								12
SB-19 WC	↓	1340	↓	↓	X	X	X								13
GW-15	↓	1435	Water	6				X	X	X					14
Trip Blank			↓	2	X			X							15

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

	Soil	1	1	1										
	Water													

Special Instructions: CAT. A, TCL+CP-51 Table 3 : Soil | TCL+CP-51 + Select TAL Metals
Water Metals Filtered (Yes/No)? YES

Relinquished by	Company	Date / Time	Received by	Company
1) Jacob Menken	AKRF	8/2/17 1000	1)	T-A
2)	T-A	8/2/17 1300	2)	T-A Edison
3)		/	3)	
4)		/	4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL-0018 (0715)

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TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 138369

Number of Coolers: 1 IR Gun #: 8

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.9 °C	1.9 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
14				22											

(If pH adjustments are required record the information below:

Sample No(s). adjusted: NA

Preservative Name/Conc.: NA Volume of Preservative used (ml): NA

Lot # of Preservative(s): NA Expiration Date: NA

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: WJM Date: 8/2/17

09/13/2017

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 2

Name (for report and invoice): Rebecca Wood	Samplers Name (Printed): Jacob Menken	Site/Project Identification: St. John Villa Phase II
Company: AKRF, INC.	P. O. #: 89215	State (Location of site): NJ ☐ NY ☒ Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: NY State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY: Project No:
Phone: 914-922-2362 Fax:		Job No: 118465

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	SVOC+TCL	Pest. Herb.	PCBs	TAL Metals	Cyanide	Hex. chrom	Dioxins TPH			Sample Numbers
SB-19 (0-2')	8/2/17	1025	Soil	8	X	X	X	X	X	X	X	X			1
SB-19 (3-5')		1025		5	X	X	X	X	X	X					2
SB-19 (10-12')		1035		5	X	X	X	X	X	X					3
SB-19 (13-15')		1035		5	X	X	X	X	X	X					4
SB-5 (1-3')		1540		6	X	X	X	X	X	X					5
SB-5 (10-12')		1555		6	X	X	X	X	X	X					6
SB-10 (1-3')		1305		6	X	X	X	X	X	X					7
SB-10 (10-12')		1310		6	X	X	X	X	X	X					8
SB-11 (1-3')		1293		6	X	X	X	X	X	X					9
SB-11 (10-12')		1295		6	X	X	X	X	X	X					10

SHORT HOLD

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil:	1	1	1	1	1	1	1	1	1		
Water:											

Special Instructions: CAT. A, TCL+CP-51 Table 3 — Water Metals Filtered (Yes/No)? _____

	Relinquished by	Company	Date / Time	Received by	Company
1	Jacob Menken	AKRF	8/3/17 1120	1	TAEDR
2		TAEDR	8/3/17 1211	2	TA 8/3/17
3				3	
4				4	

450-136485 Chain of Custody

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), C
Massachusetts (M-NJ312), North Carolina (No. 578) DRY-24 NOCS

TAL - 0016 (0715)

09/13/2017

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 2 of 2

Name (Lab report and Invoice): Rebecca Kinal	Sampler's Name (Printed): Jack Meeker	Site/Project Identification: St. John Villa Phase II
Company: AKRF, INC.	P. O. #: 89215	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: NY State: NY	Rush Charges Authorized For: 1 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY: Project No:
Phone: 914-922-2362 Fax:		Job No: 138465

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	Metals + TAL	PCBs	Herb.	PCBs	TAL metals					Sample Numbers
SB-12 (1-3')	8/2/17	1145	Soil	6											11
SB-12 (10-12')	↓	1155	↓	6											12
SB-13 (1-3')	↓	1615	↓	6											13
SB-13 (10-12')	↓	1650	↓	6											14
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other ____, 7 = Other ____				Soil:	1	1	1	1	1	1					
				Water:											

Special Instructions: CAT. A, TCL + CP-51 Table 3

Water Metals Filtered (Yes/No)? ____

Relinquished by	Company	Date / Time	Received by	Company
1) Jack Meeker	AKRF	8/3/17, 1120	1)	TA-Edi
2)	TA-Edi	8/3/17 1219	2)	TA 8/3/17 1220
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0010 (0710)

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 138465

Number of Coolers: 1

IR Gun #: 8

Cooler Temperatures

	Raw	Corrected		Raw	Corrected		Raw	Corrected
Cooler #1:	2.4 °C	2.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-8)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: RC Date: 8/3/17

09/13/2017

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138369-2

Login Number: 138369
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.9°C, IR #8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	See NCM
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	See NCM
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138369-2

Login Number: 138465
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4°C, IR #9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	See NCM
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	See NCM
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

ANALYTICAL REPORT

Job Number: 460-138284-1

Job Description: St John Villa Phase II

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Attention: Becky Kinal

Approved for release.
Allison L Bennett
Project Manager I
8/10/2017 4:00 PM

Designee for
Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
08/10/2017

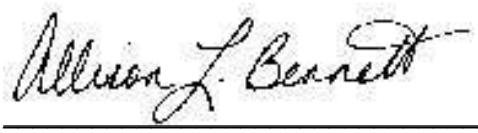
The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-138284-1

Job Description: St John Villa Phase II

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Allison L Bennett
Project Manager I
8/10/2017 4:00 PM

Designee for
Melissa Haas

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CASE NARRATIVE

Client: AKRF Inc

Project: St John Villa Phase II

Report Number: 460-138284-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 8/1/2017 12:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

Receipt Exceptions

A Chain-of-Custody (COC) was not received with sample D-15 for job 138294.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C. The samples were prepared on 08/01/2017 and analyzed on 08/03/2017 and 08/04/2017.

Methylene Chloride was detected in method blank LB3 460-453341/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/03/2017 and analyzed on 08/06/2017, 08/07/2017 and 08/08/2017.

The continuing calibration verification (CCV) analyzed in batch 460-454258 was outside the method criteria for the following analyte(s): Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-454380 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol, 4-Nitrophenol, 3-Nitroaniline and 4-Nitroaniline. A CCV standard at or below the reporting limit (RL) was analyzed with

the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-454613 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol, 4-Nitrophenol, Hexachlorocyclopentadiene, Di-n-octyl phthalate and Dibenz(a,h)anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The following laboratory control sample (LCS) associated with batch 460-453670 contained one acid/base surrogate outside acceptance limits:(LCS 460-453670/2-A) and (LCS 460-453670/3-A). The laboratory's SOP allows one acid and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

The following laboratory control sample (LCS) associated with batch 460-453671 contained one acid/base surrogate outside acceptance limits:(LCS 460-453671/2-A). The laboratory's SOP allows one acid and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Several analytes failed the recovery criteria low for the MS of sample 460-138252-17 in batch 460-454258.

Several analytes failed the recovery criteria low for the MSD of sample 460-138252-17 in batch 460-454258. 2,3,4,6-Tetrachlorophenol and Pentachlorophenol exceeded the RPD limit.

Several analytes failed the recovery criteria low for the MS of sample 460-138286-7 in batch 460-454613.

For the MSD of sample 460-138286-7 in batch 460-454613, Several analytes failed the recovery criteria low. Several analytes failed the recovery criteria high. Also, Several analytes exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS

Sample SB-8WC (460-138284-15) was analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015D - GRO. The samples were prepared on 08/02/2017 and analyzed on 08/03/2017.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS

Sample SB-8WC (460-138284-15) was analyzed for diesel range organics in accordance with EPA SW-846 Method 8015D - DRO. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

C10-C44 failed the recovery criteria low for the MS of sample 180-68692-1 in batch 460-453940.

C10-C44 failed the recovery criteria low for the MSD of sample 180-68692-1 in batch 460-453940.

Refer to the QC report for details.

No other difficulties were encountered during the DRO analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES

Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 08/02/2017 and analyzed on 08/03/2017.

Tetrachloro-m-xylene failed the surrogate recovery criteria low for 460-138325-A-6-F MSD. Refer to the QC report for details.

gamma-BHC (Lindane) failed the recovery criteria low for the MSD of sample 460-138325-6 in batch 460-453677. gamma-BHC (Lindane) exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the Pesticides analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS

Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/02/2017 and analyzed on 08/03/2017 and 08/04/2017.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

CHLORINATED HERBICIDES

Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

No difficulties were encountered during the herbicides analysis.

All quality control parameters were within the acceptance limits.

METALS

Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for metals in accordance with EPA SW-846 Methods 6010C. The samples were prepared and analyzed on 08/02/2017 and 08/03/2017.

Antimony failed the recovery criteria low for the MS of sample 460-138232-1 in batch 460-453492.

Antimony, Copper and Manganese failed the recovery criteria low for the MS of sample 460-138335-1 in batch 460-453753.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SB-2(1-3') (460-138284-1)[4X], SB-2(10-12') (460-138284-2)[4X], SB-6(1-3') (460-138284-3)[4X], SB-6(10-12') (460-138284-4)[4X], SB-7(1-3') (460-138284-5)[4X], SB-7(5-7') (460-138284-6)[4X], SB-8(1-3') (460-138284-7)[4X], SB-8(5-7') (460-138284-8)[4X], SB-9(1-3') (460-138284-9)[4X], SB-9(5-7') (460-138284-10)[4X], SB-3(1-3') (460-138284-11)[4X], SB-3(10-12') (460-138284-12)[4X], SB-4(1-3') (460-138284-13)[4X] and SB-4(10-12') (460-138284-14)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

MERCURY

Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13) and SB-4(10-12') (460-138284-14) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 08/04/2017.

Mercury failed the recovery criteria low for the MS of sample 460-138286-7 in batch 460-454006.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the Hg analysis.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM
Sample SB-8WC (460-138284-15) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were prepared on 08/05/2017 and analyzed on 08/06/2017.

No difficulties were encountered during the hexchrome Cr6 analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE
Sample SB-8WC (460-138284-15) was analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared and analyzed on 08/10/2017.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE
Samples SB-2(1-3') (460-138284-1), SB-2(10-12') (460-138284-2), SB-6(1-3') (460-138284-3), SB-6(10-12') (460-138284-4), SB-7(1-3') (460-138284-5), SB-7(5-7') (460-138284-6), SB-8(1-3') (460-138284-7), SB-8(5-7') (460-138284-8), SB-9(1-3') (460-138284-9), SB-9(5-7') (460-138284-10), SB-3(1-3') (460-138284-11), SB-3(10-12') (460-138284-12), SB-4(1-3') (460-138284-13), SB-4(10-12') (460-138284-14) and SB-8WC (460-138284-15) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 08/04/2017.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-1	**SB-2(1-3')**					
Methylene Chloride		0.00059	J B	0.0010	mg/Kg	8260C
Arsenic		1.3	J	2.9	mg/Kg	6010C
Barium		17.0	J	39.3	mg/Kg	6010C
Beryllium		0.20	J	0.39	mg/Kg	6010C
Chromium		10		2.0	mg/Kg	6010C
Cobalt		4.9	J	9.8	mg/Kg	6010C
Copper		9.1		4.9	mg/Kg	6010C
Lead		3.4		2.0	mg/Kg	6010C
Manganese		195		2.9	mg/Kg	6010C
Nickel		45.4		7.9	mg/Kg	6010C
Vanadium		13.0		9.8	mg/Kg	6010C
Zinc		15.4		5.9	mg/Kg	6010C
Percent Moisture		3.9		1.0	%	Moisture
Percent Solids		96.1		1.0	%	Moisture
460-138284-2	**SB-2(10-12')**					
Methylene Chloride		0.00047	J B	0.0011	mg/Kg	8260C
Barium		23.1	J	39.6	mg/Kg	6010C
Beryllium		0.19	J	0.40	mg/Kg	6010C
Chromium		8.6		2.0	mg/Kg	6010C
Cobalt		4.9	J	9.9	mg/Kg	6010C
Copper		9.3		5.0	mg/Kg	6010C
Lead		2.4		2.0	mg/Kg	6010C
Manganese		229		3.0	mg/Kg	6010C
Nickel		61.4		7.9	mg/Kg	6010C
Vanadium		11.8		9.9	mg/Kg	6010C
Zinc		17.1		5.9	mg/Kg	6010C
Percent Moisture		3.0		1.0	%	Moisture
Percent Solids		97.0		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-3	**SB-6(1-3')**					
Arsenic		6.4		3.0	mg/Kg	6010C
Barium		39.5	J	40.0	mg/Kg	6010C
Beryllium		0.26	J	0.40	mg/Kg	6010C
Chromium		11.9		2.0	mg/Kg	6010C
Cobalt		5.6	J	10	mg/Kg	6010C
Copper		17.7		5.0	mg/Kg	6010C
Lead		27.9		2.0	mg/Kg	6010C
Manganese		202		3.0	mg/Kg	6010C
Nickel		37.9		8.0	mg/Kg	6010C
Vanadium		13.8		10	mg/Kg	6010C
Zinc		30.9		6.0	mg/Kg	6010C
Mercury		0.024		0.018	mg/Kg	7471B
Percent Moisture		6.5		1.0	%	Moisture
Percent Solids		93.5		1.0	%	Moisture
460-138284-4	**SB-6(10-12')**					
Methylene Chloride		0.00061	J B	0.0011	mg/Kg	8260C
Arsenic		0.79	J	3.1	mg/Kg	6010C
Barium		15.0	J	41.3	mg/Kg	6010C
Beryllium		0.16	J	0.41	mg/Kg	6010C
Chromium		8.0		2.1	mg/Kg	6010C
Cobalt		3.7	J	10.3	mg/Kg	6010C
Copper		9.3		5.2	mg/Kg	6010C
Lead		2.7		2.1	mg/Kg	6010C
Manganese		151		3.1	mg/Kg	6010C
Nickel		37.0		8.3	mg/Kg	6010C
Vanadium		10.3		10.3	mg/Kg	6010C
Zinc		15.0		6.2	mg/Kg	6010C
Percent Moisture		6.8		1.0	%	Moisture
Percent Solids		93.2		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-5	**SB-7(1-3')**					
Arsenic		1.8	J	3.0	mg/Kg	6010C
Barium		34.3	J	40.3	mg/Kg	6010C
Beryllium		0.26	J	0.40	mg/Kg	6010C
Chromium		12.3		2.0	mg/Kg	6010C
Cobalt		6.1	J	10.1	mg/Kg	6010C
Copper		22.6		5.0	mg/Kg	6010C
Lead		22.3		2.0	mg/Kg	6010C
Manganese		211		3.0	mg/Kg	6010C
Nickel		47.7		8.1	mg/Kg	6010C
Vanadium		15.1		10.1	mg/Kg	6010C
Zinc		34.9		6.0	mg/Kg	6010C
Mercury		0.018		0.018	mg/Kg	7471B
Percent Moisture		8.8		1.0	%	Moisture
Percent Solids		91.2		1.0	%	Moisture
460-138284-6	**SB-7(5-7')**					
Arsenic		2.5	J	3.1	mg/Kg	6010C
Barium		35.2	J	41.2	mg/Kg	6010C
Beryllium		0.37	J	0.41	mg/Kg	6010C
Chromium		11.1		2.1	mg/Kg	6010C
Cobalt		5.6	J	10.3	mg/Kg	6010C
Copper		10.9		5.1	mg/Kg	6010C
Lead		11.1		2.1	mg/Kg	6010C
Manganese		272		3.1	mg/Kg	6010C
Nickel		27.8		8.2	mg/Kg	6010C
Vanadium		14.3		10.3	mg/Kg	6010C
Zinc		29.4		6.2	mg/Kg	6010C
Mercury		0.022		0.017	mg/Kg	7471B
Percent Moisture		7.4		1.0	%	Moisture
Percent Solids		92.6		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-7	**SB-8(1-3')**					
Methylene Chloride		0.00031	J B	0.00086	mg/Kg	8260C
Heptachlor epoxide		0.0030	J	0.0074	mg/Kg	8081B
Arsenic		0.98	J	3.1	mg/Kg	6010C
Barium		59.2		41.5	mg/Kg	6010C
Beryllium		0.42		0.42	mg/Kg	6010C
Chromium		12.2		2.1	mg/Kg	6010C
Cobalt		6.6	J	10.4	mg/Kg	6010C
Copper		10.4		5.2	mg/Kg	6010C
Lead		13.9		2.1	mg/Kg	6010C
Manganese		544		3.1	mg/Kg	6010C
Nickel		42.5		8.3	mg/Kg	6010C
Vanadium		15.8		10.4	mg/Kg	6010C
Zinc		28.0		6.2	mg/Kg	6010C
Mercury		0.024		0.017	mg/Kg	7471B
Percent Moisture		9.9		1.0	%	Moisture
Percent Solids		90.1		1.0	%	Moisture
460-138284-8	**SB-8(5-7')**					
Methylene Chloride		0.00045	J B	0.0011	mg/Kg	8260C
Arsenic		2.4	J	3.1	mg/Kg	6010C
Barium		44.2		42.0	mg/Kg	6010C
Beryllium		0.35	J	0.42	mg/Kg	6010C
Chromium		17.1		2.1	mg/Kg	6010C
Cobalt		7.7	J	10.5	mg/Kg	6010C
Copper		14.3		5.2	mg/Kg	6010C
Lead		71.8		2.1	mg/Kg	6010C
Manganese		298		3.1	mg/Kg	6010C
Nickel		59.6		8.4	mg/Kg	6010C
Vanadium		16.9		10.5	mg/Kg	6010C
Zinc		49.4		6.3	mg/Kg	6010C
Mercury		0.042		0.018	mg/Kg	7471B
Percent Moisture		9.2		1.0	%	Moisture
Percent Solids		90.8		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-9	**SB-9(1-3')**					
Methylene Chloride		0.00084	J B	0.0011	mg/Kg	8260C
4,4'-DDE		0.0036	J	0.0073	mg/Kg	8081B
4,4'-DDT		0.0035	J	0.0073	mg/Kg	8081B
Arsenic		2.6	J	3.3	mg/Kg	6010C
Barium		24.5	J	43.7	mg/Kg	6010C
Beryllium		0.31	J	0.44	mg/Kg	6010C
Chromium		12.8		2.2	mg/Kg	6010C
Cobalt		7.0	J	10.9	mg/Kg	6010C
Copper		8.2		5.5	mg/Kg	6010C
Lead		5.9		2.2	mg/Kg	6010C
Manganese		240		3.3	mg/Kg	6010C
Nickel		61.7		8.7	mg/Kg	6010C
Vanadium		11.7		10.9	mg/Kg	6010C
Zinc		24.1		6.5	mg/Kg	6010C
Percent Moisture		8.4		1.0	%	Moisture
Percent Solids		91.6		1.0	%	Moisture
460-138284-10	**SB-9(5-7')**					
Methylene Chloride		0.00053	J B	0.0011	mg/Kg	8260C
Arsenic		1.5	J	3.2	mg/Kg	6010C
Barium		55.6		42.2	mg/Kg	6010C
Beryllium		0.46		0.42	mg/Kg	6010C
Chromium		12.4		2.1	mg/Kg	6010C
Cobalt		4.7	J	10.6	mg/Kg	6010C
Copper		7.4		5.3	mg/Kg	6010C
Lead		9.4		2.1	mg/Kg	6010C
Manganese		294		3.2	mg/Kg	6010C
Nickel		38.4		8.4	mg/Kg	6010C
Vanadium		15.4		10.6	mg/Kg	6010C
Zinc		25.0		6.3	mg/Kg	6010C
Mercury		0.013	J	0.017	mg/Kg	7471B
Percent Moisture		12.3		1.0	%	Moisture
Percent Solids		87.7		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-11	**SB-3(1-3')**					
Arsenic		6.3		3.3	mg/Kg	6010C
Barium		57.4		44.4	mg/Kg	6010C
Beryllium		0.52		0.44	mg/Kg	6010C
Chromium		29.7		2.2	mg/Kg	6010C
Cobalt		8.6	J	11.1	mg/Kg	6010C
Copper		43.3		5.5	mg/Kg	6010C
Lead		16.1		2.2	mg/Kg	6010C
Manganese		377		3.3	mg/Kg	6010C
Nickel		65.1		8.9	mg/Kg	6010C
Vanadium		43.2		11.1	mg/Kg	6010C
Zinc		52.5		6.7	mg/Kg	6010C
Percent Moisture		13.4		1.0	%	Moisture
Percent Solids		86.6		1.0	%	Moisture
460-138284-12	**SB-3(10-12')**					
Methylene Chloride		0.00054	J B	0.0010	mg/Kg	8260C
Arsenic		6.0		3.1	mg/Kg	6010C
Barium		78.2		40.8	mg/Kg	6010C
Beryllium		0.70		0.41	mg/Kg	6010C
Chromium		28.4		2.0	mg/Kg	6010C
Cobalt		13.0		10.2	mg/Kg	6010C
Copper		57.0		5.1	mg/Kg	6010C
Lead		13.6		2.0	mg/Kg	6010C
Manganese		630		3.1	mg/Kg	6010C
Nickel		58.0		8.2	mg/Kg	6010C
Vanadium		42.3		10.2	mg/Kg	6010C
Zinc		64.2		6.1	mg/Kg	6010C
Percent Moisture		10.1		1.0	%	Moisture
Percent Solids		89.9		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-13	**SB-4(1-3')**					
Methylene Chloride		0.00073	J B	0.0011	mg/Kg	8260C
Benzo[a]pyrene		0.019	J	0.040	mg/Kg	8270D
Benzo[b]fluoranthene		0.042		0.040	mg/Kg	8270D
Benzo[k]fluoranthene		0.018	J	0.040	mg/Kg	8270D
Chrysene		0.036	J	0.40	mg/Kg	8270D
Fluoranthene		0.039	J	0.40	mg/Kg	8270D
Pyrene		0.034	J	0.40	mg/Kg	8270D
Arsenic		5.8		3.6	mg/Kg	6010C
Barium		75.7		48.2	mg/Kg	6010C
Beryllium		0.55		0.48	mg/Kg	6010C
Chromium		18.5		2.4	mg/Kg	6010C
Cobalt		6.4	J	12.1	mg/Kg	6010C
Copper		31.8		6.0	mg/Kg	6010C
Lead		63.2		2.4	mg/Kg	6010C
Manganese		287		3.6	mg/Kg	6010C
Nickel		26.9		9.6	mg/Kg	6010C
Vanadium		19.3		12.1	mg/Kg	6010C
Zinc		77.3		7.2	mg/Kg	6010C
Mercury		0.038		0.020	mg/Kg	7471B
Percent Moisture		17.0		1.0	%	Moisture
Percent Solids		83.0		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138284-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138284-14	**SB-4(10-12')**					
Methylene Chloride		0.00057	J B	0.00099	mg/Kg	8260C
Acenaphthylene		0.015	J	0.36	mg/Kg	8270D
Benzo[a]anthracene		0.037		0.036	mg/Kg	8270D
Benzo[a]pyrene		0.040		0.036	mg/Kg	8270D
Benzo[b]fluoranthene		0.070		0.036	mg/Kg	8270D
Benzo[g,h,i]perylene		0.031	J	0.36	mg/Kg	8270D
Chrysene		0.050	J	0.36	mg/Kg	8270D
Di-n-butyl phthalate		0.015	J	0.36	mg/Kg	8270D
Fluoranthene		0.10	J	0.36	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.032	J	0.036	mg/Kg	8270D
Isophorone		0.052	J	0.14	mg/Kg	8270D
Phenanthrene		0.031	J	0.36	mg/Kg	8270D
Pyrene		0.055	J	0.36	mg/Kg	8270D
Arsenic		3.4		3.2	mg/Kg	6010C
Barium		44.5		42.4	mg/Kg	6010C
Beryllium		0.42		0.42	mg/Kg	6010C
Chromium		17.6		2.1	mg/Kg	6010C
Cobalt		8.4	J	10.6	mg/Kg	6010C
Copper		131		5.3	mg/Kg	6010C
Lead		14.0		2.1	mg/Kg	6010C
Manganese		563		3.2	mg/Kg	6010C
Nickel		26.8		8.5	mg/Kg	6010C
Vanadium		25.5		10.6	mg/Kg	6010C
Zinc		32.9		6.4	mg/Kg	6010C
Percent Moisture		8.4		1.0	%	Moisture
Percent Solids		91.6		1.0	%	Moisture
460-138284-15	**SB-8WC**					
#2 Diesel Fuel		40		7.4	mg/Kg	8015D
C10-C44		83		9.6	mg/Kg	8015D
Percent Moisture		10.0		1.0	%	Moisture
Percent Solids		90.0		1.0	%	Moisture

METHOD SUMMARY

Client: AKRF Inc Job Number: 460-138284-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Closed System Purge and Trap	TAL EDI		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270D	
Microwave Extraction	TAL EDI		SW846 3546
Gasoline Range Organics (GRO) (GC)	TAL EDI	SW846 8015D	
Closed System Purge and Trap	TAL EDI		SW846 5035
Diesel Range Organics (DRO) (GC)	TAL EDI	SW846 8015D	
Microwave Extraction	TAL EDI		SW846 3546
Organochlorine Pesticides (GC)	TAL EDI	SW846 8081B	
Microwave Extraction	TAL EDI		SW846 3546
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082A	
Microwave Extraction	TAL EDI		SW846 3546
Herbicides (GC)	TAL EDI	SW846 8151A	
Extraction (Herbicides)	TAL EDI		SW846 8151A
Metals (ICP)	TAL EDI	SW846 6010C	
Preparation, Metals	TAL EDI		SW846 3050B
Mercury (CVAA)	TAL EDI	SW846 7471B	
Preparation, Mercury	TAL EDI		SW846 7471B
Chromium, Hexavalent	TAL EDI	SW846 7196A	
Alkaline Digestion (Chromium, Hexavalent)	TAL EDI		SW846 3060A
Percent Moisture	TAL EDI	EPA Moisture	
Cyanide, Total andor Amenable	TAL BUF	SW846 9012B	
Cyanide, Total and/or Amenable, Distillation	TAL BUF		SW846 9012B

Lab References:

TAL BUF = TestAmerica Buffalo

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: AKRF Inc

Job Number: 460-138284-1

Method	Analyst	Analyst ID
SW846 8260C	Boykin, Kenneth	KLB
SW846 8260C	Starzec, Margaret	MZS
SW846 8270D	Hamzi, Yahia A	YAH
SW846 8270D	Zhao, Chunxin	CAZ
SW846 8015D	Sarmiento, Daniel	DAS
SW846 8015D	Kouadio, Sylvia O	SOK
SW846 8081B	Kapoor, Sita	SAK
SW846 8082A	Patel, Jignesh	JHP
SW846 8151A	Kapoor, Sita	SAK
SW846 6010C	Huang, Yixin	YZH
SW846 7471B	Staib, Thomas	TJS
SW846 7196A	Leye, Mamadou	MAL
SW846 9012B	Leader, Michael D	MDL
EPA Moisture	DiGuardia, Joseph L	JLD

SAMPLE SUMMARY

Client: AKRF Inc

Job Number: 460-138284-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-138284-1	SB-2(1-3')	Solid	07/31/2017 0840	08/01/2017 1200
460-138284-2	SB-2(10-12')	Solid	07/31/2017 0855	08/01/2017 1200
460-138284-3	SB-6(1-3')	Solid	07/31/2017 1005	08/01/2017 1200
460-138284-4	SB-6(10-12')	Solid	07/31/2017 1015	08/01/2017 1200
460-138284-5	SB-7(1-3')	Solid	07/31/2017 1035	08/01/2017 1200
460-138284-6	SB-7(5-7')	Solid	07/31/2017 1050	08/01/2017 1200
460-138284-7	SB-8(1-3')	Solid	07/31/2017 1150	08/01/2017 1200
460-138284-8	SB-8(5-7')	Solid	07/31/2017 1210	08/01/2017 1200
460-138284-9	SB-9(1-3')	Solid	07/31/2017 1235	08/01/2017 1200
460-138284-10	SB-9(5-7')	Solid	07/31/2017 1245	08/01/2017 1200
460-138284-11	SB-3(1-3')	Solid	07/31/2017 1440	08/01/2017 1200
460-138284-12	SB-3(10-12')	Solid	07/31/2017 1455	08/01/2017 1200
460-138284-13	SB-4(1-3')	Solid	07/31/2017 1520	08/01/2017 1200
460-138284-14	SB-4(10-12')	Solid	07/31/2017 1530	08/01/2017 1200
460-138284-15	SB-8WC	Solid	07/31/2017 1150	08/01/2017 1200

SAMPLE RESULTS

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1 Date Sampled: 07/31/2017 0840
Client Matrix: Solid % Moisture: 3.9 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71511.D
Dilution:	1.0			Initial Weight/Volume:	5.08 g
Analysis Date:	08/03/2017 1910			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2009				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000094	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000096	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00047	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00043	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.020	U	0.0094	0.020
2-Butanone (MEK)		0.0051	U	0.0011	0.0051
2-Hexanone		0.0051	U	0.00080	0.0051
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0051	U	0.00068	0.0051
Acetone		0.0051	U	0.0039	0.0051
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00044	0.0010
Bromomethane		0.0010	U	0.00049	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00053	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00045	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0051	U	0.0044	0.0051
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.00059	J B	0.00017	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00018	0.0010

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1 | Date Sampled: 07/31/2017 0840
Client Matrix: Solid | % Moisture: 3.9 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71511.D
Dilution:	1.0			Initial Weight/Volume:	5.08 g
Analysis Date:	08/03/2017 1910			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2009				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000097	0.0010
sec-Butylbenzene		0.0010	U	0.000090	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.0010	U	0.00064	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00056	0.0010
Xylenes, Total		0.0020	U	0.00026	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		78 - 135
4-Bromofluorobenzene	121		67 - 126
Dibromofluoromethane (Surr)	113		61 - 149
Toluene-d8 (Surr)	98		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71511.D
Dilution:	1.0			Initial Weight/Volume:	5.08 g
Analysis Date:	08/03/2017 1910			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2009				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-2(10-12')**

Lab Sample ID: 460-138284-2 | Date Sampled: 07/31/2017 0855
Client Matrix: Solid | % Moisture: 3.0 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71512.D
Dilution:	1.0			Initial Weight/Volume:	4.74 g
Analysis Date:	08/03/2017 1934			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00033	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00022	0.0011
1,1-Dichloroethene		0.0011	U	0.00024	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00050	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00032	0.0011
1,2-Dichloropropane		0.0011	U	0.00046	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0054	U	0.0012	0.0054
2-Hexanone		0.0054	U	0.00085	0.0054
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0054	U	0.00072	0.0054
Acetone		0.0054	U	0.0041	0.0054
Benzene		0.0011	U	0.00028	0.0011
Bromoform		0.0011	U	0.00046	0.0011
Bromomethane		0.0011	U	0.00052	0.0011
Carbon disulfide		0.0011	U	0.00029	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00031	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00057	0.0011
Chloroform		0.0011	U	0.00035	0.0011
Chloromethane		0.0011	U	0.00047	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Cyclohexane		0.0011	U	0.00024	0.0011
Dichlorobromomethane		0.0011	U	0.00028	0.0011
Dichlorodifluoromethane		0.0011	U	0.00037	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0054	U	0.0047	0.0054
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00017	0.0011
Methylene Chloride		0.00047	J B	0.00018	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00019	0.0011

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2 Date Sampled: 07/31/2017 0855
Client Matrix: Solid % Moisture: 3.0 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71512.D
Dilution:	1.0			Initial Weight/Volume:	4.74 g
Analysis Date:	08/03/2017 1934			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00015	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000096	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00013	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00068	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00027	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00044	0.0011
Vinyl chloride		0.0011	U	0.00059	0.0011
Xylenes, Total		0.0022	U	0.00028	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		78 - 135
4-Bromofluorobenzene	109		67 - 126
Dibromofluoromethane (Surr)	104		61 - 149
Toluene-d8 (Surr)	90		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-2(10-12')**

Lab Sample ID: 460-138284-2
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71512.D
Dilution:	1.0			Initial Weight/Volume:	4.74 g
Analysis Date:	08/03/2017 1934			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2010				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-6(1-3')**

Lab Sample ID: 460-138284-3 | Date Sampled: 07/31/2017 1005
Client Matrix: Solid | % Moisture: 6.5 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71513.D
Dilution:	1.0			Initial Weight/Volume:	5.23 g
Analysis Date:	08/03/2017 1957			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000094	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000096	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00047	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00043	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.020	U	0.0094	0.020
2-Butanone (MEK)		0.0051	U	0.0011	0.0051
2-Hexanone		0.0051	U	0.00080	0.0051
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0051	U	0.00068	0.0051
Acetone		0.0051	U	0.0039	0.0051
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00043	0.0010
Bromomethane		0.0010	U	0.00048	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00053	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0051	U	0.0044	0.0051
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.0010	U	0.00017	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00018	0.0010

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71513.D
Dilution:	1.0			Initial Weight/Volume:	5.23 g
Analysis Date:	08/03/2017 1957			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000097	0.0010
sec-Butylbenzene		0.0010	U	0.000090	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.0010	U	0.00064	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00056	0.0010
Xylenes, Total		0.0020	U	0.00026	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		78 - 135
4-Bromofluorobenzene	122		67 - 126
Dibromofluoromethane (Surr)	118		61 - 149
Toluene-d8 (Surr)	100		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(1-3')**

Lab Sample ID: 460-138284-3
Client Matrix: Solid
% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71513.D
Dilution:	1.0			Initial Weight/Volume:	5.23 g
Analysis Date:	08/03/2017 1957			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2010				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4 | Date Sampled: 07/31/2017 1015
Client Matrix: Solid | % Moisture: 6.8 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71514.D
Dilution:	1.0			Initial Weight/Volume:	4.87 g
Analysis Date:	08/03/2017 2021			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2011				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00026	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00033	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00023	0.0011
1,1-Dichloroethene		0.0011	U	0.00025	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00051	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00033	0.0011
1,2-Dichloropropane		0.0011	U	0.00047	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0055	U	0.0012	0.0055
2-Hexanone		0.0055	U	0.00086	0.0055
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0055	U	0.00073	0.0055
Acetone		0.0055	U	0.0042	0.0055
Benzene		0.0011	U	0.00028	0.0011
Bromoform		0.0011	U	0.00047	0.0011
Bromomethane		0.0011	U	0.00052	0.0011
Carbon disulfide		0.0011	U	0.00029	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00031	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00058	0.0011
Chloroform		0.0011	U	0.00035	0.0011
Chloromethane		0.0011	U	0.00048	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Cyclohexane		0.0011	U	0.00024	0.0011
Dichlorobromomethane		0.0011	U	0.00028	0.0011
Dichlorodifluoromethane		0.0011	U	0.00037	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0055	U	0.0047	0.0055
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00018	0.0011
Methylene Chloride		0.00061	J B	0.00018	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00019	0.0011

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-6(10-12')

Lab Sample ID: 460-138284-4 Date Sampled: 07/31/2017 1015
Client Matrix: Solid % Moisture: 6.8 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71514.D
Dilution:	1.0			Initial Weight/Volume:	4.87 g
Analysis Date:	08/03/2017 2021			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2011				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000097	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00069	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00027	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00045	0.0011
Vinyl chloride		0.0011	U	0.00060	0.0011
Xylenes, Total		0.0022	U	0.00028	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		78 - 135
4-Bromofluorobenzene	119		67 - 126
Dibromofluoromethane (Surr)	114		61 - 149
Toluene-d8 (Surr)	99		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71514.D
Dilution:	1.0			Initial Weight/Volume:	4.87 g
Analysis Date:	08/03/2017 2021			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2011				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5 Date Sampled: 07/31/2017 1035
Client Matrix: Solid % Moisture: 8.8 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71515.D
Dilution:	1.0			Initial Weight/Volume:	5.75 g
Analysis Date:	08/03/2017 2044			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2012				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00095	U	0.00022	0.00095
1,1,2,2-Tetrachloroethane		0.00095	U	0.00020	0.00095
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00095	U	0.00029	0.00095
1,1,2-Trichloroethane		0.00095	U	0.00017	0.00095
1,1-Dichloroethane		0.00095	U	0.00020	0.00095
1,1-Dichloroethene		0.00095	U	0.00021	0.00095
1,2,3-Trichlorobenzene		0.00095	U	0.00017	0.00095
1,2,4-Trichlorobenzene		0.00095	U	0.000088	0.00095
1,2,4-Trimethylbenzene		0.00095	U	0.000090	0.00095
1,2-Dibromo-3-Chloropropane		0.00095	U	0.00044	0.00095
1,2-Dichlorobenzene		0.00095	U	0.00014	0.00095
1,2-Dichloroethane		0.00095	U	0.00028	0.00095
1,2-Dichloropropane		0.00095	U	0.00040	0.00095
1,3,5-Trimethylbenzene		0.00095	U	0.00011	0.00095
1,3-Dichlorobenzene		0.00095	U	0.00015	0.00095
1,4-Dichlorobenzene		0.00095	U	0.000095	0.00095
1,4-Dioxane		0.019	U	0.0088	0.019
2-Butanone (MEK)		0.0048	U	0.0011	0.0048
2-Hexanone		0.0048	U	0.00074	0.0048
4-Isopropyltoluene		0.00095	U	0.000093	0.00095
4-Methyl-2-pentanone (MIBK)		0.0048	U	0.00063	0.0048
Acetone		0.0048	U	0.0036	0.0048
Benzene		0.00095	U	0.00025	0.00095
Bromoform		0.00095	U	0.00041	0.00095
Bromomethane		0.00095	U	0.00045	0.00095
Carbon disulfide		0.00095	U	0.00025	0.00095
Carbon tetrachloride		0.00095	U	0.00017	0.00095
Chlorobenzene		0.00095	U	0.00017	0.00095
Chlorobromomethane		0.00095	U	0.00027	0.00095
Chlorodibromomethane		0.00095	U	0.00019	0.00095
Chloroethane		0.00095	U	0.00050	0.00095
Chloroform		0.00095	U	0.00030	0.00095
Chloromethane		0.00095	U	0.00041	0.00095
cis-1,2-Dichloroethene		0.00095	U	0.00014	0.00095
cis-1,3-Dichloropropene		0.00095	U	0.00026	0.00095
Cyclohexane		0.00095	U	0.00021	0.00095
Dichlorobromomethane		0.00095	U	0.00025	0.00095
Dichlorodifluoromethane		0.00095	U	0.00032	0.00095
Ethylbenzene		0.00095	U	0.00019	0.00095
Ethylene Dibromide		0.00095	U	0.00017	0.00095
Isopropylbenzene		0.00095	U	0.00012	0.00095
Methyl acetate		0.0048	U	0.0041	0.0048
Methyl tert-butyl ether		0.00095	U	0.00012	0.00095
Methylcyclohexane		0.00095	U	0.00015	0.00095
Methylene Chloride		0.00095	U	0.00016	0.00095
m-Xylene & p-Xylene		0.00095	U	0.00017	0.00095

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71515.D
Dilution:	1.0			Initial Weight/Volume:	5.75 g
Analysis Date:	08/03/2017 2044			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2012				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00095	U	0.00018	0.00095
n-Butylbenzene		0.00095	U	0.00014	0.00095
N-Propylbenzene		0.00095	U	0.00017	0.00095
o-Xylene		0.00095	U	0.000091	0.00095
sec-Butylbenzene		0.00095	U	0.000084	0.00095
Styrene		0.00095	U	0.00012	0.00095
tert-Butylbenzene		0.00095	U	0.00012	0.00095
Tetrachloroethene		0.00095	U	0.00014	0.00095
Toluene		0.00095	U	0.00060	0.00095
trans-1,2-Dichloroethene		0.00095	U	0.00023	0.00095
trans-1,3-Dichloropropene		0.00095	U	0.00025	0.00095
Trichloroethene		0.00095	U	0.00014	0.00095
Trichlorofluoromethane		0.00095	U	0.00039	0.00095
Vinyl chloride		0.00095	U	0.00052	0.00095
Xylenes, Total		0.0019	U	0.00024	0.0019

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		78 - 135
4-Bromofluorobenzene	118		67 - 126
Dibromofluoromethane (Surr)	116		61 - 149
Toluene-d8 (Surr)	101		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-7(1-3')**

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71515.D
Dilution:	1.0			Initial Weight/Volume:	5.75 g
Analysis Date:	08/03/2017 2044			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2012				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6 Date Sampled: 07/31/2017 1050
Client Matrix: Solid % Moisture: 7.4 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71516.D
Dilution:	1.0			Initial Weight/Volume:	4.93 g
Analysis Date:	08/03/2017 2108			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2012				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00026	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00033	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00023	0.0011
1,1-Dichloroethene		0.0011	U	0.00025	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00050	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00032	0.0011
1,2-Dichloropropane		0.0011	U	0.00046	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0055	U	0.0012	0.0055
2-Hexanone		0.0055	U	0.00085	0.0055
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0055	U	0.00073	0.0055
Acetone		0.0055	U	0.0042	0.0055
Benzene		0.0011	U	0.00028	0.0011
Bromoform		0.0011	U	0.00047	0.0011
Bromomethane		0.0011	U	0.00052	0.0011
Carbon disulfide		0.0011	U	0.00029	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00031	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00057	0.0011
Chloroform		0.0011	U	0.00035	0.0011
Chloromethane		0.0011	U	0.00048	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Cyclohexane		0.0011	U	0.00024	0.0011
Dichlorobromomethane		0.0011	U	0.00028	0.0011
Dichlorodifluoromethane		0.0011	U	0.00037	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0055	U	0.0047	0.0055
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00018	0.0011
Methylene Chloride		0.0011	U	0.00018	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00019	0.0011

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6 Date Sampled: 07/31/2017 1050
Client Matrix: Solid % Moisture: 7.4 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71516.D
Dilution:	1.0			Initial Weight/Volume:	4.93 g
Analysis Date:	08/03/2017 2108			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2012				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000096	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00068	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00027	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00044	0.0011
Vinyl chloride		0.0011	U	0.00060	0.0011
Xylenes, Total		0.0022	U	0.00028	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		78 - 135
4-Bromofluorobenzene	111		67 - 126
Dibromofluoromethane (Surr)	111		61 - 149
Toluene-d8 (Surr)	95		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-7(5-7')**

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71516.D
Dilution:	1.0			Initial Weight/Volume:	4.93 g
Analysis Date:	08/03/2017 2108			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2012				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7 | Date Sampled: 07/31/2017 1150
Client Matrix: Solid | % Moisture: 9.9 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71517.D
Dilution:	1.0			Initial Weight/Volume:	6.44 g
Analysis Date:	08/03/2017 2131			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2013				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00086	U	0.00020	0.00086
1,1,2,2-Tetrachloroethane		0.00086	U	0.00018	0.00086
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00086	U	0.00026	0.00086
1,1,2-Trichloroethane		0.00086	U	0.00015	0.00086
1,1-Dichloroethane		0.00086	U	0.00018	0.00086
1,1-Dichloroethene		0.00086	U	0.00019	0.00086
1,2,3-Trichlorobenzene		0.00086	U	0.00016	0.00086
1,2,4-Trichlorobenzene		0.00086	U	0.000079	0.00086
1,2,4-Trimethylbenzene		0.00086	U	0.000081	0.00086
1,2-Dibromo-3-Chloropropane		0.00086	U	0.00040	0.00086
1,2-Dichlorobenzene		0.00086	U	0.00012	0.00086
1,2-Dichloroethane		0.00086	U	0.00026	0.00086
1,2-Dichloropropane		0.00086	U	0.00036	0.00086
1,3,5-Trimethylbenzene		0.00086	U	0.000099	0.00086
1,3-Dichlorobenzene		0.00086	U	0.00014	0.00086
1,4-Dichlorobenzene		0.00086	U	0.000086	0.00086
1,4-Dioxane		0.017	U	0.0079	0.017
2-Butanone (MEK)		0.0043	U	0.00096	0.0043
2-Hexanone		0.0043	U	0.00067	0.0043
4-Isopropyltoluene		0.00086	U	0.000084	0.00086
4-Methyl-2-pentanone (MIBK)		0.0043	U	0.00057	0.0043
Acetone		0.0043	U	0.0033	0.0043
Benzene		0.00086	U	0.00022	0.00086
Bromoform		0.00086	U	0.00037	0.00086
Bromomethane		0.00086	U	0.00041	0.00086
Carbon disulfide		0.00086	U	0.00023	0.00086
Carbon tetrachloride		0.00086	U	0.00016	0.00086
Chlorobenzene		0.00086	U	0.00015	0.00086
Chlorobromomethane		0.00086	U	0.00024	0.00086
Chlorodibromomethane		0.00086	U	0.00017	0.00086
Chloroethane		0.00086	U	0.00045	0.00086
Chloroform		0.00086	U	0.00027	0.00086
Chloromethane		0.00086	U	0.00037	0.00086
cis-1,2-Dichloroethene		0.00086	U	0.00013	0.00086
cis-1,3-Dichloropropene		0.00086	U	0.00024	0.00086
Cyclohexane		0.00086	U	0.00019	0.00086
Dichlorobromomethane		0.00086	U	0.00022	0.00086
Dichlorodifluoromethane		0.00086	U	0.00029	0.00086
Ethylbenzene		0.00086	U	0.00017	0.00086
Ethylene Dibromide		0.00086	U	0.00016	0.00086
Isopropylbenzene		0.00086	U	0.00011	0.00086
Methyl acetate		0.0043	U	0.0037	0.0043
Methyl tert-butyl ether		0.00086	U	0.00011	0.00086
Methylcyclohexane		0.00086	U	0.00014	0.00086
Methylene Chloride		0.00031	J B	0.00014	0.00086
m-Xylene & p-Xylene		0.00086	U	0.00015	0.00086

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-8(1-3')

Lab Sample ID: 460-138284-7 Date Sampled: 07/31/2017 1150
Client Matrix: Solid % Moisture: 9.9 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71517.D
Dilution:	1.0			Initial Weight/Volume:	6.44 g
Analysis Date:	08/03/2017 2131			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2013				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00086	U	0.00016	0.00086
n-Butylbenzene		0.00086	U	0.00012	0.00086
N-Propylbenzene		0.00086	U	0.00015	0.00086
o-Xylene		0.00086	U	0.000082	0.00086
sec-Butylbenzene		0.00086	U	0.000076	0.00086
Styrene		0.00086	U	0.00011	0.00086
tert-Butylbenzene		0.00086	U	0.00011	0.00086
Tetrachloroethene		0.00086	U	0.00012	0.00086
Toluene		0.00086	U	0.00054	0.00086
trans-1,2-Dichloroethene		0.00086	U	0.00021	0.00086
trans-1,3-Dichloropropene		0.00086	U	0.00023	0.00086
Trichloroethene		0.00086	U	0.00012	0.00086
Trichlorofluoromethane		0.00086	U	0.00035	0.00086
Vinyl chloride		0.00086	U	0.00047	0.00086
Xylenes, Total		0.0017	U	0.00022	0.0017

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		78 - 135
4-Bromofluorobenzene	119		67 - 126
Dibromofluoromethane (Surr)	117		61 - 149
Toluene-d8 (Surr)	99		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71517.D
Dilution:	1.0			Initial Weight/Volume:	6.44 g
Analysis Date:	08/03/2017 2131			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2013				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8 Date Sampled: 07/31/2017 1210
Client Matrix: Solid % Moisture: 9.2 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71527.D
Dilution:	1.0			Initial Weight/Volume:	5.20 g
Analysis Date:	08/04/2017 0219			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2013				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00032	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00022	0.0011
1,1-Dichloroethene		0.0011	U	0.00024	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00019	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.000097	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00049	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00015	0.0011
1,2-Dichloroethane		0.0011	U	0.00031	0.0011
1,2-Dichloropropane		0.0011	U	0.00045	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00012	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.021	U	0.0097	0.021
2-Butanone (MEK)		0.0053	U	0.0012	0.0053
2-Hexanone		0.0053	U	0.00083	0.0053
4-Isopropyltoluene		0.0011	U	0.00010	0.0011
4-Methyl-2-pentanone (MIBK)		0.0053	U	0.00070	0.0053
Acetone		0.0053	U	0.0040	0.0053
Benzene		0.0011	U	0.00027	0.0011
Bromoform		0.0011	U	0.00045	0.0011
Bromomethane		0.0011	U	0.00050	0.0011
Carbon disulfide		0.0011	U	0.00028	0.0011
Carbon tetrachloride		0.0011	U	0.00019	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00030	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00055	0.0011
Chloroform		0.0011	U	0.00034	0.0011
Chloromethane		0.0011	U	0.00046	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00016	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Cyclohexane		0.0011	U	0.00023	0.0011
Dichlorobromomethane		0.0011	U	0.00027	0.0011
Dichlorodifluoromethane		0.0011	U	0.00036	0.0011
Ethylbenzene		0.0011	U	0.00021	0.0011
Ethylene Dibromide		0.0011	U	0.00019	0.0011
Isopropylbenzene		0.0011	U	0.00013	0.0011
Methyl acetate		0.0053	U	0.0046	0.0053
Methyl tert-butyl ether		0.0011	U	0.00013	0.0011
Methylcyclohexane		0.0011	U	0.00017	0.0011
Methylene Chloride		0.00045	J B	0.00017	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00018	0.0011

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8 Date Sampled: 07/31/2017 1210
Client Matrix: Solid % Moisture: 9.2 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71527.D
Dilution:	1.0			Initial Weight/Volume:	5.20 g
Analysis Date:	08/04/2017 0219			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2013				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00020	0.0011
n-Butylbenzene		0.0011	U	0.00015	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000093	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00013	0.0011
Tetrachloroethene		0.0011	U	0.00015	0.0011
Toluene		0.0011	U	0.00066	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00026	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00028	0.0011
Trichloroethene		0.0011	U	0.00015	0.0011
Trichlorofluoromethane		0.0011	U	0.00043	0.0011
Vinyl chloride		0.0011	U	0.00058	0.0011
Xylenes, Total		0.0021	U	0.00027	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		78 - 135
4-Bromofluorobenzene	114		67 - 126
Dibromofluoromethane (Surr)	115		61 - 149
Toluene-d8 (Surr)	97		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(5-7')**

Lab Sample ID: 460-138284-8
Client Matrix: Solid
% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71527.D
Dilution:	1.0			Initial Weight/Volume:	5.20 g
Analysis Date:	08/04/2017 0219			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2013				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9 Date Sampled: 07/31/2017 1235
Client Matrix: Solid % Moisture: 8.4 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71528.D
Dilution:	1.0			Initial Weight/Volume:	4.86 g
Analysis Date:	08/04/2017 0242			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2014				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00026	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00034	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00023	0.0011
1,1-Dichloroethene		0.0011	U	0.00025	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00011	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00052	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00033	0.0011
1,2-Dichloropropane		0.0011	U	0.00047	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0056	U	0.0012	0.0056
2-Hexanone		0.0056	U	0.00088	0.0056
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0056	U	0.00075	0.0056
Acetone		0.0056	U	0.0043	0.0056
Benzene		0.0011	U	0.00029	0.0011
Bromoform		0.0011	U	0.00048	0.0011
Bromomethane		0.0011	U	0.00053	0.0011
Carbon disulfide		0.0011	U	0.00030	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00032	0.0011
Chlorodibromomethane		0.0011	U	0.00022	0.0011
Chloroethane		0.0011	U	0.00059	0.0011
Chloroform		0.0011	U	0.00036	0.0011
Chloromethane		0.0011	U	0.00049	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00031	0.0011
Cyclohexane		0.0011	U	0.00025	0.0011
Dichlorobromomethane		0.0011	U	0.00029	0.0011
Dichlorodifluoromethane		0.0011	U	0.00038	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0056	U	0.0048	0.0056
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00018	0.0011
Methylene Chloride		0.00084	J B	0.00018	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00020	0.0011

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9 Date Sampled: 07/31/2017 1235
Client Matrix: Solid % Moisture: 8.4 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71528.D
Dilution:	1.0			Initial Weight/Volume:	4.86 g
Analysis Date:	08/04/2017 0242			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2014				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00020	0.0011
o-Xylene		0.0011	U	0.00011	0.0011
sec-Butylbenzene		0.0011	U	0.000099	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00070	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00028	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00046	0.0011
Vinyl chloride		0.0011	U	0.00061	0.0011
Xylenes, Total		0.0022	U	0.00028	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		78 - 135
4-Bromofluorobenzene	120		67 - 126
Dibromofluoromethane (Surr)	117		61 - 149
Toluene-d8 (Surr)	100		73 - 121

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9 Date Sampled: 07/31/2017 1235
Client Matrix: Solid % Moisture: 8.4 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71528.D
Dilution:	1.0			Initial Weight/Volume:	4.86 g
Analysis Date:	08/04/2017 0242			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2014				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10 | Date Sampled: 07/31/2017 1245
Client Matrix: Solid | % Moisture: 12.3 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71529.D
Dilution:	1.0			Initial Weight/Volume:	5.40 g
Analysis Date:	08/04/2017 0306			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2015				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00032	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00022	0.0011
1,1-Dichloroethene		0.0011	U	0.00024	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00019	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.000097	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.000099	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00049	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00015	0.0011
1,2-Dichloroethane		0.0011	U	0.00031	0.0011
1,2-Dichloropropane		0.0011	U	0.00045	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00012	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.021	U	0.0097	0.021
2-Butanone (MEK)		0.0053	U	0.0012	0.0053
2-Hexanone		0.0053	U	0.00082	0.0053
4-Isopropyltoluene		0.0011	U	0.00010	0.0011
4-Methyl-2-pentanone (MIBK)		0.0053	U	0.00070	0.0053
Acetone		0.0053	U	0.0040	0.0053
Benzene		0.0011	U	0.00027	0.0011
Bromoform		0.0011	U	0.00045	0.0011
Bromomethane		0.0011	U	0.00050	0.0011
Carbon disulfide		0.0011	U	0.00028	0.0011
Carbon tetrachloride		0.0011	U	0.00019	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00030	0.0011
Chlorodibromomethane		0.0011	U	0.00020	0.0011
Chloroethane		0.0011	U	0.00055	0.0011
Chloroform		0.0011	U	0.00034	0.0011
Chloromethane		0.0011	U	0.00046	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00016	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Cyclohexane		0.0011	U	0.00023	0.0011
Dichlorobromomethane		0.0011	U	0.00027	0.0011
Dichlorodifluoromethane		0.0011	U	0.00036	0.0011
Ethylbenzene		0.0011	U	0.00021	0.0011
Ethylene Dibromide		0.0011	U	0.00019	0.0011
Isopropylbenzene		0.0011	U	0.00013	0.0011
Methyl acetate		0.0053	U	0.0045	0.0053
Methyl tert-butyl ether		0.0011	U	0.00013	0.0011
Methylcyclohexane		0.0011	U	0.00017	0.0011
Methylene Chloride		0.00053	J B	0.00017	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00018	0.0011

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-9(5-7')**

Lab Sample ID: 460-138284-10 | Date Sampled: 07/31/2017 1245
Client Matrix: Solid | % Moisture: 12.3 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71529.D
Dilution:	1.0			Initial Weight/Volume:	5.40 g
Analysis Date:	08/04/2017 0306			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2015				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00020	0.0011
n-Butylbenzene		0.0011	U	0.00015	0.0011
N-Propylbenzene		0.0011	U	0.00018	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000093	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00013	0.0011
Tetrachloroethene		0.0011	U	0.00015	0.0011
Toluene		0.0011	U	0.00066	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00026	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00028	0.0011
Trichloroethene		0.0011	U	0.00015	0.0011
Trichlorofluoromethane		0.0011	U	0.00043	0.0011
Vinyl chloride		0.0011	U	0.00058	0.0011
Xylenes, Total		0.0021	U	0.00027	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		78 - 135
4-Bromofluorobenzene	120		67 - 126
Dibromofluoromethane (Surr)	118		61 - 149
Toluene-d8 (Surr)	100		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-9(5-7')**

Lab Sample ID: 460-138284-10
Client Matrix: Solid
% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71529.D
Dilution:	1.0			Initial Weight/Volume:	5.40 g
Analysis Date:	08/04/2017 0306			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2015				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-3(1-3')**

Lab Sample ID: 460-138284-11 | Date Sampled: 07/31/2017 1440
Client Matrix: Solid | % Moisture: 13.4 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71530.D
Dilution:	1.0			Initial Weight/Volume:	6.66 g
Analysis Date:	08/04/2017 0329			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2015				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00087	U	0.00020	0.00087
1,1,2,2-Tetrachloroethane		0.00087	U	0.00019	0.00087
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00087	U	0.00026	0.00087
1,1,2-Trichloroethane		0.00087	U	0.00015	0.00087
1,1-Dichloroethane		0.00087	U	0.00018	0.00087
1,1-Dichloroethene		0.00087	U	0.00019	0.00087
1,2,3-Trichlorobenzene		0.00087	U	0.00016	0.00087
1,2,4-Trichlorobenzene		0.00087	U	0.000080	0.00087
1,2,4-Trimethylbenzene		0.00087	U	0.000081	0.00087
1,2-Dibromo-3-Chloropropane		0.00087	U	0.00040	0.00087
1,2-Dichlorobenzene		0.00087	U	0.00012	0.00087
1,2-Dichloroethane		0.00087	U	0.00026	0.00087
1,2-Dichloropropane		0.00087	U	0.00037	0.00087
1,3,5-Trimethylbenzene		0.00087	U	0.00010	0.00087
1,3-Dichlorobenzene		0.00087	U	0.00014	0.00087
1,4-Dichlorobenzene		0.00087	U	0.000087	0.00087
1,4-Dioxane		0.017	U	0.0080	0.017
2-Butanone (MEK)		0.0043	U	0.00096	0.0043
2-Hexanone		0.0043	U	0.00068	0.0043
4-Isopropyltoluene		0.00087	U	0.000085	0.00087
4-Methyl-2-pentanone (MIBK)		0.0043	U	0.00058	0.0043
Acetone		0.0043	U	0.0033	0.0043
Benzene		0.00087	U	0.00022	0.00087
Bromoform		0.00087	U	0.00037	0.00087
Bromomethane		0.00087	U	0.00041	0.00087
Carbon disulfide		0.00087	U	0.00023	0.00087
Carbon tetrachloride		0.00087	U	0.00016	0.00087
Chlorobenzene		0.00087	U	0.00015	0.00087
Chlorobromomethane		0.00087	U	0.00024	0.00087
Chlorodibromomethane		0.00087	U	0.00017	0.00087
Chloroethane		0.00087	U	0.00045	0.00087
Chloroform		0.00087	U	0.00028	0.00087
Chloromethane		0.00087	U	0.00038	0.00087
cis-1,2-Dichloroethene		0.00087	U	0.00013	0.00087
cis-1,3-Dichloropropene		0.00087	U	0.00024	0.00087
Cyclohexane		0.00087	U	0.00019	0.00087
Dichlorobromomethane		0.00087	U	0.00022	0.00087
Dichlorodifluoromethane		0.00087	U	0.00029	0.00087
Ethylbenzene		0.00087	U	0.00017	0.00087
Ethylene Dibromide		0.00087	U	0.00016	0.00087
Isopropylbenzene		0.00087	U	0.00011	0.00087
Methyl acetate		0.0043	U	0.0037	0.0043
Methyl tert-butyl ether		0.00087	U	0.00011	0.00087
Methylcyclohexane		0.00087	U	0.00014	0.00087
Methylene Chloride		0.00087	U	0.00014	0.00087
m-Xylene & p-Xylene		0.00087	U	0.00015	0.00087

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11 | Date Sampled: 07/31/2017 1440
Client Matrix: Solid | % Moisture: 13.4 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71530.D
Dilution:	1.0			Initial Weight/Volume:	6.66 g
Analysis Date:	08/04/2017 0329			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2015				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00087	U	0.00016	0.00087
n-Butylbenzene		0.00087	U	0.00012	0.00087
N-Propylbenzene		0.00087	U	0.00015	0.00087
o-Xylene		0.00087	U	0.000082	0.00087
sec-Butylbenzene		0.00087	U	0.000076	0.00087
Styrene		0.00087	U	0.00011	0.00087
tert-Butylbenzene		0.00087	U	0.00011	0.00087
Tetrachloroethene		0.00087	U	0.00012	0.00087
Toluene		0.00087	U	0.00054	0.00087
trans-1,2-Dichloroethene		0.00087	U	0.00021	0.00087
trans-1,3-Dichloropropene		0.00087	U	0.00023	0.00087
Trichloroethene		0.00087	U	0.00012	0.00087
Trichlorofluoromethane		0.00087	U	0.00035	0.00087
Vinyl chloride		0.00087	U	0.00047	0.00087
Xylenes, Total		0.0017	U	0.00022	0.0017

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		78 - 135
4-Bromofluorobenzene	116		67 - 126
Dibromofluoromethane (Surr)	117		61 - 149
Toluene-d8 (Surr)	98		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-3(1-3')**

Lab Sample ID: 460-138284-11
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71530.D
Dilution:	1.0			Initial Weight/Volume:	6.66 g
Analysis Date:	08/04/2017 0329			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2015				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-3(10-12')**

Lab Sample ID: 460-138284-12 | Date Sampled: 07/31/2017 1455
Client Matrix: Solid | % Moisture: 10.1 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71531.D
Dilution:	1.0			Initial Weight/Volume:	5.56 g
Analysis Date:	08/04/2017 0353			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2016				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00014	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.020	U	0.0092	0.020
2-Butanone (MEK)		0.0050	U	0.0011	0.0050
2-Hexanone		0.0050	U	0.00078	0.0050
4-Isopropyltoluene		0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)		0.0050	U	0.00066	0.0050
Acetone		0.0050	U	0.0038	0.0050
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00043	0.0010
Bromomethane		0.0010	U	0.00047	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00018	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00028	0.0010
Chlorodibromomethane		0.0010	U	0.00019	0.0010
Chloroethane		0.0010	U	0.00052	0.0010
Chloroform		0.0010	U	0.00032	0.0010
Chloromethane		0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Cyclohexane		0.0010	U	0.00022	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00034	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0050	U	0.0043	0.0050
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.00054	J B	0.00016	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00017	0.0010

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12 Date Sampled: 07/31/2017 1455
Client Matrix: Solid % Moisture: 10.1 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71531.D
Dilution:	1.0			Initial Weight/Volume:	5.56 g
Analysis Date:	08/04/2017 0353			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2016				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00014	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000095	0.0010
sec-Butylbenzene		0.0010	U	0.000088	0.0010
Styrene		0.0010	U	0.00012	0.0010
tert-Butylbenzene		0.0010	U	0.00012	0.0010
Tetrachloroethene		0.0010	U	0.00014	0.0010
Toluene		0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00014	0.0010
Trichlorofluoromethane		0.0010	U	0.00041	0.0010
Vinyl chloride		0.0010	U	0.00055	0.0010
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		78 - 135
4-Bromofluorobenzene	116		67 - 126
Dibromofluoromethane (Surr)	116		61 - 149
Toluene-d8 (Surr)	97		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71531.D
Dilution:	1.0			Initial Weight/Volume:	5.56 g
Analysis Date:	08/04/2017 0353			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2016				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.73	0.0056	J

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13 | Date Sampled: 07/31/2017 1520
Client Matrix: Solid | % Moisture: 17.0 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71532.D
Dilution:	1.0			Initial Weight/Volume:	5.37 g
Analysis Date:	08/04/2017 0417			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2016				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00026	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00034	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00023	0.0011
1,1-Dichloroethene		0.0011	U	0.00025	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00011	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00052	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00033	0.0011
1,2-Dichloropropane		0.0011	U	0.00047	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0056	U	0.0012	0.0056
2-Hexanone		0.0056	U	0.00088	0.0056
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0056	U	0.00075	0.0056
Acetone		0.0056	U	0.0043	0.0056
Benzene		0.0011	U	0.00029	0.0011
Bromoform		0.0011	U	0.00048	0.0011
Bromomethane		0.0011	U	0.00053	0.0011
Carbon disulfide		0.0011	U	0.00030	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00032	0.0011
Chlorodibromomethane		0.0011	U	0.00022	0.0011
Chloroethane		0.0011	U	0.00059	0.0011
Chloroform		0.0011	U	0.00036	0.0011
Chloromethane		0.0011	U	0.00049	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00031	0.0011
Cyclohexane		0.0011	U	0.00025	0.0011
Dichlorobromomethane		0.0011	U	0.00029	0.0011
Dichlorodifluoromethane		0.0011	U	0.00038	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0056	U	0.0048	0.0056
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00018	0.0011
Methylene Chloride		0.00073	J B	0.00018	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00020	0.0011

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13 Date Sampled: 07/31/2017 1520
Client Matrix: Solid % Moisture: 17.0 Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71532.D
Dilution:	1.0			Initial Weight/Volume:	5.37 g
Analysis Date:	08/04/2017 0417			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2016				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00020	0.0011
o-Xylene		0.0011	U	0.00011	0.0011
sec-Butylbenzene		0.0011	U	0.000099	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00070	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00028	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00046	0.0011
Vinyl chloride		0.0011	U	0.00061	0.0011
Xylenes, Total		0.0022	U	0.00028	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		78 - 135
4-Bromofluorobenzene	111		67 - 126
Dibromofluoromethane (Surr)	112		61 - 149
Toluene-d8 (Surr)	94		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-4(1-3')**

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71532.D
Dilution:	1.0			Initial Weight/Volume:	5.37 g
Analysis Date:	08/04/2017 0417			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2016				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-4(10-12')**

Lab Sample ID: 460-138284-14 | Date Sampled: 07/31/2017 1530
Client Matrix: Solid | % Moisture: 8.4 | Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71533.D
Dilution:	1.0			Initial Weight/Volume:	5.52 g
Analysis Date:	08/04/2017 0440			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2017				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00099	U	0.00023	0.00099
1,1,2,2-Tetrachloroethane		0.00099	U	0.00021	0.00099
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00099	U	0.00030	0.00099
1,1,2-Trichloroethane		0.00099	U	0.00018	0.00099
1,1-Dichloroethane		0.00099	U	0.00020	0.00099
1,1-Dichloroethene		0.00099	U	0.00022	0.00099
1,2,3-Trichlorobenzene		0.00099	U	0.00018	0.00099
1,2,4-Trichlorobenzene		0.00099	U	0.000091	0.00099
1,2,4-Trimethylbenzene		0.00099	U	0.000093	0.00099
1,2-Dibromo-3-Chloropropane		0.00099	U	0.00045	0.00099
1,2-Dichlorobenzene		0.00099	U	0.00014	0.00099
1,2-Dichloroethane		0.00099	U	0.00029	0.00099
1,2-Dichloropropane		0.00099	U	0.00042	0.00099
1,3,5-Trimethylbenzene		0.00099	U	0.00011	0.00099
1,3-Dichlorobenzene		0.00099	U	0.00016	0.00099
1,4-Dichlorobenzene		0.00099	U	0.000099	0.00099
1,4-Dioxane		0.020	U	0.0091	0.020
2-Butanone (MEK)		0.0049	U	0.0011	0.0049
2-Hexanone		0.0049	U	0.00077	0.0049
4-Isopropyltoluene		0.00099	U	0.000097	0.00099
4-Methyl-2-pentanone (MIBK)		0.0049	U	0.00066	0.0049
Acetone		0.0049	U	0.0037	0.0049
Benzene		0.00099	U	0.00026	0.00099
Bromoform		0.00099	U	0.00042	0.00099
Bromomethane		0.00099	U	0.00047	0.00099
Carbon disulfide		0.00099	U	0.00026	0.00099
Carbon tetrachloride		0.00099	U	0.00018	0.00099
Chlorobenzene		0.00099	U	0.00018	0.00099
Chlorobromomethane		0.00099	U	0.00028	0.00099
Chlorodibromomethane		0.00099	U	0.00019	0.00099
Chloroethane		0.00099	U	0.00052	0.00099
Chloroform		0.00099	U	0.00032	0.00099
Chloromethane		0.00099	U	0.00043	0.00099
cis-1,2-Dichloroethene		0.00099	U	0.00015	0.00099
cis-1,3-Dichloropropene		0.00099	U	0.00027	0.00099
Cyclohexane		0.00099	U	0.00022	0.00099
Dichlorobromomethane		0.00099	U	0.00025	0.00099
Dichlorodifluoromethane		0.00099	U	0.00033	0.00099
Ethylbenzene		0.00099	U	0.00020	0.00099
Ethylene Dibromide		0.00099	U	0.00018	0.00099
Isopropylbenzene		0.00099	U	0.00012	0.00099
Methyl acetate		0.0049	U	0.0043	0.0049
Methyl tert-butyl ether		0.00099	U	0.00012	0.00099
Methylcyclohexane		0.00099	U	0.00016	0.00099
Methylene Chloride		0.00057	J B	0.00016	0.00099
m-Xylene & p-Xylene		0.00099	U	0.00017	0.00099

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71533.D
Dilution:	1.0			Initial Weight/Volume:	5.52 g
Analysis Date:	08/04/2017 0440			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2017				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00099	U	0.00019	0.00099
n-Butylbenzene		0.00099	U	0.00014	0.00099
N-Propylbenzene		0.00099	U	0.00017	0.00099
o-Xylene		0.00099	U	0.000094	0.00099
sec-Butylbenzene		0.00099	U	0.000087	0.00099
Styrene		0.00099	U	0.00012	0.00099
tert-Butylbenzene		0.00099	U	0.00012	0.00099
Tetrachloroethene		0.00099	U	0.00014	0.00099
Toluene		0.00099	U	0.00062	0.00099
trans-1,2-Dichloroethene		0.00099	U	0.00024	0.00099
trans-1,3-Dichloropropene		0.00099	U	0.00026	0.00099
Trichloroethene		0.00099	U	0.00014	0.00099
Trichlorofluoromethane		0.00099	U	0.00040	0.00099
Vinyl chloride		0.00099	U	0.00054	0.00099
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		78 - 135
4-Bromofluorobenzene	121		67 - 126
Dibromofluoromethane (Surr)	119		61 - 149
Toluene-d8 (Surr)	102		73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453341	Lab File ID:	K71533.D
Dilution:	1.0			Initial Weight/Volume:	5.52 g
Analysis Date:	08/04/2017 0440			Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2017				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.72	0.0053	J N

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1 Date Sampled: 07/31/2017 0840
Client Matrix: Solid % Moisture: 3.9 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46852.D
Dilution:	1.0			Initial Weight/Volume:	15.0361 g
Analysis Date:	08/06/2017 0449			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.34	U	0.029	0.34
1,2,4,5-Tetrachlorobenzene		0.34	U	0.026	0.34
2,2'-oxybis[1-chloropropane]		0.34	U	0.014	0.34
2,3,4,6-Tetrachlorophenol		0.34	U	0.032	0.34
2,4,5-Trichlorophenol		0.34	U	0.034	0.34
2,4,6-Trichlorophenol		0.14	U	0.0098	0.14
2,4-Dichlorophenol		0.14	U	0.0081	0.14
2,4-Dimethylphenol		0.34	U	0.075	0.34
2,4-Dinitrophenol		0.28	U	0.26	0.28
2,4-Dinitrotoluene		0.070	U	0.014	0.070
2,6-Dinitrotoluene		0.070	U	0.018	0.070
2-Chloronaphthalene		0.34	U	0.0078	0.34
2-Chlorophenol		0.34	U	0.0087	0.34
2-Methylnaphthalene		0.34	U	0.0076	0.34
2-Methylphenol		0.34	U	0.015	0.34
2-Nitroaniline		0.34	U	0.011	0.34
2-Nitrophenol		0.34	U	0.012	0.34
3,3'-Dichlorobenzidine		0.14	U	0.038	0.14
3-Nitroaniline		0.34	U	0.010	0.34
4,6-Dinitro-2-methylphenol		0.28	U	0.092	0.28
4-Bromophenyl phenyl ether		0.34	U	0.011	0.34
4-Chloro-3-methylphenol		0.34	U	0.015	0.34
4-Chloroaniline		0.34	U	0.0088	0.34
4-Chlorophenyl phenyl ether		0.34	U	0.010	0.34
4-Methylphenol		0.34	U	0.0093	0.34
4-Nitroaniline		0.34	U	0.013	0.34
4-Nitrophenol		0.70	U	0.16	0.70
Acenaphthene		0.34	U	0.0083	0.34
Acenaphthylene		0.34	U	0.0088	0.34
Acetophenone		0.34	U	0.0075	0.34
Anthracene		0.34	U	0.033	0.34
Atrazine		0.14	U	0.015	0.14
Benzaldehyde		0.34	U	0.026	0.34
Benzo[a]anthracene		0.034	U	0.029	0.034
Benzo[a]pyrene		0.034	U	0.010	0.034
Benzo[b]fluoranthene		0.034	U	0.013	0.034
Benzo[g,h,i]perylene		0.34	U	0.020	0.34
Benzo[k]fluoranthene		0.034	U	0.015	0.034
Bis(2-chloroethoxy)methane		0.34	U	0.011	0.34
Bis(2-chloroethyl)ether		0.034	U	0.0081	0.034
Bis(2-ethylhexyl) phthalate		0.34	U	0.013	0.34
Butyl benzyl phthalate		0.34	U	0.011	0.34
Caprolactam		0.34	U	0.025	0.34
Carbazole		0.34	U	0.0085	0.34
Chrysene		0.34	U	0.0093	0.34
Dibenz(a,h)anthracene		0.034	U	0.018	0.034

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46852.D
Dilution:	1.0			Initial Weight/Volume:	15.0361 g
Analysis Date:	08/06/2017 0449			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.34	U	0.010	0.34
Diethyl phthalate		0.34	U	0.0098	0.34
Dimethyl phthalate		0.34	U	0.010	0.34
Di-n-butyl phthalate		0.34	U	0.010	0.34
Di-n-octyl phthalate		0.34	U	0.017	0.34
Fluoranthene		0.34	U	0.010	0.34
Fluorene		0.34	U	0.0075	0.34
Hexachlorobenzene		0.034	U	0.014	0.034
Hexachlorobutadiene		0.070	U	0.0097	0.070
Hexachlorocyclopentadiene		0.34	U	0.021	0.34
Hexachloroethane		0.034	U	0.013	0.034
Indeno[1,2,3-cd]pyrene		0.034	U	0.023	0.034
Isophorone		0.14	U	0.0074	0.14
Naphthalene		0.34	U	0.0087	0.34
Nitrobenzene		0.034	U	0.011	0.034
N-Nitrosodi-n-propylamine		0.034	U	0.012	0.034
N-Nitrosodiphenylamine		0.34	U	0.031	0.34
Pentachlorophenol		0.28	U	0.042	0.28
Phenanthrene		0.34	U	0.0091	0.34
Phenol		0.34	U	0.011	0.34
Pyrene		0.34	U	0.016	0.34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	82		10 - 103
2-Fluorobiphenyl	68		38 - 95
2-Fluorophenol (Surr)	62		25 - 92
Nitrobenzene-d5 (Surr)	68		37 - 94
Phenol-d5 (Surr)	63		32 - 91
Terphenyl-d14 (Surr)	82		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46852.D
Dilution:	1.0			Initial Weight/Volume:	15.0361 g
Analysis Date:	08/06/2017 0449			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
90611-02-2	2-Cyclopenten-1-one, 3,4,5,5-tetramethyl-	3.16	0.64	J N
	Unknown	4.96	1.0	J

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2 Date Sampled: 07/31/2017 0855
Client Matrix: Solid % Moisture: 3.0 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46853.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/06/2017 0513			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.34	U	0.029	0.34
1,2,4,5-Tetrachlorobenzene		0.34	U	0.025	0.34
2,2'-oxybis[1-chloropropane]		0.34	U	0.014	0.34
2,3,4,6-Tetrachlorophenol		0.34	U	0.032	0.34
2,4,5-Trichlorophenol		0.34	U	0.034	0.34
2,4,6-Trichlorophenol		0.14	U	0.0097	0.14
2,4-Dichlorophenol		0.14	U	0.0080	0.14
2,4-Dimethylphenol		0.34	U	0.075	0.34
2,4-Dinitrophenol		0.27	U	0.26	0.27
2,4-Dinitrotoluene		0.069	U	0.013	0.069
2,6-Dinitrotoluene		0.069	U	0.018	0.069
2-Chloronaphthalene		0.34	U	0.0077	0.34
2-Chlorophenol		0.34	U	0.0086	0.34
2-Methylnaphthalene		0.34	U	0.0075	0.34
2-Methylphenol		0.34	U	0.015	0.34
2-Nitroaniline		0.34	U	0.011	0.34
2-Nitrophenol		0.34	U	0.011	0.34
3,3'-Dichlorobenzidine		0.14	U	0.038	0.14
3-Nitroaniline		0.34	U	0.010	0.34
4,6-Dinitro-2-methylphenol		0.27	U	0.091	0.27
4-Bromophenyl phenyl ether		0.34	U	0.011	0.34
4-Chloro-3-methylphenol		0.34	U	0.015	0.34
4-Chloroaniline		0.34	U	0.0087	0.34
4-Chlorophenyl phenyl ether		0.34	U	0.010	0.34
4-Methylphenol		0.34	U	0.0093	0.34
4-Nitroaniline		0.34	U	0.013	0.34
4-Nitrophenol		0.69	U	0.16	0.69
Acenaphthene		0.34	U	0.0082	0.34
Acenaphthylene		0.34	U	0.0087	0.34
Acetophenone		0.34	U	0.0074	0.34
Anthracene		0.34	U	0.032	0.34
Atrazine		0.14	U	0.015	0.14
Benzaldehyde		0.34	U	0.026	0.34
Benzo[a]anthracene		0.034	U	0.028	0.034
Benzo[a]pyrene		0.034	U	0.010	0.034
Benzo[b]fluoranthene		0.034	U	0.013	0.034
Benzo[g,h,i]perylene		0.34	U	0.020	0.34
Benzo[k]fluoranthene		0.034	U	0.015	0.034
Bis(2-chloroethoxy)methane		0.34	U	0.011	0.34
Bis(2-chloroethyl)ether		0.034	U	0.0080	0.034
Bis(2-ethylhexyl) phthalate		0.34	U	0.013	0.34
Butyl benzyl phthalate		0.34	U	0.010	0.34
Caprolactam		0.34	U	0.024	0.34
Carbazole		0.34	U	0.0084	0.34
Chrysene		0.34	U	0.0093	0.34
Dibenz(a,h)anthracene		0.034	U	0.018	0.034

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2 | Date Sampled: 07/31/2017 0855
Client Matrix: Solid | % Moisture: 3.0 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46853.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/06/2017 0513			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.34	U	0.010	0.34
Diethyl phthalate		0.34	U	0.0097	0.34
Dimethyl phthalate		0.34	U	0.0099	0.34
Di-n-butyl phthalate		0.34	U	0.010	0.34
Di-n-octyl phthalate		0.34	U	0.017	0.34
Fluoranthene		0.34	U	0.010	0.34
Fluorene		0.34	U	0.0074	0.34
Hexachlorobenzene		0.034	U	0.014	0.034
Hexachlorobutadiene		0.069	U	0.0096	0.069
Hexachlorocyclopentadiene		0.34	U	0.021	0.34
Hexachloroethane		0.034	U	0.012	0.034
Indeno[1,2,3-cd]pyrene		0.034	U	0.023	0.034
Isophorone		0.14	U	0.0073	0.14
Naphthalene		0.34	U	0.0086	0.34
Nitrobenzene		0.034	U	0.011	0.034
N-Nitrosodi-n-propylamine		0.034	U	0.011	0.034
N-Nitrosodiphenylamine		0.34	U	0.031	0.34
Pentachlorophenol		0.27	U	0.041	0.27
Phenanthrene		0.34	U	0.0091	0.34
Phenol		0.34	U	0.011	0.34
Pyrene		0.34	U	0.015	0.34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	77		10 - 103
2-Fluorobiphenyl	65		38 - 95
2-Fluorophenol (Surr)	64		25 - 92
Nitrobenzene-d5 (Surr)	68		37 - 94
Phenol-d5 (Surr)	63		32 - 91
Terphenyl-d14 (Surr)	82		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-2(10-12')**

Lab Sample ID: 460-138284-2
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46853.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/06/2017 0513			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.95	0.31	J
	Unknown	3.16	0.33	J
	Unknown	4.96	0.57	J

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3 Date Sampled: 07/31/2017 1005
Client Matrix: Solid % Moisture: 6.5 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46854.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/06/2017 0538			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.015	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.035	0.35
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0083	0.14
2,4-Dimethylphenol		0.35	U	0.078	0.35
2,4-Dinitrophenol		0.28	U	0.27	0.28
2,4-Dinitrotoluene		0.071	U	0.014	0.071
2,6-Dinitrotoluene		0.071	U	0.019	0.071
2-Chloronaphthalene		0.35	U	0.0080	0.35
2-Chlorophenol		0.35	U	0.0090	0.35
2-Methylnaphthalene		0.35	U	0.0078	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.012	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.039	0.14
3-Nitroaniline		0.35	U	0.010	0.35
4,6-Dinitro-2-methylphenol		0.28	U	0.094	0.28
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0091	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.011	0.35
4-Methylphenol		0.35	U	0.0096	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.71	U	0.17	0.71
Acenaphthene		0.35	U	0.0085	0.35
Acenaphthylene		0.35	U	0.0091	0.35
Acetophenone		0.35	U	0.0077	0.35
Anthracene		0.35	U	0.033	0.35
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.35	U	0.027	0.35
Benzo[a]anthracene		0.035	U	0.029	0.035
Benzo[a]pyrene		0.035	U	0.011	0.035
Benzo[b]fluoranthene		0.035	U	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0083	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.025	0.35
Carbazole		0.35	U	0.0087	0.35
Chrysene		0.35	U	0.0096	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3 | Date Sampled: 07/31/2017 1005
Client Matrix: Solid | % Moisture: 6.5 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46854.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/06/2017 0538			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.011	0.35
Diethyl phthalate		0.35	U	0.010	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.011	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.35	U	0.010	0.35
Fluorene		0.35	U	0.0077	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.071	U	0.0099	0.071
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.023	0.035
Isophorone		0.14	U	0.0076	0.14
Naphthalene		0.35	U	0.0090	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.032	0.35
Pentachlorophenol		0.28	U	0.043	0.28
Phenanthrene		0.35	U	0.0094	0.35
Phenol		0.35	U	0.012	0.35
Pyrene		0.35	U	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	64		10 - 103
2-Fluorobiphenyl	52		38 - 95
2-Fluorophenol (Surr)	48		25 - 92
Nitrobenzene-d5 (Surr)	53		37 - 94
Phenol-d5 (Surr)	47		32 - 91
Terphenyl-d14 (Surr)	63		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46854.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/06/2017 0538			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	4.96	0.35	J

Client Sample ID: SB-6(10-12')

Lab Sample ID: 460-138284-4 Date Sampled: 07/31/2017 1015
Client Matrix: Solid % Moisture: 6.8 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46855.D
Dilution:	1.0			Initial Weight/Volume:	15.0331 g
Analysis Date:	08/06/2017 0602			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.015	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.035	0.35
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0084	0.14
2,4-Dimethylphenol		0.35	U	0.078	0.35
2,4-Dinitrophenol		0.28	U	0.27	0.28
2,4-Dinitrotoluene		0.072	U	0.014	0.072
2,6-Dinitrotoluene		0.072	U	0.019	0.072
2-Chloronaphthalene		0.35	U	0.0080	0.35
2-Chlorophenol		0.35	U	0.0090	0.35
2-Methylnaphthalene		0.35	U	0.0078	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.012	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.35	U	0.010	0.35
4,6-Dinitro-2-methylphenol		0.28	U	0.094	0.28
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0091	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.011	0.35
4-Methylphenol		0.35	U	0.0096	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.72	U	0.17	0.72
Acenaphthene		0.35	U	0.0086	0.35
Acenaphthylene		0.35	U	0.0091	0.35
Acetophenone		0.35	U	0.0077	0.35
Anthracene		0.35	U	0.034	0.35
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.35	U	0.027	0.35
Benzo[a]anthracene		0.035	U	0.030	0.035
Benzo[a]pyrene		0.035	U	0.011	0.035
Benzo[b]fluoranthene		0.035	U	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0084	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.025	0.35
Carbazole		0.35	U	0.0088	0.35
Chrysene		0.35	U	0.0096	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-6(10-12')

Lab Sample ID: 460-138284-4 | Date Sampled: 07/31/2017 1015
Client Matrix: Solid | % Moisture: 6.8 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46855.D
Dilution:	1.0			Initial Weight/Volume:	15.0331 g
Analysis Date:	08/06/2017 0602			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.011	0.35
Diethyl phthalate		0.35	U	0.010	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.011	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.35	U	0.010	0.35
Fluorene		0.35	U	0.0077	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.072	U	0.010	0.072
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.024	0.035
Isophorone		0.14	U	0.0076	0.14
Naphthalene		0.35	U	0.0090	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.032	0.35
Pentachlorophenol		0.28	U	0.043	0.28
Phenanthrene		0.35	U	0.0094	0.35
Phenol		0.35	U	0.012	0.35
Pyrene		0.35	U	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	72		10 - 103
2-Fluorobiphenyl	64		38 - 95
2-Fluorophenol (Surr)	60		25 - 92
Nitrobenzene-d5 (Surr)	65		37 - 94
Phenol-d5 (Surr)	60		32 - 91
Terphenyl-d14 (Surr)	73		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(10-12')

Lab Sample ID: 460-138284-4
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46855.D
Dilution:	1.0			Initial Weight/Volume:	15.0331 g
Analysis Date:	08/06/2017 0602			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.17	0.64	J
	Unknown	4.96	0.85	J

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5 Date Sampled: 07/31/2017 1035
Client Matrix: Solid % Moisture: 8.8 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46856.D
Dilution:	1.0			Initial Weight/Volume:	15.0267 g
Analysis Date:	08/06/2017 0627			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0085	0.15
2,4-Dimethylphenol		0.36	U	0.080	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.073	U	0.014	0.073
2,6-Dinitrotoluene		0.073	U	0.019	0.073
2-Chloronaphthalene		0.36	U	0.0082	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.36	U	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.15	U	0.040	0.15
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.097	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.016	0.36
4-Chloroaniline		0.36	U	0.0093	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0099	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.73	U	0.17	0.73
Acenaphthene		0.36	U	0.0088	0.36
Acenaphthylene		0.36	U	0.0093	0.36
Acetophenone		0.36	U	0.0079	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.36	U	0.028	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.036	U	0.011	0.036
Benzo[b]fluoranthene		0.036	U	0.014	0.036
Benzo[g,h,i]perylene		0.36	U	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0085	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0090	0.36
Chrysene		0.36	U	0.0099	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5 | Date Sampled: 07/31/2017 1035
Client Matrix: Solid | % Moisture: 8.8 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46856.D
Dilution:	1.0			Initial Weight/Volume:	15.0267 g
Analysis Date:	08/06/2017 0627			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.011	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.36	U	0.011	0.36
Fluorene		0.36	U	0.0079	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.073	U	0.010	0.073
Hexachlorocyclopentadiene		0.36	U	0.023	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.15	U	0.0078	0.15
Naphthalene		0.36	U	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.36	U	0.0096	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.36	U	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	66		10 - 103
2-Fluorobiphenyl	51		38 - 95
2-Fluorophenol (Surr)	46		25 - 92
Nitrobenzene-d5 (Surr)	51		37 - 94
Phenol-d5 (Surr)	46		32 - 91
Terphenyl-d14 (Surr)	66		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46856.D
Dilution:	1.0			Initial Weight/Volume:	15.0267 g
Analysis Date:	08/06/2017 0627			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.16	0.38	J
	Unknown	4.96	0.62	J

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6 Date Sampled: 07/31/2017 1050
Client Matrix: Solid % Moisture: 7.4 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46857.D
Dilution:	1.0			Initial Weight/Volume:	15.0415 g
Analysis Date:	08/06/2017 0652			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.030	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.035	0.36
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0084	0.14
2,4-Dimethylphenol		0.36	U	0.078	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.072	U	0.014	0.072
2,6-Dinitrotoluene		0.072	U	0.019	0.072
2-Chloronaphthalene		0.36	U	0.0081	0.36
2-Chlorophenol		0.36	U	0.0090	0.36
2-Methylnaphthalene		0.36	U	0.0079	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.095	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.015	0.36
4-Chloroaniline		0.36	U	0.0092	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0097	0.36
4-Nitroaniline		0.36	U	0.013	0.36
4-Nitrophenol		0.72	U	0.17	0.72
Acenaphthene		0.36	U	0.0086	0.36
Acenaphthylene		0.36	U	0.0092	0.36
Acetophenone		0.36	U	0.0078	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.36	U	0.027	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.036	U	0.011	0.036
Benzo[b]fluoranthene		0.036	U	0.014	0.036
Benzo[g,h,i]perylene		0.36	U	0.020	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0084	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0088	0.36
Chrysene		0.36	U	0.0097	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6 | Date Sampled: 07/31/2017 1050
Client Matrix: Solid | % Moisture: 7.4 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46857.D
Dilution:	1.0			Initial Weight/Volume:	15.0415 g
Analysis Date:	08/06/2017 0652			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.010	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.36	U	0.011	0.36
Fluorene		0.36	U	0.0078	0.36
Hexachlorobenzene		0.036	U	0.014	0.036
Hexachlorobutadiene		0.072	U	0.010	0.072
Hexachlorocyclopentadiene		0.36	U	0.022	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.14	U	0.0076	0.14
Naphthalene		0.36	U	0.0090	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.032	0.36
Pentachlorophenol		0.29	U	0.043	0.29
Phenanthrene		0.36	U	0.0095	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.36	U	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	77		10 - 103
2-Fluorobiphenyl	49		38 - 95
2-Fluorophenol (Surr)	44		25 - 92
Nitrobenzene-d5 (Surr)	46		37 - 94
Phenol-d5 (Surr)	45		32 - 91
Terphenyl-d14 (Surr)	77		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Prep Method:	3546	Prep Batch:	460-453670	Lab File ID:	z46857.D
Dilution:	1.0			Initial Weight/Volume:	15.0415 g
Analysis Date:	08/06/2017 0652			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 4**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.95	1.8	J
	Unknown	3.03	0.31	J
	Unknown	3.16	2.4	J
	Unknown	4.96	1.8	J

Client Sample ID: SB-8(1-3')

Lab Sample ID: 460-138284-7 Date Sampled: 07/31/2017 1150
Client Matrix: Solid % Moisture: 9.9 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19412.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/07/2017 0136			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.031	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.027	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.034	0.37
2,4,5-Trichlorophenol		0.37	U	0.036	0.37
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0086	0.15
2,4-Dimethylphenol		0.37	U	0.081	0.37
2,4-Dinitrophenol		0.29	U	0.28	0.29
2,4-Dinitrotoluene		0.074	U	0.015	0.074
2,6-Dinitrotoluene		0.074	U	0.020	0.074
2-Chloronaphthalene		0.37	U	0.0083	0.37
2-Chlorophenol		0.37	U	0.0093	0.37
2-Methylnaphthalene		0.37	U	0.0081	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.012	0.37
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.29	U	0.098	0.29
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0094	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.74	U	0.18	0.74
Acenaphthene		0.37	U	0.0089	0.37
Acenaphthylene		0.37	U	0.0094	0.37
Acetophenone		0.37	U	0.0080	0.37
Anthracene		0.37	U	0.035	0.37
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		0.037	U	0.031	0.037
Benzo[a]pyrene		0.037	U	0.011	0.037
Benzo[b]fluoranthene		0.037	U	0.014	0.037
Benzo[g,h,i]perylene		0.37	U	0.021	0.37
Benzo[k]fluoranthene		0.037	U	0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.011	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0086	0.037
Bis(2-ethylhexyl) phthalate		0.37	U	0.014	0.37
Butyl benzyl phthalate		0.37	U	0.011	0.37
Caprolactam		0.37	U	0.026	0.37
Carbazole		0.37	U	0.0091	0.37
Chrysene		0.37	U	0.010	0.37
Dibenz(a,h)anthracene		0.037	U	0.019	0.037

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7 | Date Sampled: 07/31/2017 1150
Client Matrix: Solid | % Moisture: 9.9 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19412.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/07/2017 0136			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.37	U	0.011	0.37
Diethyl phthalate		0.37	U	0.010	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.37	U	0.011	0.37
Fluorene		0.37	U	0.0080	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.074	U	0.010	0.074
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.013	0.037
Indeno[1,2,3-cd]pyrene		0.037	U	0.024	0.037
Isophorone		0.15	U	0.0079	0.15
Naphthalene		0.37	U	0.0093	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.012	0.037
N-Nitrosodiphenylamine		0.37	U	0.033	0.37
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.37	U	0.0098	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.37	U	0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	64		10 - 103
2-Fluorobiphenyl	70		38 - 95
2-Fluorophenol (Surr)	68		25 - 92
Nitrobenzene-d5 (Surr)	72		37 - 94
Phenol-d5 (Surr)	72		32 - 91
Terphenyl-d14 (Surr)	86		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19412.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/07/2017 0136			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.10	190	J

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-8(5-7')**

Lab Sample ID: 460-138284-8 | Date Sampled: 07/31/2017 1210
Client Matrix: Solid | % Moisture: 9.2 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19413.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/07/2017 0158			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0086	0.15
2,4-Dimethylphenol		0.36	U	0.080	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.074	U	0.014	0.074
2,6-Dinitrotoluene		0.074	U	0.019	0.074
2-Chloronaphthalene		0.36	U	0.0082	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.36	U	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.097	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.016	0.36
4-Chloroaniline		0.36	U	0.0093	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0099	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.74	U	0.17	0.74
Acenaphthene		0.36	U	0.0088	0.36
Acenaphthylene		0.36	U	0.0093	0.36
Acetophenone		0.36	U	0.0079	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.36	U	0.028	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.036	U	0.011	0.036
Benzo[b]fluoranthene		0.036	U	0.014	0.036
Benzo[g,h,i]perylene		0.36	U	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0086	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0090	0.36
Chrysene		0.36	U	0.0099	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-8(5-7')**

Lab Sample ID: 460-138284-8 | Date Sampled: 07/31/2017 1210
Client Matrix: Solid | % Moisture: 9.2 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19413.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/07/2017 0158			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.011	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.36	U	0.011	0.36
Fluorene		0.36	U	0.0079	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.074	U	0.010	0.074
Hexachlorocyclopentadiene		0.36	U	0.023	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.15	U	0.0078	0.15
Naphthalene		0.36	U	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.36	U	0.0097	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.36	U	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	69		10 - 103
2-Fluorobiphenyl	73		38 - 95
2-Fluorophenol (Surr)	72		25 - 92
Nitrobenzene-d5 (Surr)	74		37 - 94
Phenol-d5 (Surr)	75		32 - 91
Terphenyl-d14 (Surr)	87		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19413.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/07/2017 0158			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.12	230	J

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9 Date Sampled: 07/31/2017 1235
Client Matrix: Solid % Moisture: 8.4 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19414.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/07/2017 0220			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0085	0.14
2,4-Dimethylphenol		0.36	U	0.079	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.073	U	0.014	0.073
2,6-Dinitrotoluene		0.073	U	0.019	0.073
2-Chloronaphthalene		0.36	U	0.0082	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.36	U	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.096	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.015	0.36
4-Chloroaniline		0.36	U	0.0093	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0098	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.73	U	0.17	0.73
Acenaphthene		0.36	U	0.0087	0.36
Acenaphthylene		0.36	U	0.0093	0.36
Acetophenone		0.36	U	0.0078	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.36	U	0.027	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.036	U	0.011	0.036
Benzo[b]fluoranthene		0.036	U	0.014	0.036
Benzo[g,h,i]perylene		0.36	U	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0085	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0089	0.36
Chrysene		0.36	U	0.0098	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9 | Date Sampled: 07/31/2017 1235
Client Matrix: Solid | % Moisture: 8.4 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19414.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/07/2017 0220			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.010	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.36	U	0.011	0.36
Fluorene		0.36	U	0.0078	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.073	U	0.010	0.073
Hexachlorocyclopentadiene		0.36	U	0.022	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.14	U	0.0077	0.14
Naphthalene		0.36	U	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.36	U	0.0096	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.36	U	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	71		10 - 103
2-Fluorobiphenyl	76		38 - 95
2-Fluorophenol (Surr)	75		25 - 92
Nitrobenzene-d5 (Surr)	79		37 - 94
Phenol-d5 (Surr)	79		32 - 91
Terphenyl-d14 (Surr)	96		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19414.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/07/2017 0220			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.15	290	J
	Unknown	5.85	0.31	J

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: **SB-9(5-7')**

Lab Sample ID: 460-138284-10 | Date Sampled: 07/31/2017 1245
Client Matrix: Solid | % Moisture: 12.3 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19415.D
Dilution:	1.0			Initial Weight/Volume:	15.0326 g
Analysis Date:	08/07/2017 0241			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.38	U	0.032	0.38
1,2,4,5-Tetrachlorobenzene		0.38	U	0.028	0.38
2,2'-oxybis[1-chloropropane]		0.38	U	0.015	0.38
2,3,4,6-Tetrachlorophenol		0.38	U	0.035	0.38
2,4,5-Trichlorophenol		0.38	U	0.037	0.38
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0089	0.15
2,4-Dimethylphenol		0.38	U	0.083	0.38
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.076	U	0.015	0.076
2,6-Dinitrotoluene		0.076	U	0.020	0.076
2-Chloronaphthalene		0.38	U	0.0085	0.38
2-Chlorophenol		0.38	U	0.0096	0.38
2-Methylnaphthalene		0.38	U	0.0083	0.38
2-Methylphenol		0.38	U	0.016	0.38
2-Nitroaniline		0.38	U	0.012	0.38
2-Nitrophenol		0.38	U	0.013	0.38
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.38	U	0.011	0.38
4,6-Dinitro-2-methylphenol		0.30	U	0.10	0.30
4-Bromophenyl phenyl ether		0.38	U	0.012	0.38
4-Chloro-3-methylphenol		0.38	U	0.016	0.38
4-Chloroaniline		0.38	U	0.0097	0.38
4-Chlorophenyl phenyl ether		0.38	U	0.011	0.38
4-Methylphenol		0.38	U	0.010	0.38
4-Nitroaniline		0.38	U	0.014	0.38
4-Nitrophenol		0.76	U	0.18	0.76
Acenaphthene		0.38	U	0.0091	0.38
Acenaphthylene		0.38	U	0.0097	0.38
Acetophenone		0.38	U	0.0082	0.38
Anthracene		0.38	U	0.036	0.38
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.38	U	0.029	0.38
Benzo[a]anthracene		0.038	U	0.031	0.038
Benzo[a]pyrene		0.038	U	0.011	0.038
Benzo[b]fluoranthene		0.038	U	0.015	0.038
Benzo[g,h,i]perylene		0.38	U	0.022	0.38
Benzo[k]fluoranthene		0.038	U	0.016	0.038
Bis(2-chloroethoxy)methane		0.38	U	0.012	0.38
Bis(2-chloroethyl)ether		0.038	U	0.0089	0.038
Bis(2-ethylhexyl) phthalate		0.38	U	0.015	0.38
Butyl benzyl phthalate		0.38	U	0.012	0.38
Caprolactam		0.38	U	0.027	0.38
Carbazole		0.38	U	0.0093	0.38
Chrysene		0.38	U	0.010	0.38
Dibenz(a,h)anthracene		0.038	U	0.020	0.038

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10 Date Sampled: 07/31/2017 1245
Client Matrix: Solid % Moisture: 12.3 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19415.D
Dilution:	1.0			Initial Weight/Volume:	15.0326 g
Analysis Date:	08/07/2017 0241			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.38	U	0.011	0.38
Diethyl phthalate		0.38	U	0.011	0.38
Dimethyl phthalate		0.38	U	0.011	0.38
Di-n-butyl phthalate		0.38	U	0.011	0.38
Di-n-octyl phthalate		0.38	U	0.019	0.38
Fluoranthene		0.38	U	0.011	0.38
Fluorene		0.38	U	0.0082	0.38
Hexachlorobenzene		0.038	U	0.015	0.038
Hexachlorobutadiene		0.076	U	0.011	0.076
Hexachlorocyclopentadiene		0.38	U	0.023	0.38
Hexachloroethane		0.038	U	0.014	0.038
Indeno[1,2,3-cd]pyrene		0.038	U	0.025	0.038
Isophorone		0.15	U	0.0081	0.15
Naphthalene		0.38	U	0.0096	0.38
Nitrobenzene		0.038	U	0.012	0.038
N-Nitrosodi-n-propylamine		0.038	U	0.013	0.038
N-Nitrosodiphenylamine		0.38	U	0.034	0.38
Pentachlorophenol		0.30	U	0.046	0.30
Phenanthrene		0.38	U	0.010	0.38
Phenol		0.38	U	0.012	0.38
Pyrene		0.38	U	0.017	0.38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	72		10 - 103
2-Fluorobiphenyl	73		38 - 95
2-Fluorophenol (Surr)	70		25 - 92
Nitrobenzene-d5 (Surr)	75		37 - 94
Phenol-d5 (Surr)	72		32 - 91
Terphenyl-d14 (Surr)	89		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10
Client Matrix: Solid

% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19415.D
Dilution:	1.0			Initial Weight/Volume:	15.0326 g
Analysis Date:	08/07/2017 0241			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.06	41	J

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11 Date Sampled: 07/31/2017 1440
Client Matrix: Solid % Moisture: 13.4 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19416.D
Dilution:	1.0			Initial Weight/Volume:	15.0254 g
Analysis Date:	08/07/2017 0303			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.38	U	0.032	0.38
1,2,4,5-Tetrachlorobenzene		0.38	U	0.028	0.38
2,2'-oxybis[1-chloropropane]		0.38	U	0.016	0.38
2,3,4,6-Tetrachlorophenol		0.38	U	0.036	0.38
2,4,5-Trichlorophenol		0.38	U	0.038	0.38
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0090	0.15
2,4-Dimethylphenol		0.38	U	0.084	0.38
2,4-Dinitrophenol		0.31	U	0.29	0.31
2,4-Dinitrotoluene		0.077	U	0.015	0.077
2,6-Dinitrotoluene		0.077	U	0.020	0.077
2-Chloronaphthalene		0.38	U	0.0086	0.38
2-Chlorophenol		0.38	U	0.0097	0.38
2-Methylnaphthalene		0.38	U	0.0084	0.38
2-Methylphenol		0.38	U	0.017	0.38
2-Nitroaniline		0.38	U	0.013	0.38
2-Nitrophenol		0.38	U	0.013	0.38
3,3'-Dichlorobenzidine		0.15	U	0.043	0.15
3-Nitroaniline		0.38	U	0.011	0.38
4,6-Dinitro-2-methylphenol		0.31	U	0.10	0.31
4-Bromophenyl phenyl ether		0.38	U	0.012	0.38
4-Chloro-3-methylphenol		0.38	U	0.016	0.38
4-Chloroaniline		0.38	U	0.0098	0.38
4-Chlorophenyl phenyl ether		0.38	U	0.011	0.38
4-Methylphenol		0.38	U	0.010	0.38
4-Nitroaniline		0.38	U	0.014	0.38
4-Nitrophenol		0.77	U	0.18	0.77
Acenaphthene		0.38	U	0.0092	0.38
Acenaphthylene		0.38	U	0.0098	0.38
Acetophenone		0.38	U	0.0083	0.38
Anthracene		0.38	U	0.036	0.38
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.38	U	0.029	0.38
Benzo[a]anthracene		0.038	U	0.032	0.038
Benzo[a]pyrene		0.038	U	0.012	0.038
Benzo[b]fluoranthene		0.038	U	0.015	0.038
Benzo[g,h,i]perylene		0.38	U	0.022	0.38
Benzo[k]fluoranthene		0.038	U	0.017	0.038
Bis(2-chloroethoxy)methane		0.38	U	0.012	0.38
Bis(2-chloroethyl)ether		0.038	U	0.0090	0.038
Bis(2-ethylhexyl) phthalate		0.38	U	0.015	0.38
Butyl benzyl phthalate		0.38	U	0.012	0.38
Caprolactam		0.38	U	0.027	0.38
Carbazole		0.38	U	0.0094	0.38
Chrysene		0.38	U	0.010	0.38
Dibenz(a,h)anthracene		0.038	U	0.020	0.038

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11 | Date Sampled: 07/31/2017 1440
Client Matrix: Solid | % Moisture: 13.4 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19416.D
Dilution:	1.0			Initial Weight/Volume:	15.0254 g
Analysis Date:	08/07/2017 0303			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.38	U	0.012	0.38
Diethyl phthalate		0.38	U	0.011	0.38
Dimethyl phthalate		0.38	U	0.011	0.38
Di-n-butyl phthalate		0.38	U	0.011	0.38
Di-n-octyl phthalate		0.38	U	0.019	0.38
Fluoranthene		0.38	U	0.011	0.38
Fluorene		0.38	U	0.0083	0.38
Hexachlorobenzene		0.038	U	0.015	0.038
Hexachlorobutadiene		0.077	U	0.011	0.077
Hexachlorocyclopentadiene		0.38	U	0.024	0.38
Hexachloroethane		0.038	U	0.014	0.038
Indeno[1,2,3-cd]pyrene		0.038	U	0.025	0.038
Isophorone		0.15	U	0.0082	0.15
Naphthalene		0.38	U	0.0097	0.38
Nitrobenzene		0.038	U	0.012	0.038
N-Nitrosodi-n-propylamine		0.038	U	0.013	0.038
N-Nitrosodiphenylamine		0.38	U	0.035	0.38
Pentachlorophenol		0.31	U	0.046	0.31
Phenanthrene		0.38	U	0.010	0.38
Phenol		0.38	U	0.012	0.38
Pyrene		0.38	U	0.017	0.38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	52		10 - 103
2-Fluorobiphenyl	52		38 - 95
2-Fluorophenol (Surr)	47		25 - 92
Nitrobenzene-d5 (Surr)	47		37 - 94
Phenol-d5 (Surr)	51		32 - 91
Terphenyl-d14 (Surr)	75		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19416.D
Dilution:	1.0			Initial Weight/Volume:	15.0254 g
Analysis Date:	08/07/2017 0303			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.11	210	J

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12 Date Sampled: 07/31/2017 1455
Client Matrix: Solid % Moisture: 10.1 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19417.D
Dilution:	1.0			Initial Weight/Volume:	15.0425 g
Analysis Date:	08/07/2017 0325			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.031	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.027	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.034	0.37
2,4,5-Trichlorophenol		0.37	U	0.036	0.37
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0087	0.15
2,4-Dimethylphenol		0.37	U	0.081	0.37
2,4-Dinitrophenol		0.29	U	0.28	0.29
2,4-Dinitrotoluene		0.074	U	0.015	0.074
2,6-Dinitrotoluene		0.074	U	0.020	0.074
2-Chloronaphthalene		0.37	U	0.0083	0.37
2-Chlorophenol		0.37	U	0.0093	0.37
2-Methylnaphthalene		0.37	U	0.0081	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.012	0.37
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.29	U	0.098	0.29
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0094	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.74	U	0.18	0.74
Acenaphthene		0.37	U	0.0089	0.37
Acenaphthylene		0.37	U	0.0094	0.37
Acetophenone		0.37	U	0.0080	0.37
Anthracene		0.37	U	0.035	0.37
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		0.037	U	0.031	0.037
Benzo[a]pyrene		0.037	U	0.011	0.037
Benzo[b]fluoranthene		0.037	U	0.014	0.037
Benzo[g,h,i]perylene		0.37	U	0.021	0.37
Benzo[k]fluoranthene		0.037	U	0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.011	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0087	0.037
Bis(2-ethylhexyl) phthalate		0.37	U	0.014	0.37
Butyl benzyl phthalate		0.37	U	0.011	0.37
Caprolactam		0.37	U	0.026	0.37
Carbazole		0.37	U	0.0091	0.37
Chrysene		0.37	U	0.010	0.37
Dibenz(a,h)anthracene		0.037	U	0.019	0.037

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19417.D
Dilution:	1.0			Initial Weight/Volume:	15.0425 g
Analysis Date:	08/07/2017 0325			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.37	U	0.011	0.37
Diethyl phthalate		0.37	U	0.010	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.37	U	0.011	0.37
Fluorene		0.37	U	0.0080	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.074	U	0.010	0.074
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.013	0.037
Indeno[1,2,3-cd]pyrene		0.037	U	0.024	0.037
Isophorone		0.15	U	0.0079	0.15
Naphthalene		0.37	U	0.0093	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.012	0.037
N-Nitrosodiphenylamine		0.37	U	0.033	0.37
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.37	U	0.0098	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.37	U	0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	53		10 - 103
2-Fluorobiphenyl	63		38 - 95
2-Fluorophenol (Surr)	61		25 - 92
Nitrobenzene-d5 (Surr)	65		37 - 94
Phenol-d5 (Surr)	64		32 - 91
Terphenyl-d14 (Surr)	78		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19417.D
Dilution:	1.0			Initial Weight/Volume:	15.0425 g
Analysis Date:	08/07/2017 0325			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.16	400	J
	Unknown	5.54	0.47	J
	Unknown	5.85	0.38	J

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13 Date Sampled: 07/31/2017 1520
Client Matrix: Solid % Moisture: 17.0 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19418.D
Dilution:	1.0			Initial Weight/Volume:	15.0489 g
Analysis Date:	08/07/2017 0347			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.40	U	0.034	0.40
1,2,4,5-Tetrachlorobenzene		0.40	U	0.030	0.40
2,2'-oxybis[1-chloropropane]		0.40	U	0.016	0.40
2,3,4,6-Tetrachlorophenol		0.40	U	0.037	0.40
2,4,5-Trichlorophenol		0.40	U	0.040	0.40
2,4,6-Trichlorophenol		0.16	U	0.011	0.16
2,4-Dichlorophenol		0.16	U	0.0094	0.16
2,4-Dimethylphenol		0.40	U	0.087	0.40
2,4-Dinitrophenol		0.32	U	0.30	0.32
2,4-Dinitrotoluene		0.080	U	0.016	0.080
2,6-Dinitrotoluene		0.080	U	0.021	0.080
2-Chloronaphthalene		0.40	U	0.0090	0.40
2-Chlorophenol		0.40	U	0.010	0.40
2-Methylnaphthalene		0.40	U	0.0088	0.40
2-Methylphenol		0.40	U	0.017	0.40
2-Nitroaniline		0.40	U	0.013	0.40
2-Nitrophenol		0.40	U	0.013	0.40
3,3'-Dichlorobenzidine		0.16	U	0.044	0.16
3-Nitroaniline		0.40	U	0.012	0.40
4,6-Dinitro-2-methylphenol		0.32	U	0.11	0.32
4-Bromophenyl phenyl ether		0.40	U	0.012	0.40
4-Chloro-3-methylphenol		0.40	U	0.017	0.40
4-Chloroaniline		0.40	U	0.010	0.40
4-Chlorophenyl phenyl ether		0.40	U	0.012	0.40
4-Methylphenol		0.40	U	0.011	0.40
4-Nitroaniline		0.40	U	0.015	0.40
4-Nitrophenol		0.80	U	0.19	0.80
Acenaphthene		0.40	U	0.0096	0.40
Acenaphthylene		0.40	U	0.010	0.40
Acetophenone		0.40	U	0.0087	0.40
Anthracene		0.40	U	0.038	0.40
Atrazine		0.16	U	0.018	0.16
Benzaldehyde		0.40	U	0.030	0.40
Benzo[a]anthracene		0.040	U	0.033	0.040
Benzo[a]pyrene		0.019	J	0.012	0.040
Benzo[b]fluoranthene		0.042		0.015	0.040
Benzo[g,h,i]perylene		0.40	U	0.023	0.40
Benzo[k]fluoranthene		0.018	J	0.017	0.040
Bis(2-chloroethoxy)methane		0.40	U	0.012	0.40
Bis(2-chloroethyl)ether		0.040	U	0.0094	0.040
Bis(2-ethylhexyl) phthalate		0.40	U	0.015	0.40
Butyl benzyl phthalate		0.40	U	0.012	0.40
Caprolactam		0.40	U	0.029	0.40
Carbazole		0.40	U	0.0099	0.40
Chrysene		0.036	J	0.011	0.40
Dibenz(a,h)anthracene		0.040	U	0.021	0.040

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13 | Date Sampled: 07/31/2017 1520
Client Matrix: Solid | % Moisture: 17.0 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19418.D
Dilution:	1.0			Initial Weight/Volume:	15.0489 g
Analysis Date:	08/07/2017 0347			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.40	U	0.012	0.40
Diethyl phthalate		0.40	U	0.011	0.40
Dimethyl phthalate		0.40	U	0.012	0.40
Di-n-butyl phthalate		0.40	U	0.012	0.40
Di-n-octyl phthalate		0.40	U	0.020	0.40
Fluoranthene		0.039	J	0.012	0.40
Fluorene		0.40	U	0.0087	0.40
Hexachlorobenzene		0.040	U	0.016	0.040
Hexachlorobutadiene		0.080	U	0.011	0.080
Hexachlorocyclopentadiene		0.40	U	0.025	0.40
Hexachloroethane		0.040	U	0.015	0.040
Indeno[1,2,3-cd]pyrene		0.040	U	0.026	0.040
Isophorone		0.16	U	0.0085	0.16
Naphthalene		0.40	U	0.010	0.40
Nitrobenzene		0.040	U	0.012	0.040
N-Nitrosodi-n-propylamine		0.040	U	0.013	0.040
N-Nitrosodiphenylamine		0.40	U	0.036	0.40
Pentachlorophenol		0.32	U	0.048	0.32
Phenanthrene		0.40	U	0.011	0.40
Phenol		0.40	U	0.013	0.40
Pyrene		0.034	J	0.018	0.40

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	58		10 - 103
2-Fluorobiphenyl	60		38 - 95
2-Fluorophenol (Surr)	61		25 - 92
Nitrobenzene-d5 (Surr)	63		37 - 94
Phenol-d5 (Surr)	61		32 - 91
Terphenyl-d14 (Surr)	74		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	L19418.D
Dilution:	1.0			Initial Weight/Volume:	15.0489 g
Analysis Date:	08/07/2017 0347			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.06	61	J

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14 Date Sampled: 07/31/2017 1530
Client Matrix: Solid % Moisture: 8.4 Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	X263076.D
Dilution:	1.0			Initial Weight/Volume:	15.0216 g
Analysis Date:	08/08/2017 0143			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0085	0.14
2,4-Dimethylphenol		0.36	U	0.079	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.073	U	0.014	0.073
2,6-Dinitrotoluene		0.073	U	0.019	0.073
2-Chloronaphthalene		0.36	U	0.0082	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.36	U	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.096	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.015	0.36
4-Chloroaniline		0.36	U	0.0093	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0098	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.73	U	0.17	0.73
Acenaphthene		0.36	U	0.0087	0.36
Acenaphthylene		0.015	J	0.0093	0.36
Acetophenone		0.36	U	0.0078	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.36	U	0.027	0.36
Benzo[a]anthracene		0.037		0.030	0.036
Benzo[a]pyrene		0.040		0.011	0.036
Benzo[b]fluoranthene		0.070		0.014	0.036
Benzo[g,h,i]perylene		0.031	J	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0085	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0089	0.36
Chrysene		0.050	J	0.0098	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14 | Date Sampled: 07/31/2017 1530
Client Matrix: Solid | % Moisture: 8.4 | Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	X263076.D
Dilution:	1.0			Initial Weight/Volume:	15.0216 g
Analysis Date:	08/08/2017 0143			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.010	0.36
Di-n-butyl phthalate		0.015	J	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.10	J	0.011	0.36
Fluorene		0.36	U	0.0078	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.073	U	0.010	0.073
Hexachlorocyclopentadiene		0.36	U	0.022	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.032	J	0.024	0.036
Isophorone		0.052	J	0.0077	0.14
Naphthalene		0.36	U	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.031	J	0.0096	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.055	J	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	56		10 - 103
2-Fluorobiphenyl	62		38 - 95
2-Fluorophenol (Surr)	45		25 - 92
Nitrobenzene-d5 (Surr)	59		37 - 94
Phenol-d5 (Surr)	48		32 - 91
Terphenyl-d14 (Surr)	49		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-453671	Lab File ID:	X263076.D
Dilution:	1.0			Initial Weight/Volume:	15.0216 g
Analysis Date:	08/08/2017 0143			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
191-07-1	Coronene	12.09	2.5	J N

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8WC**

Lab Sample ID: 460-138284-15
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8015D Gasoline Range Organics (GRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Prep Method:	5035	Prep Batch:	460-453615	Initial Weight/Volume:	5.08 g
Dilution:	50			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2046			Injection Volume:	5 mL
Prep Date:	08/02/2017 2142			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
GRO		2.7	U	2.7	2.7

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	105		80 - 135

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8WC**

Lab Sample ID: 460-138284-15
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8015D Diesel Range Organics (DRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Prep Method:	3546	Prep Batch:	460-453727	Lab File ID:	3F010401.D
Dilution:	1.0			Initial Weight/Volume:	15.0505 g
Analysis Date:	08/04/2017 0925			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
#2 Diesel Fuel		40		1.2	7.4
C10-C44		83		1.2	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	67		25 - 132

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0131 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0913			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0070	U	0.0012	0.0070
4,4'-DDE		0.0070	U	0.00082	0.0070
4,4'-DDT		0.0070	U	0.0013	0.0070
Aldrin		0.0070	U	0.0010	0.0070
alpha-BHC		0.0021	U	0.00071	0.0021
beta-BHC		0.0021	U	0.00078	0.0021
Chlordane (technical)		0.070	U	0.017	0.070
delta-BHC		0.0021	U	0.00043	0.0021
Dieldrin		0.0021	U	0.00090	0.0021
Endosulfan I		0.0070	U	0.0011	0.0070
Endosulfan II		0.0070	U	0.0018	0.0070
Endosulfan sulfate		0.0070	U	0.00087	0.0070
Endrin		0.0070	U	0.0010	0.0070
Endrin aldehyde		0.0070	U	0.0016	0.0070
Endrin ketone		0.0070	U	0.0014	0.0070
gamma-BHC (Lindane)		0.0021	U	0.00064	0.0021
Heptachlor		0.0070	U	0.00082	0.0070
Heptachlor epoxide		0.0070	U	0.0010	0.0070
Methoxychlor		0.0070	U	0.0016	0.0070
Toxaphene		0.070	U	0.025	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	108		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0131 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0913			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		50 - 150
Tetrachloro-m-xylene	104		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0069 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0926			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0069	U	0.0012	0.0069
4,4'-DDE		0.0069	U	0.00081	0.0069
4,4'-DDT		0.0069	U	0.0013	0.0069
Aldrin		0.0069	U	0.0010	0.0069
alpha-BHC		0.0021	U	0.00070	0.0021
beta-BHC		0.0021	U	0.00077	0.0021
Chlordane (technical)		0.069	U	0.017	0.069
delta-BHC		0.0021	U	0.00042	0.0021
Dieldrin		0.0021	U	0.00090	0.0021
Endosulfan I		0.0069	U	0.0011	0.0069
Endosulfan II		0.0069	U	0.0018	0.0069
Endosulfan sulfate		0.0069	U	0.00087	0.0069
Endrin		0.0069	U	0.00099	0.0069
Endrin aldehyde		0.0069	U	0.0016	0.0069
Endrin ketone		0.0069	U	0.0013	0.0069
gamma-BHC (Lindane)		0.0021	U	0.00064	0.0021
Heptachlor		0.0069	U	0.00081	0.0069
Heptachlor epoxide		0.0069	U	0.0010	0.0069
Methoxychlor		0.0069	U	0.0016	0.0069
Toxaphene		0.069	U	0.025	0.069

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		50 - 150
Tetrachloro-m-xylene	113		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-2(10-12')**

Lab Sample ID: 460-138284-2
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0069 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0926			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0937			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0072	U	0.0012	0.0072
4,4'-DDE		0.0072	U	0.00084	0.0072
4,4'-DDT		0.0072	U	0.0013	0.0072
Aldrin		0.0072	U	0.0011	0.0072
alpha-BHC		0.0021	U	0.00073	0.0021
beta-BHC		0.0021	U	0.00080	0.0021
Chlordane (technical)		0.072	U	0.017	0.072
delta-BHC		0.0021	U	0.00044	0.0021
Dieldrin		0.0021	U	0.00093	0.0021
Endosulfan I		0.0072	U	0.0011	0.0072
Endosulfan II		0.0072	U	0.0018	0.0072
Endosulfan sulfate		0.0072	U	0.00090	0.0072
Endrin		0.0072	U	0.0010	0.0072
Endrin aldehyde		0.0072	U	0.0017	0.0072
Endrin ketone		0.0072	U	0.0014	0.0072
gamma-BHC (Lindane)		0.0021	U	0.00066	0.0021
Heptachlor		0.0072	U	0.00084	0.0072
Heptachlor epoxide		0.0072	U	0.0011	0.0072
Methoxychlor		0.0072	U	0.0016	0.0072
Toxaphene		0.072	U	0.026	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		50 - 150
Tetrachloro-m-xylene	106		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(1-3')**

Lab Sample ID: 460-138284-3
Client Matrix: Solid
% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0937			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	108		50 - 150
Tetrachloro-m-xylene	105		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0949			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0072	U	0.0012	0.0072
4,4'-DDE		0.0072	U	0.00085	0.0072
4,4'-DDT		0.0072	U	0.0013	0.0072
Aldrin		0.0072	U	0.0011	0.0072
alpha-BHC		0.0021	U	0.00073	0.0021
beta-BHC		0.0021	U	0.00080	0.0021
Chlordane (technical)		0.072	U	0.017	0.072
delta-BHC		0.0021	U	0.00044	0.0021
Dieldrin		0.0021	U	0.00093	0.0021
Endosulfan I		0.0072	U	0.0011	0.0072
Endosulfan II		0.0072	U	0.0018	0.0072
Endosulfan sulfate		0.0072	U	0.00090	0.0072
Endrin		0.0072	U	0.0010	0.0072
Endrin aldehyde		0.0072	U	0.0017	0.0072
Endrin ketone		0.0072	U	0.0014	0.0072
gamma-BHC (Lindane)		0.0021	U	0.00067	0.0021
Heptachlor		0.0072	U	0.00085	0.0072
Heptachlor epoxide		0.0072	U	0.0011	0.0072
Methoxychlor		0.0072	U	0.0016	0.0072
Toxaphene		0.072	U	0.026	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	137		50 - 150
Tetrachloro-m-xylene	112		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 0949			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		50 - 150
Tetrachloro-m-xylene	111		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0010 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1212			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0073	U	0.0013	0.0073
4,4'-DDE		0.0073	U	0.00087	0.0073
4,4'-DDT		0.0073	U	0.0013	0.0073
Aldrin		0.0073	U	0.0011	0.0073
alpha-BHC		0.0022	U	0.00075	0.0022
beta-BHC		0.0022	U	0.00082	0.0022
Chlordane (technical)		0.073	U	0.018	0.073
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00095	0.0022
Endosulfan I		0.0073	U	0.0011	0.0073
Endosulfan II		0.0073	U	0.0019	0.0073
Endosulfan sulfate		0.0073	U	0.00092	0.0073
Endrin		0.0073	U	0.0011	0.0073
Endrin aldehyde		0.0073	U	0.0017	0.0073
Endrin ketone		0.0073	U	0.0014	0.0073
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0073	U	0.00087	0.0073
Heptachlor epoxide		0.0073	U	0.0011	0.0073
Methoxychlor		0.0073	U	0.0017	0.0073
Toxaphene		0.073	U	0.027	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		50 - 150
Tetrachloro-m-xylene	122		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0010 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1212			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	105		50 - 150
Tetrachloro-m-xylene	106		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0019 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1014			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0072	U	0.0012	0.0072
4,4'-DDE		0.0072	U	0.00085	0.0072
4,4'-DDT		0.0072	U	0.0013	0.0072
Aldrin		0.0072	U	0.0011	0.0072
alpha-BHC		0.0022	U	0.00073	0.0022
beta-BHC		0.0022	U	0.00081	0.0022
Chlordane (technical)		0.072	U	0.017	0.072
delta-BHC		0.0022	U	0.00044	0.0022
Dieldrin		0.0022	U	0.00094	0.0022
Endosulfan I		0.0072	U	0.0011	0.0072
Endosulfan II		0.0072	U	0.0019	0.0072
Endosulfan sulfate		0.0072	U	0.00091	0.0072
Endrin		0.0072	U	0.0010	0.0072
Endrin aldehyde		0.0072	U	0.0017	0.0072
Endrin ketone		0.0072	U	0.0014	0.0072
gamma-BHC (Lindane)		0.0022	U	0.00067	0.0022
Heptachlor		0.0072	U	0.00085	0.0072
Heptachlor epoxide		0.0072	U	0.0011	0.0072
Methoxychlor		0.0072	U	0.0017	0.0072
Toxaphene		0.072	U	0.026	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119		50 - 150
Tetrachloro-m-xylene	119		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-7(5-7')**

Lab Sample ID: 460-138284-6
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0019 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1014			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119		50 - 150
Tetrachloro-m-xylene	115		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1026			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0074	U	0.0013	0.0074
4,4'-DDE		0.0074	U	0.00088	0.0074
4,4'-DDT		0.0074	U	0.0014	0.0074
Aldrin		0.0074	U	0.0011	0.0074
alpha-BHC		0.0022	U	0.00075	0.0022
beta-BHC		0.0022	U	0.00083	0.0022
Chlordane (technical)		0.074	U	0.018	0.074
delta-BHC		0.0022	U	0.00046	0.0022
Dieldrin		0.0022	U	0.00097	0.0022
Endosulfan I		0.0074	U	0.0011	0.0074
Endosulfan II		0.0074	U	0.0019	0.0074
Endosulfan sulfate		0.0074	U	0.00093	0.0074
Endrin		0.0074	U	0.0011	0.0074
Endrin aldehyde		0.0074	U	0.0018	0.0074
Endrin ketone		0.0074	U	0.0014	0.0074
gamma-BHC (Lindane)		0.0022	U	0.00069	0.0022
Heptachlor		0.0074	U	0.00088	0.0074
Heptachlor epoxide		0.0030	J	0.0011	0.0074
Methoxychlor		0.0074	U	0.0017	0.0074
Toxaphene		0.074	U	0.027	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		50 - 150
Tetrachloro-m-xylene	123		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(1-3')

Lab Sample ID: 460-138284-7
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1026			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		50 - 150
Tetrachloro-m-xylene	108		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0016 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1038			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0074	U	0.0013	0.0074
4,4'-DDE		0.0074	U	0.00087	0.0074
4,4'-DDT		0.0074	U	0.0014	0.0074
Aldrin		0.0074	U	0.0011	0.0074
alpha-BHC		0.0022	U	0.00075	0.0022
beta-BHC		0.0022	U	0.00083	0.0022
Chlordane (technical)		0.074	U	0.018	0.074
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00096	0.0022
Endosulfan I		0.0074	U	0.0011	0.0074
Endosulfan II		0.0074	U	0.0019	0.0074
Endosulfan sulfate		0.0074	U	0.00092	0.0074
Endrin		0.0074	U	0.0011	0.0074
Endrin aldehyde		0.0074	U	0.0017	0.0074
Endrin ketone		0.0074	U	0.0014	0.0074
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0074	U	0.00087	0.0074
Heptachlor epoxide		0.0074	U	0.0011	0.0074
Methoxychlor		0.0074	U	0.0017	0.0074
Toxaphene		0.074	U	0.027	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	126		50 - 150
Tetrachloro-m-xylene	118		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0016 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1038			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0050 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1050			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0073	U	0.0012	0.0073
4,4'-DDE		0.0036	J	0.00086	0.0073
4,4'-DDT		0.0035	J	0.0013	0.0073
Aldrin		0.0073	U	0.0011	0.0073
alpha-BHC		0.0022	U	0.00074	0.0022
beta-BHC		0.0022	U	0.00082	0.0022
Chlordane (technical)		0.073	U	0.018	0.073
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00095	0.0022
Endosulfan I		0.0073	U	0.0011	0.0073
Endosulfan II		0.0073	U	0.0019	0.0073
Endosulfan sulfate		0.0073	U	0.00092	0.0073
Endrin		0.0073	U	0.0010	0.0073
Endrin aldehyde		0.0073	U	0.0017	0.0073
Endrin ketone		0.0073	U	0.0014	0.0073
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0073	U	0.00086	0.0073
Heptachlor epoxide		0.0073	U	0.0011	0.0073
Methoxychlor		0.0073	U	0.0017	0.0073
Toxaphene		0.073	U	0.026	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	130		50 - 150
Tetrachloro-m-xylene	118		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0050 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1050			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10
Client Matrix: Solid

% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1102			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0076	U	0.0013	0.0076
4,4'-DDE		0.0076	U	0.00090	0.0076
4,4'-DDT		0.0076	U	0.0014	0.0076
Aldrin		0.0076	U	0.0012	0.0076
alpha-BHC		0.0023	U	0.00078	0.0023
beta-BHC		0.0023	U	0.00086	0.0023
Chlordane (technical)		0.076	U	0.018	0.076
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.00099	0.0023
Endosulfan I		0.0076	U	0.0012	0.0076
Endosulfan II		0.0076	U	0.0020	0.0076
Endosulfan sulfate		0.0076	U	0.00096	0.0076
Endrin		0.0076	U	0.0011	0.0076
Endrin aldehyde		0.0076	U	0.0018	0.0076
Endrin ketone		0.0076	U	0.0015	0.0076
gamma-BHC (Lindane)		0.0023	U	0.00071	0.0023
Heptachlor		0.0076	U	0.00090	0.0076
Heptachlor epoxide		0.0076	U	0.0011	0.0076
Methoxychlor		0.0076	U	0.0017	0.0076
Toxaphene		0.076	U	0.028	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	122		50 - 150
Tetrachloro-m-xylene	100		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10
Client Matrix: Solid

% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1102			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	102		50 - 150
Tetrachloro-m-xylene	100		47 - 150

Client: AKRF Inc Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11 Date Sampled: 07/31/2017 1440
Client Matrix: Solid % Moisture: 13.4 Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0066 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1114			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0077	U	0.0013	0.0077
4,4'-DDE		0.0077	U	0.00091	0.0077
4,4'-DDT		0.0077	U	0.0014	0.0077
Aldrin		0.0077	U	0.0012	0.0077
alpha-BHC		0.0023	U	0.00078	0.0023
beta-BHC		0.0023	U	0.00087	0.0023
Chlordane (technical)		0.077	U	0.019	0.077
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.0010	0.0023
Endosulfan I		0.0077	U	0.0012	0.0077
Endosulfan II		0.0077	U	0.0020	0.0077
Endosulfan sulfate		0.0077	U	0.00097	0.0077
Endrin		0.0077	U	0.0011	0.0077
Endrin aldehyde		0.0077	U	0.0018	0.0077
Endrin ketone		0.0077	U	0.0015	0.0077
gamma-BHC (Lindane)		0.0023	U	0.00072	0.0023
Heptachlor		0.0077	U	0.00091	0.0077
Heptachlor epoxide		0.0077	U	0.0012	0.0077
Methoxychlor		0.0077	U	0.0018	0.0077
Toxaphene		0.077	U	0.028	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0066 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1114			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		50 - 150
Tetrachloro-m-xylene	104		47 - 150

Client: AKRF Inc | Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12 | Date Sampled: 07/31/2017 1455
Client Matrix: Solid | % Moisture: 10.1 | Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0171 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1125			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0074	U	0.0013	0.0074
4,4'-DDE		0.0074	U	0.00088	0.0074
4,4'-DDT		0.0074	U	0.0014	0.0074
Aldrin		0.0074	U	0.0011	0.0074
alpha-BHC		0.0022	U	0.00076	0.0022
beta-BHC		0.0022	U	0.00083	0.0022
Chlordane (technical)		0.074	U	0.018	0.074
delta-BHC		0.0022	U	0.00046	0.0022
Dieldrin		0.0022	U	0.00097	0.0022
Endosulfan I		0.0074	U	0.0011	0.0074
Endosulfan II		0.0074	U	0.0019	0.0074
Endosulfan sulfate		0.0074	U	0.00093	0.0074
Endrin		0.0074	U	0.0011	0.0074
Endrin aldehyde		0.0074	U	0.0018	0.0074
Endrin ketone		0.0074	U	0.0014	0.0074
gamma-BHC (Lindane)		0.0022	U	0.00069	0.0022
Heptachlor		0.0074	U	0.00088	0.0074
Heptachlor epoxide		0.0074	U	0.0011	0.0074
Methoxychlor		0.0074	U	0.0017	0.0074
Toxaphene		0.074	U	0.027	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		50 - 150
Tetrachloro-m-xylene	112		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0171 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1125			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	107		50 - 150
Tetrachloro-m-xylene	104		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0039 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1138			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0081	U	0.0014	0.0081
4,4'-DDE		0.0081	U	0.00095	0.0081
4,4'-DDT		0.0081	U	0.0015	0.0081
Aldrin		0.0081	U	0.0012	0.0081
alpha-BHC		0.0024	U	0.00082	0.0024
beta-BHC		0.0024	U	0.00090	0.0024
Chlordane (technical)		0.081	U	0.020	0.081
delta-BHC		0.0024	U	0.00049	0.0024
Dieldrin		0.0024	U	0.0010	0.0024
Endosulfan I		0.0081	U	0.0012	0.0081
Endosulfan II		0.0081	U	0.0021	0.0081
Endosulfan sulfate		0.0081	U	0.0010	0.0081
Endrin		0.0081	U	0.0012	0.0081
Endrin aldehyde		0.0081	U	0.0019	0.0081
Endrin ketone		0.0081	U	0.0016	0.0081
gamma-BHC (Lindane)		0.0024	U	0.00075	0.0024
Heptachlor		0.0081	U	0.00095	0.0081
Heptachlor epoxide		0.0081	U	0.0012	0.0081
Methoxychlor		0.0081	U	0.0018	0.0081
Toxaphene		0.081	U	0.029	0.081

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		50 - 150
Tetrachloro-m-xylene	108		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid
% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0039 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1138			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		50 - 150
Tetrachloro-m-xylene	107		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0079 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1149			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0073	U	0.0012	0.0073
4,4'-DDE		0.0073	U	0.00086	0.0073
4,4'-DDT		0.0073	U	0.0013	0.0073
Aldrin		0.0073	U	0.0011	0.0073
alpha-BHC		0.0022	U	0.00074	0.0022
beta-BHC		0.0022	U	0.00082	0.0022
Chlordane (technical)		0.073	U	0.018	0.073
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00095	0.0022
Endosulfan I		0.0073	U	0.0011	0.0073
Endosulfan II		0.0073	U	0.0019	0.0073
Endosulfan sulfate		0.0073	U	0.00092	0.0073
Endrin		0.0073	U	0.0010	0.0073
Endrin aldehyde		0.0073	U	0.0017	0.0073
Endrin ketone		0.0073	U	0.0014	0.0073
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0073	U	0.00086	0.0073
Heptachlor epoxide		0.0073	U	0.0011	0.0073
Methoxychlor		0.0073	U	0.0017	0.0073
Toxaphene		0.073	U	0.026	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		50 - 150
Tetrachloro-m-xylene	117		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Prep Method:	3546	Prep Batch:	460-453600	Initial Weight/Volume:	+15.0079 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 1149			Injection Volume:	1 uL
Prep Date:	08/02/2017 2037			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0131 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2021			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.070	U	0.0092	0.070
Aroclor 1221		0.070	U	0.0092	0.070
Aroclor 1232		0.070	U	0.0092	0.070
Aroclor 1242		0.070	U	0.0092	0.070
Aroclor 1248		0.070	U	0.0092	0.070
Aroclor 1254		0.070	U	0.0096	0.070
Aroclor 1260		0.070	U	0.0096	0.070
Aroclor 1268		0.070	U	0.0096	0.070
Aroclor-1262		0.070	U	0.0096	0.070
Polychlorinated biphenyls, Total		0.070	U	0.0096	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0131 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2021			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0069 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2044			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.069	U	0.0092	0.069
Aroclor 1221		0.069	U	0.0092	0.069
Aroclor 1232		0.069	U	0.0092	0.069
Aroclor 1242		0.069	U	0.0092	0.069
Aroclor 1248		0.069	U	0.0092	0.069
Aroclor 1254		0.069	U	0.0095	0.069
Aroclor 1260		0.069	U	0.0095	0.069
Aroclor 1268		0.069	U	0.0095	0.069
Aroclor-1262		0.069	U	0.0095	0.069
Polychlorinated biphenyls, Total		0.069	U	0.0095	0.069

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0069 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2044			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2108			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.072	U	0.0095	0.072
Aroclor 1221		0.072	U	0.0095	0.072
Aroclor 1232		0.072	U	0.0095	0.072
Aroclor 1242		0.072	U	0.0095	0.072
Aroclor 1248		0.072	U	0.0095	0.072
Aroclor 1254		0.072	U	0.0098	0.072
Aroclor 1260		0.072	U	0.0098	0.072
Aroclor 1268		0.072	U	0.0098	0.072
Aroclor-1262		0.072	U	0.0098	0.072
Polychlorinated biphenyls, Total		0.072	U	0.0098	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	126		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2108			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	124		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2131			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.072	U	0.0095	0.072
Aroclor 1221		0.072	U	0.0095	0.072
Aroclor 1232		0.072	U	0.0095	0.072
Aroclor 1242		0.072	U	0.0095	0.072
Aroclor 1248		0.072	U	0.0095	0.072
Aroclor 1254		0.072	U	0.0099	0.072
Aroclor 1260		0.072	U	0.0099	0.072
Aroclor 1268		0.072	U	0.0099	0.072
Aroclor-1262		0.072	U	0.0099	0.072
Polychlorinated biphenyls, Total		0.072	U	0.0099	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(10-12')

Lab Sample ID: 460-138284-4
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2131			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0010 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2155			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.073	U	0.0098	0.073
Aroclor 1221		0.073	U	0.0098	0.073
Aroclor 1232		0.073	U	0.0098	0.073
Aroclor 1242		0.073	U	0.0098	0.073
Aroclor 1248		0.073	U	0.0098	0.073
Aroclor 1254		0.073	U	0.010	0.073
Aroclor 1260		0.073	U	0.010	0.073
Aroclor 1268		0.073	U	0.010	0.073
Aroclor-1262		0.073	U	0.010	0.073
Polychlorinated biphenyls, Total		0.073	U	0.010	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	76	p	35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0010 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2155			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0019 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2218			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.072	U	0.0096	0.072
Aroclor 1221		0.072	U	0.0096	0.072
Aroclor 1232		0.072	U	0.0096	0.072
Aroclor 1242		0.072	U	0.0096	0.072
Aroclor 1248		0.072	U	0.0096	0.072
Aroclor 1254		0.072	U	0.0099	0.072
Aroclor 1260		0.072	U	0.0099	0.072
Aroclor 1268		0.072	U	0.0099	0.072
Aroclor-1262		0.072	U	0.0099	0.072
Polychlorinated biphenyls, Total		0.072	U	0.0099	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	128		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0019 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2218			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	127		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(1-3')

Lab Sample ID: 460-138284-7
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2242			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.074	U	0.0099	0.074
Aroclor 1221		0.074	U	0.0099	0.074
Aroclor 1232		0.074	U	0.0099	0.074
Aroclor 1242		0.074	U	0.0099	0.074
Aroclor 1248		0.074	U	0.0099	0.074
Aroclor 1254		0.074	U	0.010	0.074
Aroclor 1260		0.074	U	0.010	0.074
Aroclor 1268		0.074	U	0.010	0.074
Aroclor-1262		0.074	U	0.010	0.074
Polychlorinated biphenyls, Total		0.074	U	0.010	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(1-3')

Lab Sample ID: 460-138284-7
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2242			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0016 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2305			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.074	U	0.0098	0.074
Aroclor 1221		0.074	U	0.0098	0.074
Aroclor 1232		0.074	U	0.0098	0.074
Aroclor 1242		0.074	U	0.0098	0.074
Aroclor 1248		0.074	U	0.0098	0.074
Aroclor 1254		0.074	U	0.010	0.074
Aroclor 1260		0.074	U	0.010	0.074
Aroclor 1268		0.074	U	0.010	0.074
Aroclor-1262		0.074	U	0.010	0.074
Polychlorinated biphenyls, Total		0.074	U	0.010	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0016 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2305			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	104		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9
Client Matrix: Solid

% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0050 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2328			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.073	U	0.0097	0.073
Aroclor 1221		0.073	U	0.0097	0.073
Aroclor 1232		0.073	U	0.0097	0.073
Aroclor 1242		0.073	U	0.0097	0.073
Aroclor 1248		0.073	U	0.0097	0.073
Aroclor 1254		0.073	U	0.010	0.073
Aroclor 1260		0.073	U	0.010	0.073
Aroclor 1268		0.073	U	0.010	0.073
Aroclor-1262		0.073	U	0.010	0.073
Polychlorinated biphenyls, Total		0.073	U	0.010	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	123		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-9(1-3')**

Lab Sample ID: 460-138284-9
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0050 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2328			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	123		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10
Client Matrix: Solid

% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2352			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.076	U	0.010	0.076
Aroclor 1221		0.076	U	0.010	0.076
Aroclor 1232		0.076	U	0.010	0.076
Aroclor 1242		0.076	U	0.010	0.076
Aroclor 1248		0.076	U	0.010	0.076
Aroclor 1254		0.076	U	0.010	0.076
Aroclor 1260		0.076	U	0.010	0.076
Aroclor 1268		0.076	U	0.010	0.076
Aroclor-1262		0.076	U	0.010	0.076
Polychlorinated biphenyls, Total		0.076	U	0.010	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	122		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10
Client Matrix: Solid

% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0038 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2352			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	122		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0066 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0015			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.077	U	0.010	0.077
Aroclor 1221		0.077	U	0.010	0.077
Aroclor 1232		0.077	U	0.010	0.077
Aroclor 1242		0.077	U	0.010	0.077
Aroclor 1248		0.077	U	0.010	0.077
Aroclor 1254		0.077	U	0.011	0.077
Aroclor 1260		0.077	U	0.011	0.077
Aroclor 1268		0.077	U	0.011	0.077
Aroclor-1262		0.077	U	0.011	0.077
Polychlorinated biphenyls, Total		0.077	U	0.011	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	122		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0066 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0015			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	121		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid

% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0171 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0039			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.074	U	0.0099	0.074
Aroclor 1221		0.074	U	0.0099	0.074
Aroclor 1232		0.074	U	0.0099	0.074
Aroclor 1242		0.074	U	0.0099	0.074
Aroclor 1248		0.074	U	0.0099	0.074
Aroclor 1254		0.074	U	0.010	0.074
Aroclor 1260		0.074	U	0.010	0.074
Aroclor 1268		0.074	U	0.010	0.074
Aroclor-1262		0.074	U	0.010	0.074
Polychlorinated biphenyls, Total		0.074	U	0.010	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-3(10-12')**

Lab Sample ID: 460-138284-12
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0171 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0039			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0039 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0102			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.081	U	0.011	0.081
Aroclor 1221		0.081	U	0.011	0.081
Aroclor 1232		0.081	U	0.011	0.081
Aroclor 1242		0.081	U	0.011	0.081
Aroclor 1248		0.081	U	0.011	0.081
Aroclor 1254		0.081	U	0.011	0.081
Aroclor 1260		0.081	U	0.011	0.081
Aroclor 1268		0.081	U	0.011	0.081
Aroclor-1262		0.081	U	0.011	0.081
Polychlorinated biphenyls, Total		0.081	U	0.011	0.081

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0039 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0102			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	115		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0079 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0126			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.073	U	0.0097	0.073
Aroclor 1221		0.073	U	0.0097	0.073
Aroclor 1232		0.073	U	0.0097	0.073
Aroclor 1242		0.073	U	0.0097	0.073
Aroclor 1248		0.073	U	0.0097	0.073
Aroclor 1254		0.073	U	0.010	0.073
Aroclor 1260		0.073	U	0.010	0.073
Aroclor 1268		0.073	U	0.010	0.073
Aroclor-1262		0.073	U	0.010	0.073
Polychlorinated biphenyls, Total		0.073	U	0.010	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(10-12')

Lab Sample ID: 460-138284-14
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Prep Method:	3546	Prep Batch:	460-453607	Initial Weight/Volume:	+15.0079 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0126			Injection Volume:	1 uL
Prep Date:	08/02/2017 2048			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0131 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1057			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0081	0.018
2,4-D		0.018	U	0.0081	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	125		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-2(1-3')**

Lab Sample ID: 460-138284-1
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0131 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1057			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	108		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0124 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1111			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0080	0.018
2,4-D		0.018	U	0.0080	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	139		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-2(10-12')**

Lab Sample ID: 460-138284-2
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0124 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1111			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0138 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1126			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0083	0.018
2,4-D		0.018	U	0.0083	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	128		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(1-3')**

Lab Sample ID: 460-138284-3
Client Matrix: Solid
% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0138 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1126			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	112		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid

% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0126 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1141			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0084	0.018
2,4-D		0.018	U	0.0084	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	136		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0126 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1141			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0133 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1156			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0086	0.019
2,4-D		0.019	U	0.0086	0.019
Silvex (2,4,5-TP)		0.019	U	0.012	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	130		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-7(1-3')**

Lab Sample ID: 460-138284-5
Client Matrix: Solid
% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0133 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1156			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0122 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1211			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0084	0.018
2,4-D		0.018	U	0.0084	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	118		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-7(5-7')**

Lab Sample ID: 460-138284-6
Client Matrix: Solid
% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0122 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1211			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	112		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0130 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1225			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0087	0.019
2,4-D		0.019	U	0.0087	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0130 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1225			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(5-7')**

Lab Sample ID: 460-138284-8
Client Matrix: Solid
% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0128 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1240			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0086	0.019
2,4-D		0.019	U	0.0086	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	130		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-8(5-7')**

Lab Sample ID: 460-138284-8
Client Matrix: Solid
% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0128 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1240			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	108		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-9(1-3')**

Lab Sample ID: 460-138284-9
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0137 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1455			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0085	0.019
2,4-D		0.019	U	0.0085	0.019
Silvex (2,4,5-TP)		0.019	U	0.012	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	130		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-9(1-3')**

Lab Sample ID: 460-138284-9
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0137 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1455			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	107		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-9(5-7')**

Lab Sample ID: 460-138284-10
Client Matrix: Solid
% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0135 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1310			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0089	0.019
2,4-D		0.019	U	0.0089	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	129		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-9(5-7')**

Lab Sample ID: 460-138284-10
Client Matrix: Solid
% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0135 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1310			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	103		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-3(1-3')**

Lab Sample ID: 460-138284-11
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0130 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1411			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0090	0.020
2,4-D		0.020	U	0.0090	0.020
Silvex (2,4,5-TP)		0.020	U	0.013	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	134		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-3(1-3')**

Lab Sample ID: 460-138284-11
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0130 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1411			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	108		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0124 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1425			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0087	0.019
2,4-D		0.019	U	0.0087	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	137		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-3(10-12')**

Lab Sample ID: 460-138284-12
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0124 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1425			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	108		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0129 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1440			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0094	0.020
2,4-D		0.020	U	0.0094	0.020
Silvex (2,4,5-TP)		0.020	U	0.014	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	131		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-4(1-3')**

Lab Sample ID: 460-138284-13
Client Matrix: Solid
% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0129 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1440			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	105		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-4(10-12')**

Lab Sample ID: 460-138284-14
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0137 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1356			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0085	0.019
2,4-D		0.019	U	0.0085	0.019
Silvex (2,4,5-TP)		0.019	U	0.012	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	130		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-4(10-12')**

Lab Sample ID: 460-138284-14
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-453880	Initial Weight/Volume:	30.0137 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1356			Injection Volume:	1 uL
Prep Date:	08/03/2017 2238			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/31/2017 0840
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.06 g
Analysis Date:	08/03/2017 1431			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.9	U	0.47	3.9
Arsenic		1.3	J	0.73	2.9
Barium		17.0	J	3.2	39.3
Beryllium		0.20	J	0.045	0.39
Cadmium		0.79	U	0.12	0.79
Chromium		10		0.54	2.0
Cobalt		4.9	J	1.1	9.8
Copper		9.1		1.1	4.9
Lead		3.4		0.59	2.0
Manganese		195		0.30	2.9
Nickel		45.4		0.74	7.9
Selenium		3.9	U	1.2	3.9
Silver		2.0	U	0.30	2.0
Thallium		3.9	U	1.2	3.9
Vanadium		13.0		1.2	9.8
Zinc		15.4		0.51	5.9

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/04/2017 0851			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017	U	0.011	0.017

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 460-138284-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 07/31/2017 0855
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.04 g
Analysis Date:	08/03/2017 1434			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.0	U	0.48	4.0
Arsenic		3.0	U	0.73	3.0
Barium		23.1	J	3.2	39.6
Beryllium		0.19	J	0.046	0.40
Cadmium		0.79	U	0.12	0.79
Chromium		8.6		0.55	2.0
Cobalt		4.9	J	1.1	9.9
Copper		9.3		1.1	5.0
Lead		2.4		0.60	2.0
Manganese		229		0.31	3.0
Nickel		61.4		0.75	7.9
Selenium		4.0	U	1.2	4.0
Silver		2.0	U	0.30	2.0
Thallium		4.0	U	1.2	4.0
Vanadium		11.8		1.2	9.9
Zinc		17.1		0.51	5.9

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/04/2017 0856			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017	U	0.011	0.017

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3
Client Matrix: Solid

% Moisture: 6.5

Date Sampled: 07/31/2017 1005
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.07 g
Analysis Date:	08/03/2017 1438			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.0	U	0.48	4.0
Arsenic		6.4		0.74	3.0
Barium		39.5	J	3.2	40.0
Beryllium		0.26	J	0.046	0.40
Cadmium		0.80	U	0.12	0.80
Chromium		11.9		0.55	2.0
Cobalt		5.6	J	1.1	10
Copper		17.7		1.1	5.0
Lead		27.9		0.60	2.0
Manganese		202		0.31	3.0
Nickel		37.9		0.76	8.0
Selenium		4.0	U	1.2	4.0
Silver		2.0	U	0.30	2.0
Thallium		4.0	U	1.2	4.0
Vanadium		13.8		1.2	10
Zinc		30.9		0.52	6.0

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/04/2017 0858			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.024		0.011	0.018

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-6(10-12')**

Lab Sample ID: 460-138284-4
Client Matrix: Solid
% Moisture: 6.8

Date Sampled: 07/31/2017 1015
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.04 g
Analysis Date:	08/03/2017 1454			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.1	U	0.50	4.1
Arsenic		0.79	J	0.76	3.1
Barium		15.0	J	3.3	41.3
Beryllium		0.16	J	0.047	0.41
Cadmium		0.83	U	0.12	0.83
Chromium		8.0		0.57	2.1
Cobalt		3.7	J	1.2	10.3
Copper		9.3		1.2	5.2
Lead		2.7		0.62	2.1
Manganese		151		0.32	3.1
Nickel		37.0		0.78	8.3
Selenium		4.1	U	1.2	4.1
Silver		2.1	U	0.31	2.1
Thallium		4.1	U	1.2	4.1
Vanadium		10.3		1.2	10.3
Zinc		15.0		0.53	6.2

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 0859			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017	U	0.011	0.017

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5
Client Matrix: Solid

% Moisture: 8.8

Date Sampled: 07/31/2017 1035
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.09 g
Analysis Date:	08/02/2017 1417			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.0	U	0.48	4.0
Arsenic		1.8	J	0.74	3.0
Barium		34.3	J	3.3	40.3
Beryllium		0.26	J	0.046	0.40
Cadmium		0.81	U	0.12	0.81
Chromium		12.3		0.56	2.0
Cobalt		6.1	J	1.1	10.1
Copper		22.6		1.1	5.0
Lead		22.3		0.61	2.0
Manganese		211		0.31	3.0
Nickel		47.7		0.76	8.1
Selenium		4.0	U	1.2	4.0
Silver		2.0	U	0.31	2.0
Thallium		4.0	U	1.2	4.0
Vanadium		15.1		1.2	10.1
Zinc		34.9		0.52	6.0

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/04/2017 0901			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018		0.012	0.018

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/31/2017 1050
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.05 g
Analysis Date:	08/02/2017 1413			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.1	U	0.49	4.1
Arsenic		2.5	J	0.76	3.1
Barium		35.2	J	3.3	41.2
Beryllium		0.37	J	0.047	0.41
Cadmium		0.82	U	0.12	0.82
Chromium		11.1		0.57	2.1
Cobalt		5.6	J	1.2	10.3
Copper		10.9		1.2	5.1
Lead		11.1		0.62	2.1
Manganese		272		0.32	3.1
Nickel		27.8		0.78	8.2
Selenium		4.1	U	1.2	4.1
Silver		2.1	U	0.31	2.1
Thallium		4.1	U	1.2	4.1
Vanadium		14.3		1.2	10.3
Zinc		29.4		0.53	6.2

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 0903			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.022		0.011	0.017

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(1-3')

Lab Sample ID: 460-138284-7
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 07/31/2017 1150
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.07 g
Analysis Date:	08/02/2017 1409			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.50	4.2
Arsenic		0.98	J	0.77	3.1
Barium		59.2		3.4	41.5
Beryllium		0.42		0.048	0.42
Cadmium		0.83	U	0.12	0.83
Chromium		12.2		0.58	2.1
Cobalt		6.6	J	1.2	10.4
Copper		10.4		1.2	5.2
Lead		13.9		0.63	2.1
Manganese		544		0.32	3.1
Nickel		42.5		0.79	8.3
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		15.8		1.2	10.4
Zinc		28.0		0.54	6.2

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453922	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1136			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0743				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.024		0.011	0.017

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-8(5-7')

Lab Sample ID: 460-138284-8
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 07/31/2017 1210
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.05 g
Analysis Date:	08/02/2017 1405			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.50	4.2
Arsenic		2.4	J	0.78	3.1
Barium		44.2		3.4	42.0
Beryllium		0.35	J	0.048	0.42
Cadmium		0.84	U	0.12	0.84
Chromium		17.1		0.58	2.1
Cobalt		7.7	J	1.2	10.5
Copper		14.3		1.2	5.2
Lead		71.8		0.63	2.1
Manganese		298		0.33	3.1
Nickel		59.6		0.80	8.4
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		16.9		1.2	10.5
Zinc		49.4		0.54	6.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/04/2017 0946			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.042		0.012	0.018

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1235
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.00 g
Analysis Date:	08/02/2017 1401			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.4	U	0.52	4.4
Arsenic		2.6	J	0.81	3.3
Barium		24.5	J	3.5	43.7
Beryllium		0.31	J	0.050	0.44
Cadmium		0.87	U	0.13	0.87
Chromium		12.8		0.61	2.2
Cobalt		7.0	J	1.2	10.9
Copper		8.2		1.2	5.5
Lead		5.9		0.66	2.2
Manganese		240		0.34	3.3
Nickel		61.7		0.83	8.7
Selenium		4.4	U	1.3	4.4
Silver		2.2	U	0.33	2.2
Thallium		4.4	U	1.3	4.4
Vanadium		11.7		1.3	10.9
Zinc		24.1		0.56	6.5

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/04/2017 0948			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.012	0.018

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-9(5-7')

Lab Sample ID: 460-138284-10
Client Matrix: Solid

% Moisture: 12.3

Date Sampled: 07/31/2017 1245
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.08 g
Analysis Date:	08/02/2017 1357			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.51	4.2
Arsenic		1.5	J	0.78	3.2
Barium		55.6		3.4	42.2
Beryllium		0.46		0.049	0.42
Cadmium		0.84	U	0.13	0.84
Chromium		12.4		0.59	2.1
Cobalt		4.7	J	1.2	10.6
Copper		7.4		1.2	5.3
Lead		9.4		0.64	2.1
Manganese		294		0.33	3.2
Nickel		38.4		0.80	8.4
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		15.4		1.3	10.6
Zinc		25.0		0.55	6.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	08/04/2017 0949			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.013	J	0.011	0.017

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 07/31/2017 1440
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.04 g
Analysis Date:	08/02/2017 1342			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.4	U	0.53	4.4
Arsenic		6.3		0.82	3.3
Barium		57.4		3.6	44.4
Beryllium		0.52		0.051	0.44
Cadmium		0.89	U	0.13	0.89
Chromium		29.7		0.62	2.2
Cobalt		8.6	J	1.3	11.1
Copper		43.3		1.3	5.5
Lead		16.1		0.67	2.2
Manganese		377		0.34	3.3
Nickel		65.1		0.84	8.9
Selenium		4.4	U	1.3	4.4
Silver		2.2	U	0.34	2.2
Thallium		4.4	U	1.3	4.4
Vanadium		43.2		1.3	11.1
Zinc		52.5		0.57	6.7

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 0951			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.019	U	0.012	0.019

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-3(10-12')

Lab Sample ID: 460-138284-12
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 07/31/2017 1455
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.09 g
Analysis Date:	08/02/2017 1338			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.1	U	0.49	4.1
Arsenic		6.0		0.76	3.1
Barium		78.2		3.3	40.8
Beryllium		0.70		0.047	0.41
Cadmium		0.82	U	0.12	0.82
Chromium		28.4		0.57	2.0
Cobalt		13.0		1.2	10.2
Copper		57.0		1.2	5.1
Lead		13.6		0.62	2.0
Manganese		630		0.32	3.1
Nickel		58.0		0.77	8.2
Selenium		4.1	U	1.2	4.1
Silver		2.0	U	0.31	2.0
Thallium		4.1	U	1.2	4.1
Vanadium		42.3		1.2	10.2
Zinc		64.2		0.53	6.1

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	08/04/2017 0953			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.011	0.018

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: SB-4(1-3')

Lab Sample ID: 460-138284-13
Client Matrix: Solid

% Moisture: 17.0

Date Sampled: 07/31/2017 1520
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.00 g
Analysis Date:	08/02/2017 1334			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.8	U	0.58	4.8
Arsenic		5.8		0.89	3.6
Barium		75.7		3.9	48.2
Beryllium		0.55		0.055	0.48
Cadmium		0.96	U	0.14	0.96
Chromium		18.5		0.67	2.4
Cobalt		6.4	J	1.4	12.1
Copper		31.8		1.4	6.0
Lead		63.2		0.73	2.4
Manganese		287		0.37	3.6
Nickel		26.9		0.91	9.6
Selenium		4.8	U	1.5	4.8
Silver		2.4	U	0.37	2.4
Thallium		4.8	U	1.4	4.8
Vanadium		19.3		1.4	12.1
Zinc		77.3		0.62	7.2

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0954			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.038		0.013	0.020

Client: AKRF Inc

Job Number: 460-138284-1

Client Sample ID: **SB-4(10-12')**

Lab Sample ID: 460-138284-14
Client Matrix: Solid
% Moisture: 8.4

Date Sampled: 07/31/2017 1530
Date Received: 08/01/2017 1200

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453492	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0			Initial Weight/Volume:	1.03 g
Analysis Date:	08/02/2017 1330			Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.51	4.2
Arsenic		3.4		0.78	3.2
Barium		44.5		3.4	42.4
Beryllium		0.42		0.049	0.42
Cadmium		0.85	U	0.13	0.85
Chromium		17.6		0.59	2.1
Cobalt		8.4	J	1.2	10.6
Copper		131		1.2	5.3
Lead		14.0		0.64	2.1
Manganese		563		0.33	3.2
Nickel		26.8		0.80	8.5
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.3	4.2
Vanadium		25.5		1.3	10.6
Zinc		32.9		0.55	6.4

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 0956			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.011	0.018

General Chemistry

Client Sample ID: SB-2(1-3')

Lab Sample ID: 460-138284-1 Date Sampled: 07/31/2017 0840
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	96.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-2(10-12')**

Lab Sample ID: 460-138284-2 Date Sampled: 07/31/2017 0855
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	97.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-6(1-3')

Lab Sample ID: 460-138284-3 Date Sampled: 07/31/2017 1005
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.5		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	93.5		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-6(10-12')

Lab Sample ID: 460-138284-4 Date Sampled: 07/31/2017 1015
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	93.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-7(1-3')

Lab Sample ID: 460-138284-5 Date Sampled: 07/31/2017 1035
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	91.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-7(5-7')

Lab Sample ID: 460-138284-6 Date Sampled: 07/31/2017 1050
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	92.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-8(1-3')**

Lab Sample ID: 460-138284-7 Date Sampled: 07/31/2017 1150
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	90.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-8(5-7')**

Lab Sample ID: 460-138284-8 Date Sampled: 07/31/2017 1210
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	90.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-9(1-3')

Lab Sample ID: 460-138284-9 Date Sampled: 07/31/2017 1235
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	91.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-9(5-7')**

Lab Sample ID: 460-138284-10 Date Sampled: 07/31/2017 1245
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N
Percent Solids	87.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454126	Analysis Date: 08/04/2017 2001						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-3(1-3')

Lab Sample ID: 460-138284-11 Date Sampled: 07/31/2017 1440
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N
Percent Solids	86.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-3(10-12')**

Lab Sample ID: 460-138284-12 Date Sampled: 07/31/2017 1455
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N
Percent Solids	89.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-4(1-3')**

Lab Sample ID: 460-138284-13 Date Sampled: 07/31/2017 1520
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N
Percent Solids	83.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-4(10-12')**

Lab Sample ID: 460-138284-14 Date Sampled: 07/31/2017 1530
Client Matrix: Solid Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N
Percent Solids	91.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-8WC**

Lab Sample ID: 460-138284-15 Date Sampled: 07/31/2017 1150
Client Matrix: Solid % Moisture: 10.0 Date Received: 08/01/2017 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium, hexavalent	2.2	U	mg/Kg	0.44	2.2	1.0	7196A
Analysis Batch: 460-454349	Analysis Date: 08/06/2017 1315						DryWt Corrected: Y
Prep Batch: 460-454251	Prep Date: 08/05/2017 1744						
Cyanide, Total	1.1	U	mg/Kg	0.53	1.1	1.0	9012B
Analysis Batch: 480-371553	Analysis Date: 08/10/2017 1301						DryWt Corrected: Y
Prep Batch: 480-371474	Prep Date: 08/10/2017 1001						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N
Percent Solids	90.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454128	Analysis Date: 08/04/2017 2041						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: AKRF Inc Job Number: 460-138284-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	B	The analyte was found in an associated blank, as well as in the sample.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	MS or MSD is outside acceptance limits.
	*	Surrogate is outside acceptance limits.
	A	The tentatively identified compound is a suspected aldol-condensation product.
	N	This flag indicates the presumptive evidence of a compound.
GC VOA		
	U	Analyzed for but not detected.
GC Semi VOA		
	U	Analyzed for but not detected.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	MS or MSD is outside acceptance limits.
	*	Surrogate is outside acceptance limits.
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

DATA REPORTING QUALIFIERS

Client: AKRF Inc

Job Number: 460-138284-1

Lab Section	Qualifier	Description
Metals		
	U	Indicates analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Sample result is greater than the MDL but below the CRDL
	N	Spiked sample recovery is not within control limits.
General Chemistry		
	U	Indicates analyzed for but not detected.

QUALITY CONTROL RESULTS

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-453341					
LB3 460-453341/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	5035	
460-138284-1	SB-2(1-3')	T	Solid	5035	
460-138284-2	SB-2(10-12')	T	Solid	5035	
460-138284-3	SB-6(1-3')	T	Solid	5035	
460-138284-4	SB-6(10-12')	T	Solid	5035	
460-138284-5	SB-7(1-3')	T	Solid	5035	
460-138284-6	SB-7(5-7')	T	Solid	5035	
460-138284-7	SB-8(1-3')	T	Solid	5035	
460-138284-8	SB-8(5-7')	T	Solid	5035	
460-138284-9	SB-9(1-3')	T	Solid	5035	
460-138284-10	SB-9(5-7')	T	Solid	5035	
460-138284-11	SB-3(1-3')	T	Solid	5035	
460-138284-12	SB-3(10-12')	T	Solid	5035	
460-138284-13	SB-4(1-3')	T	Solid	5035	
460-138284-14	SB-4(10-12')	T	Solid	5035	
Analysis Batch:460-453717					
LCS 460-453717/3	Lab Control Sample	T	Solid	8260C	
LCSD 460-453717/30	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-453717/7	Method Blank	T	Solid	8260C	
LB3 460-453341/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	8260C	460-453341
460-138284-1	SB-2(1-3')	T	Solid	8260C	460-453341
460-138284-2	SB-2(10-12')	T	Solid	8260C	460-453341
460-138284-3	SB-6(1-3')	T	Solid	8260C	460-453341
460-138284-4	SB-6(10-12')	T	Solid	8260C	460-453341
460-138284-5	SB-7(1-3')	T	Solid	8260C	460-453341
460-138284-6	SB-7(5-7')	T	Solid	8260C	460-453341
460-138284-7	SB-8(1-3')	T	Solid	8260C	460-453341
Analysis Batch:460-453882					
LCS 460-453882/3	Lab Control Sample	T	Solid	8260C	
LCSD 460-453882/4	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-453882/6	Method Blank	T	Solid	8260C	
460-138284-8	SB-8(5-7')	T	Solid	8260C	460-453341
460-138284-9	SB-9(1-3')	T	Solid	8260C	460-453341
460-138284-10	SB-9(5-7')	T	Solid	8260C	460-453341
460-138284-11	SB-3(1-3')	T	Solid	8260C	460-453341
460-138284-12	SB-3(10-12')	T	Solid	8260C	460-453341
460-138284-13	SB-4(1-3')	T	Solid	8260C	460-453341
460-138284-14	SB-4(10-12')	T	Solid	8260C	460-453341

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 460-453670					
LCS 460-453670/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-453670/3-A	Lab Control Sample	T	Solid	3546	
MB 460-453670/1-A	Method Blank	T	Solid	3546	
460-138252-A-17-A MS	Matrix Spike	T	Solid	3546	
460-138252-A-17-B MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138284-1	SB-2(1-3')	T	Solid	3546	
460-138284-2	SB-2(10-12')	T	Solid	3546	
460-138284-3	SB-6(1-3')	T	Solid	3546	
460-138284-4	SB-6(10-12')	T	Solid	3546	
460-138284-5	SB-7(1-3')	T	Solid	3546	
460-138284-6	SB-7(5-7')	T	Solid	3546	
Prep Batch: 460-453671					
LCS 460-453671/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-453671/3-A	Lab Control Sample	T	Solid	3546	
MB 460-453671/1-A	Method Blank	T	Solid	3546	
460-138284-7	SB-8(1-3')	T	Solid	3546	
460-138284-8	SB-8(5-7')	T	Solid	3546	
460-138284-9	SB-9(1-3')	T	Solid	3546	
460-138284-10	SB-9(5-7')	T	Solid	3546	
460-138284-11	SB-3(1-3')	T	Solid	3546	
460-138284-12	SB-3(10-12')	T	Solid	3546	
460-138284-13	SB-4(1-3')	T	Solid	3546	
460-138284-14	SB-4(10-12')	T	Solid	3546	
460-138286-F-7-A MS	Matrix Spike	T	Solid	3546	
460-138286-F-7-B MSD	Matrix Spike Duplicate	T	Solid	3546	
Analysis Batch:460-454258					
LCS 460-453670/2-A	Lab Control Sample	T	Solid	8270D	460-453670
LCS 460-453670/3-A	Lab Control Sample	T	Solid	8270D	460-453670
460-138252-A-17-A MS	Matrix Spike	T	Solid	8270D	460-453670
460-138252-A-17-B MSD	Matrix Spike Duplicate	T	Solid	8270D	460-453670
460-138284-1	SB-2(1-3')	T	Solid	8270D	460-453670
460-138284-2	SB-2(10-12')	T	Solid	8270D	460-453670
460-138284-3	SB-6(1-3')	T	Solid	8270D	460-453670
460-138284-4	SB-6(10-12')	T	Solid	8270D	460-453670
460-138284-5	SB-7(1-3')	T	Solid	8270D	460-453670
460-138284-6	SB-7(5-7')	T	Solid	8270D	460-453670

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:460-454380					
LCS 460-453671/2-A	Lab Control Sample	T	Solid	8270D	460-453671
LCS 460-453671/3-A	Lab Control Sample	T	Solid	8270D	460-453671
MB 460-453671/1-A	Method Blank	T	Solid	8270D	460-453671
460-138284-7	SB-8(1-3')	T	Solid	8270D	460-453671
460-138284-8	SB-8(5-7')	T	Solid	8270D	460-453671
460-138284-9	SB-9(1-3')	T	Solid	8270D	460-453671
460-138284-10	SB-9(5-7')	T	Solid	8270D	460-453671
460-138284-11	SB-3(1-3')	T	Solid	8270D	460-453671
460-138284-12	SB-3(10-12')	T	Solid	8270D	460-453671
460-138284-13	SB-4(1-3')	T	Solid	8270D	460-453671
Analysis Batch:460-454613					
460-138284-14	SB-4(10-12')	T	Solid	8270D	460-453671
460-138286-F-7-A MS	Matrix Spike	T	Solid	8270D	460-453671
460-138286-F-7-B MSD	Matrix Spike Duplicate	T	Solid	8270D	460-453671
Analysis Batch:460-454687					
MB 460-453670/1-A	Method Blank	T	Solid	8270D	460-453670

Report Basis
T = Total

GC VOA					
Prep Batch: 460-453615					
460-138284-15	SB-8WC	T	Solid	5035	
Analysis Batch:460-453807					
LCS 460-453807/2	Lab Control Sample	T	Solid	8015D	
LCSD 460-453807/3	Lab Control Sample Duplicate	T	Solid	8015D	
MB 460-453807/4	Method Blank	T	Solid	8015D	
460-138284-15	SB-8WC	T	Solid	8015D	460-453615

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-453600					
LCS 460-453600/2-A	Lab Control Sample	T	Solid	3546	
MB 460-453600/1-A	Method Blank	T	Solid	3546	
460-138284-1	SB-2(1-3')	T	Solid	3546	
460-138284-2	SB-2(10-12')	T	Solid	3546	
460-138284-3	SB-6(1-3')	T	Solid	3546	
460-138284-4	SB-6(10-12')	T	Solid	3546	
460-138284-5	SB-7(1-3')	T	Solid	3546	
460-138284-6	SB-7(5-7')	T	Solid	3546	
460-138284-7	SB-8(1-3')	T	Solid	3546	
460-138284-8	SB-8(5-7')	T	Solid	3546	
460-138284-9	SB-9(1-3')	T	Solid	3546	
460-138284-10	SB-9(5-7')	T	Solid	3546	
460-138284-11	SB-3(1-3')	T	Solid	3546	
460-138284-12	SB-3(10-12')	T	Solid	3546	
460-138284-13	SB-4(1-3')	T	Solid	3546	
460-138284-14	SB-4(10-12')	T	Solid	3546	
460-138325-A-6-E MS	Matrix Spike	T	Solid	3546	
460-138325-A-6-F MSD	Matrix Spike Duplicate	T	Solid	3546	
Prep Batch: 460-453607					
LCS 460-453607/2-A	Lab Control Sample	T	Solid	3546	
MB 460-453607/1-A	Method Blank	T	Solid	3546	
460-138271-A-1-A MS	Matrix Spike	T	Solid	3546	
460-138271-A-1-B MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138284-1	SB-2(1-3')	T	Solid	3546	
460-138284-2	SB-2(10-12')	T	Solid	3546	
460-138284-3	SB-6(1-3')	T	Solid	3546	
460-138284-4	SB-6(10-12')	T	Solid	3546	
460-138284-5	SB-7(1-3')	T	Solid	3546	
460-138284-6	SB-7(5-7')	T	Solid	3546	
460-138284-7	SB-8(1-3')	T	Solid	3546	
460-138284-8	SB-8(5-7')	T	Solid	3546	
460-138284-9	SB-9(1-3')	T	Solid	3546	
460-138284-10	SB-9(5-7')	T	Solid	3546	
460-138284-11	SB-3(1-3')	T	Solid	3546	
460-138284-12	SB-3(10-12')	T	Solid	3546	
460-138284-13	SB-4(1-3')	T	Solid	3546	
460-138284-14	SB-4(10-12')	T	Solid	3546	

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:460-453677					
LCS 460-453600/2-A	Lab Control Sample	T	Solid	8081B	460-453600
MB 460-453600/1-A	Method Blank	T	Solid	8081B	460-453600
460-138284-1	SB-2(1-3')	T	Solid	8081B	460-453600
460-138284-2	SB-2(10-12')	T	Solid	8081B	460-453600
460-138284-3	SB-6(1-3')	T	Solid	8081B	460-453600
460-138284-4	SB-6(10-12')	T	Solid	8081B	460-453600
460-138284-5	SB-7(1-3')	T	Solid	8081B	460-453600
460-138284-6	SB-7(5-7')	T	Solid	8081B	460-453600
460-138284-7	SB-8(1-3')	T	Solid	8081B	460-453600
460-138284-8	SB-8(5-7')	T	Solid	8081B	460-453600
460-138284-9	SB-9(1-3')	T	Solid	8081B	460-453600
460-138284-10	SB-9(5-7')	T	Solid	8081B	460-453600
460-138284-11	SB-3(1-3')	T	Solid	8081B	460-453600
460-138284-12	SB-3(10-12')	T	Solid	8081B	460-453600
460-138284-13	SB-4(1-3')	T	Solid	8081B	460-453600
460-138284-14	SB-4(10-12')	T	Solid	8081B	460-453600
460-138325-A-6-E MS	Matrix Spike	T	Solid	8081B	460-453600
460-138325-A-6-F MSD	Matrix Spike Duplicate	T	Solid	8081B	460-453600
Prep Batch: 460-453727					
LCS 460-453727/2-A	Lab Control Sample	T	Solid	3546	
MB 460-453727/1-A	Method Blank	T	Solid	3546	
180-68692-C-1-A MS	Matrix Spike	T	Solid	3546	
180-68692-C-1-B MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138284-15	SB-8WC	T	Solid	3546	
Analysis Batch:460-453815					
LCS 460-453607/2-A	Lab Control Sample	T	Solid	8082A	460-453607
MB 460-453607/1-A	Method Blank	T	Solid	8082A	460-453607
460-138271-A-1-A MS	Matrix Spike	T	Solid	8082A	460-453607
460-138271-A-1-B MSD	Matrix Spike Duplicate	T	Solid	8082A	460-453607
460-138284-1	SB-2(1-3')	T	Solid	8082A	460-453607
460-138284-2	SB-2(10-12')	T	Solid	8082A	460-453607
460-138284-3	SB-6(1-3')	T	Solid	8082A	460-453607
460-138284-4	SB-6(10-12')	T	Solid	8082A	460-453607
460-138284-5	SB-7(1-3')	T	Solid	8082A	460-453607
460-138284-6	SB-7(5-7')	T	Solid	8082A	460-453607
460-138284-7	SB-8(1-3')	T	Solid	8082A	460-453607
460-138284-8	SB-8(5-7')	T	Solid	8082A	460-453607
460-138284-9	SB-9(1-3')	T	Solid	8082A	460-453607
460-138284-10	SB-9(5-7')	T	Solid	8082A	460-453607
460-138284-11	SB-3(1-3')	T	Solid	8082A	460-453607
460-138284-12	SB-3(10-12')	T	Solid	8082A	460-453607
460-138284-13	SB-4(1-3')	T	Solid	8082A	460-453607
460-138284-14	SB-4(10-12')	T	Solid	8082A	460-453607

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-453880					
LCS 460-453880/2-A	Lab Control Sample	T	Solid	8151A	
MB 460-453880/1-A	Method Blank	T	Solid	8151A	
460-138284-1	SB-2(1-3')	T	Solid	8151A	
460-138284-1MS	Matrix Spike	T	Solid	8151A	
460-138284-1MSD	Matrix Spike Duplicate	T	Solid	8151A	
460-138284-2	SB-2(10-12')	T	Solid	8151A	
460-138284-3	SB-6(1-3')	T	Solid	8151A	
460-138284-4	SB-6(10-12')	T	Solid	8151A	
460-138284-5	SB-7(1-3')	T	Solid	8151A	
460-138284-6	SB-7(5-7')	T	Solid	8151A	
460-138284-7	SB-8(1-3')	T	Solid	8151A	
460-138284-8	SB-8(5-7')	T	Solid	8151A	
460-138284-9	SB-9(1-3')	T	Solid	8151A	
460-138284-10	SB-9(5-7')	T	Solid	8151A	
460-138284-11	SB-3(1-3')	T	Solid	8151A	
460-138284-12	SB-3(10-12')	T	Solid	8151A	
460-138284-13	SB-4(1-3')	T	Solid	8151A	
460-138284-14	SB-4(10-12')	T	Solid	8151A	
Analysis Batch:460-453940					
LCS 460-453727/2-A	Lab Control Sample	T	Solid	8015D	460-453727
MB 460-453727/1-A	Method Blank	T	Solid	8015D	460-453727
180-68692-C-1-A MS	Matrix Spike	T	Solid	8015D	460-453727
180-68692-C-1-B MSD	Matrix Spike Duplicate	T	Solid	8015D	460-453727
460-138284-15	SB-8WC	T	Solid	8015D	460-453727
Analysis Batch:460-453964					
LCS 460-453880/2-A	Lab Control Sample	T	Solid	8151A	460-453880
MB 460-453880/1-A	Method Blank	T	Solid	8151A	460-453880
460-138284-1	SB-2(1-3')	T	Solid	8151A	460-453880
460-138284-1MS	Matrix Spike	T	Solid	8151A	460-453880
460-138284-1MSD	Matrix Spike Duplicate	T	Solid	8151A	460-453880
460-138284-2	SB-2(10-12')	T	Solid	8151A	460-453880
460-138284-3	SB-6(1-3')	T	Solid	8151A	460-453880
460-138284-4	SB-6(10-12')	T	Solid	8151A	460-453880
460-138284-5	SB-7(1-3')	T	Solid	8151A	460-453880
460-138284-6	SB-7(5-7')	T	Solid	8151A	460-453880
460-138284-7	SB-8(1-3')	T	Solid	8151A	460-453880
460-138284-8	SB-8(5-7')	T	Solid	8151A	460-453880
460-138284-9	SB-9(1-3')	T	Solid	8151A	460-453880
460-138284-10	SB-9(5-7')	T	Solid	8151A	460-453880
460-138284-11	SB-3(1-3')	T	Solid	8151A	460-453880
460-138284-12	SB-3(10-12')	T	Solid	8151A	460-453880
460-138284-13	SB-4(1-3')	T	Solid	8151A	460-453880
460-138284-14	SB-4(10-12')	T	Solid	8151A	460-453880

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: AKRF Inc Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-453373					
LCSSRM 460-453373/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-453373/1-A ^2	Method Blank	T	Solid	3050B	
460-138232-A-1-B DU	Duplicate	T	Solid	3050B	
460-138232-A-1-C MS	Matrix Spike	T	Solid	3050B	
460-138284-5	SB-7(1-3')	T	Solid	3050B	
460-138284-6	SB-7(5-7')	T	Solid	3050B	
460-138284-7	SB-8(1-3')	T	Solid	3050B	
460-138284-8	SB-8(5-7')	T	Solid	3050B	
460-138284-9	SB-9(1-3')	T	Solid	3050B	
460-138284-10	SB-9(5-7')	T	Solid	3050B	
460-138284-11	SB-3(1-3')	T	Solid	3050B	
460-138284-12	SB-3(10-12')	T	Solid	3050B	
460-138284-13	SB-4(1-3')	T	Solid	3050B	
460-138284-14	SB-4(10-12')	T	Solid	3050B	
Analysis Batch:460-453492					
LCSSRM 460-453373/2-A	LCS-Certified Reference Material	T	Solid	6010C	460-453373
MB 460-453373/1-A ^2	Method Blank	T	Solid	6010C	460-453373
460-138232-A-1-B DU	Duplicate	T	Solid	6010C	460-453373
460-138232-A-1-C MS	Matrix Spike	T	Solid	6010C	460-453373
460-138284-5	SB-7(1-3')	T	Solid	6010C	460-453373
460-138284-6	SB-7(5-7')	T	Solid	6010C	460-453373
460-138284-7	SB-8(1-3')	T	Solid	6010C	460-453373
460-138284-8	SB-8(5-7')	T	Solid	6010C	460-453373
460-138284-9	SB-9(1-3')	T	Solid	6010C	460-453373
460-138284-10	SB-9(5-7')	T	Solid	6010C	460-453373
460-138284-11	SB-3(1-3')	T	Solid	6010C	460-453373
460-138284-12	SB-3(10-12')	T	Solid	6010C	460-453373
460-138284-13	SB-4(1-3')	T	Solid	6010C	460-453373
460-138284-14	SB-4(10-12')	T	Solid	6010C	460-453373
Prep Batch: 460-453640					
LCSSRM 460-453640/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-453640/1-A	Method Blank	T	Solid	3050B	
460-138284-1	SB-2(1-3')	T	Solid	3050B	
460-138284-2	SB-2(10-12')	T	Solid	3050B	
460-138284-3	SB-6(1-3')	T	Solid	3050B	
460-138284-4	SB-6(10-12')	T	Solid	3050B	
460-138335-A-1-B DU	Duplicate	T	Solid	3050B	
460-138335-A-1-C MS	Matrix Spike	T	Solid	3050B	

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:460-453753					
LCSSRM 460-453640/2-A	LCS-Certified Reference Material	T	Solid	6010C	460-453640
MB 460-453640/1-A	Method Blank	T	Solid	6010C	460-453640
460-138284-1	SB-2(1-3')	T	Solid	6010C	460-453640
460-138284-2	SB-2(10-12')	T	Solid	6010C	460-453640
460-138284-3	SB-6(1-3')	T	Solid	6010C	460-453640
460-138284-4	SB-6(10-12')	T	Solid	6010C	460-453640
460-138335-A-1-B DU	Duplicate	T	Solid	6010C	460-453640
460-138335-A-1-C MS	Matrix Spike	T	Solid	6010C	460-453640
Prep Batch: 460-453913					
LCSSRM 460-453913/10-A ^4	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-453913/9-A	Method Blank	T	Solid	7471B	
460-138284-1	SB-2(1-3')	T	Solid	7471B	
460-138284-2	SB-2(10-12')	T	Solid	7471B	
460-138284-3	SB-6(1-3')	T	Solid	7471B	
460-138284-4	SB-6(10-12')	T	Solid	7471B	
460-138284-5	SB-7(1-3')	T	Solid	7471B	
460-138284-6	SB-7(5-7')	T	Solid	7471B	
460-138495-A-3-H DU	Duplicate	T	Solid	7471B	
460-138495-A-3-I MS	Matrix Spike	T	Solid	7471B	
Prep Batch: 460-453914					
LCSSRM 460-453914/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-453914/1-A	Method Blank	T	Solid	7471B	
460-138284-8	SB-8(5-7')	T	Solid	7471B	
460-138284-9	SB-9(1-3')	T	Solid	7471B	
460-138284-10	SB-9(5-7')	T	Solid	7471B	
460-138284-11	SB-3(1-3')	T	Solid	7471B	
460-138284-12	SB-3(10-12')	T	Solid	7471B	
460-138284-13	SB-4(1-3')	T	Solid	7471B	
460-138284-14	SB-4(10-12')	T	Solid	7471B	
460-138286-A-7-E DU ^3	Duplicate	T	Solid	7471B	
460-138286-F-7-G MS ^3	Matrix Spike	T	Solid	7471B	
Prep Batch: 460-453922					
LCSSRM 460-453922/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-453922/1-A	Method Blank	T	Solid	7471B	
460-138132-F-1-B DU	Duplicate	T	Solid	7471B	
460-138132-F-1-C MS	Matrix Spike	T	Solid	7471B	
460-138284-7	SB-8(1-3')	T	Solid	7471B	

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:460-454006					
LCSSRM 460-453913/10-A ^4	LCS-Certified Reference Material	T	Solid	7471B	460-453913
MB 460-453913/9-A	Method Blank	T	Solid	7471B	460-453913
LCSSRM 460-453914/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	460-453914
MB 460-453914/1-A	Method Blank	T	Solid	7471B	460-453914
LCSSRM 460-453922/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	460-453922
MB 460-453922/1-A	Method Blank	T	Solid	7471B	460-453922
460-138132-F-1-B DU	Duplicate	T	Solid	7471B	460-453922
460-138132-F-1-C MS	Matrix Spike	T	Solid	7471B	460-453922
460-138284-1	SB-2(1-3')	T	Solid	7471B	460-453913
460-138284-2	SB-2(10-12')	T	Solid	7471B	460-453913
460-138284-3	SB-6(1-3')	T	Solid	7471B	460-453913
460-138284-4	SB-6(10-12')	T	Solid	7471B	460-453913
460-138284-5	SB-7(1-3')	T	Solid	7471B	460-453913
460-138284-6	SB-7(5-7')	T	Solid	7471B	460-453913
460-138284-7	SB-8(1-3')	T	Solid	7471B	460-453922
460-138284-8	SB-8(5-7')	T	Solid	7471B	460-453914
460-138284-9	SB-9(1-3')	T	Solid	7471B	460-453914
460-138284-10	SB-9(5-7')	T	Solid	7471B	460-453914
460-138284-11	SB-3(1-3')	T	Solid	7471B	460-453914
460-138284-12	SB-3(10-12')	T	Solid	7471B	460-453914
460-138284-13	SB-4(1-3')	T	Solid	7471B	460-453914
460-138284-14	SB-4(10-12')	T	Solid	7471B	460-453914
460-138286-A-7-E DU ^3	Duplicate	T	Solid	7471B	460-453914
460-138286-F-7-G MS ^3	Matrix Spike	T	Solid	7471B	460-453914
460-138495-A-3-H DU	Duplicate	T	Solid	7471B	460-453913
460-138495-A-3-I MS	Matrix Spike	T	Solid	7471B	460-453913

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 480-371474					
LCSSRM 480-371474/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	
MB 480-371474/1-A	Method Blank	T	Solid	9012B	
460-138284-15	SB-8WC	T	Solid	9012B	
460-138494-F-4-B MS	Matrix Spike	T	Solid	9012B	
460-138494-F-4-C MSD	Matrix Spike Duplicate	T	Solid	9012B	
Analysis Batch:480-371553					
LCSSRM 480-371474/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	480-371474
MB 480-371474/1-A	Method Blank	T	Solid	9012B	480-371474
460-138284-15	SB-8WC	T	Solid	9012B	480-371474
460-138494-F-4-B MS	Matrix Spike	T	Solid	9012B	480-371474
460-138494-F-4-C MSD	Matrix Spike Duplicate	T	Solid	9012B	480-371474
Analysis Batch:460-454126					
460-138284-1	SB-2(1-3')	T	Solid	Moisture	
460-138284-2	SB-2(10-12')	T	Solid	Moisture	
460-138284-3	SB-6(1-3')	T	Solid	Moisture	
460-138284-4	SB-6(10-12')	T	Solid	Moisture	
460-138284-5	SB-7(1-3')	T	Solid	Moisture	
460-138284-6	SB-7(5-7')	T	Solid	Moisture	
460-138284-7	SB-8(1-3')	T	Solid	Moisture	
460-138284-8	SB-8(5-7')	T	Solid	Moisture	
460-138284-9	SB-9(1-3')	T	Solid	Moisture	
460-138284-10	SB-9(5-7')	T	Solid	Moisture	
460-138284-10DU	Duplicate	T	Solid	Moisture	
Analysis Batch:460-454128					
460-138284-11	SB-3(1-3')	T	Solid	Moisture	
460-138284-12	SB-3(10-12')	T	Solid	Moisture	
460-138284-13	SB-4(1-3')	T	Solid	Moisture	
460-138284-14	SB-4(10-12')	T	Solid	Moisture	
460-138284-15	SB-8WC	T	Solid	Moisture	
460-138286-A-7 DU	Duplicate	T	Solid	Moisture	
460-138286-F-7 MS	Matrix Spike	T	Solid	Moisture	
460-138286-F-7 MSD	Matrix Spike Duplicate	T	Solid	Moisture	
Prep Batch: 460-454251					
LCSI 460-454251/3-A	Lab Control Sample Insoluble	T	Solid	3060A	
LCSSRM 460-454251/2-A	LCS-Certified Reference Material	T	Solid	3060A	
MB 460-454251/1-A	Method Blank	T	Solid	3060A	
460-138284-15	SB-8WC	T	Solid	3060A	
460-138292-F-7-E DU	Duplicate	T	Solid	3060A	
460-138292-F-7-G MSI	Matrix Spike Insoluble	T	Solid	3060A	
460-138292-F-7-F MSS	Matrix Spike Soluble	T	Solid	3060A	

Client: AKRF Inc

Job Number: 460-138284-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-454349					
LCSI 460-454251/3-A	Lab Control Sample Insoluble	T	Solid	7196A	460-454251
LCSSRM 460-454251/2-A	LCS-Certified Reference Material	T	Solid	7196A	460-454251
MB 460-454251/1-A	Method Blank	T	Solid	7196A	460-454251
460-138284-15	SB-8WC	T	Solid	7196A	460-454251
460-138292-F-7-E DU	Duplicate	T	Solid	7196A	460-454251
460-138292-F-7-G MSI	Matrix Spike Insoluble	T	Solid	7196A	460-454251
460-138292-F-7-F MSS	Matrix Spike Soluble	T	Solid	7196A	460-454251

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138284-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	DBFM %Rec	TOL %Rec
460-138284-1	SB-2(1-3')	108	121	113	98
460-138284-2	SB-2(10-12')	97	109	104	90
460-138284-3	SB-6(1-3')	109	122	118	100
460-138284-4	SB-6(10-12')	106	119	114	99
460-138284-5	SB-7(1-3')	108	118	116	101
460-138284-6	SB-7(5-7')	102	111	111	95
460-138284-7	SB-8(1-3')	110	119	117	99
460-138284-8	SB-8(5-7')	110	114	115	97
460-138284-9	SB-9(1-3')	113	120	117	100
460-138284-10	SB-9(5-7')	111	120	118	100
460-138284-11	SB-3(1-3')	112	116	117	98
460-138284-12	SB-3(10-12')	111	116	116	97
460-138284-13	SB-4(1-3')	109	111	112	94
460-138284-14	SB-4(10-12')	113	121	119	102
MB 460-453717/7		102	115	112	98
MB 460-453882/6		101	111	109	95
LB3 460-453341/1-A		103	118	115	99
LCS 460-453717/3		103	118	111	101
LCS 460-453882/3		108	115	113	99
LCSD 460-453717/30		99	112	106	97
LCSD 460-453882/4		105	112	108	99

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
BFB = 4-Bromofluorobenzene	67-126
DBFM = Dibromofluoromethane (Surr)	61-149
TOL = Toluene-d8 (Surr)	73-121

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPHL %Rec
460-138284-1	SB-2(1-3')	82	68	62	68	63	82
460-138284-2	SB-2(10-12')	77	65	64	68	63	82
460-138284-3	SB-6(1-3')	64	52	48	53	47	63
460-138284-4	SB-6(10-12')	72	64	60	65	60	73
460-138284-5	SB-7(1-3')	66	51	46	51	46	66
460-138284-6	SB-7(5-7')	77	49	44	46	45	77
460-138284-7	SB-8(1-3')	64	70	68	72	72	86
460-138284-8	SB-8(5-7')	69	73	72	74	75	87
460-138284-9	SB-9(1-3')	71	76	75	79	79	96
460-138284-10	SB-9(5-7')	72	73	70	75	72	89
460-138284-11	SB-3(1-3')	52	52	47	47	51	75
460-138284-12	SB-3(10-12')	53	63	61	65	64	78
460-138284-13	SB-4(1-3')	58	60	61	63	61	74
460-138284-14	SB-4(10-12')	56	62	45	59	48	49
MB 460-453670/1-A		74	70	73	78	77	98
MB 460-453671/1-A		86	85	86	91	90	103
LCS 460-453670/2-A		116*	90	85	87	82	90
LCS 460-453670/3-A		106*	81	82	86	76	94
LCS 460-453671/2-A		98	89	88	91	92*	103
LCS 460-453671/3-A		86	88	88	93	88	106
460-138252-A-17-A MS		50	79	64	78	70	87
460-138286-F-7-A MS		69	75	57	75	58	55
460-138252-A-17-B MSD		68	78	65	74	69	83
460-138286-F-7-B MSD		67	70	53	72	54	53

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol (Surr)	10-103
FBP = 2-Fluorobiphenyl	38-95
2FP = 2-Fluorophenol (Surr)	25-92
NBZ = Nitrobenzene-d5 (Surr)	37-94
PHL = Phenol-d5 (Surr)	32-91
TPHL = Terphenyl-d14 (Surr)	24-109

Client: AKRF Inc

Job Number: 460-138284-1

Surrogate Recovery Report

8015D Gasoline Range Organics (GRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TFT1 %Rec
460-138284-15	SB-8WC	105
MB 460-453807/4		94
LCS 460-453807/2		98
LCSD 460-453807/3		94

Surrogate	Acceptance Limits
TFT = a,a,a-Trifluorotoluene	80-135

Client: AKRF Inc

Job Number: 460-138284-1

Surrogate Recovery Report

8015D Diesel Range Organics (DRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH %Rec
460-138284-15	SB-8WC	67
MB 460-453727/1-A		77
LCS 460-453727/2-A		93
180-68692-C-1-A MS		86
180-68692-C-1-B MSD		68

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	25-132

Surrogate Recovery Report

8081B Organochlorine Pesticides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec	TCX1 %Rec	TCX2 %Rec
460-138284-1	SB-2(1-3')	106	108	104	110
460-138284-2	SB-2(10-12')	114	116	110	113
460-138284-3	SB-6(1-3')	108	112	106	105
460-138284-4	SB-6(10-12')	113	137	111	112
460-138284-5	SB-7(1-3')	105	117	106	122
460-138284-6	SB-7(5-7')	119	119	115	119
460-138284-7	SB-8(1-3')	111	116	108	123
460-138284-8	SB-8(5-7')	118	126	118	114
460-138284-9	SB-9(1-3')	117	130	114	118
460-138284-10	SB-9(5-7')	102	122	100	100
460-138284-11	SB-3(1-3')	106	114	104	110
460-138284-12	SB-3(10-12')	107	111	104	112
460-138284-13	SB-4(1-3')	110	113	107	108
460-138284-14	SB-4(10-12')	114	112	110	117
MB 460-453600/1-A		115			111
LCS 460-453600/2-A		106			106
460-138325-A-6-E MS		86			60p
460-138325-A-6-F MSD		90			45p *

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	50-150
TCX = Tetrachloro-m-xylene	47-150

Client: AKRF Inc

Job Number: 460-138284-1

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec
460-138284-1	SB-2(1-3')	110	111
460-138284-2	SB-2(10-12')	116	116
460-138284-3	SB-6(1-3')	126	124
460-138284-4	SB-6(10-12')	119	119
460-138284-5	SB-7(1-3')	76p	116
460-138284-6	SB-7(5-7')	128	127
460-138284-7	SB-8(1-3')	114	116
460-138284-8	SB-8(5-7')	104	116
460-138284-9	SB-9(1-3')	123	123
460-138284-10	SB-9(5-7')	122	122
460-138284-11	SB-3(1-3')	122	121
460-138284-12	SB-3(10-12')	117	117
460-138284-13	SB-4(1-3')	115	116
460-138284-14	SB-4(10-12')	118	119
MB 460-453607/1-A		128	121
LCS 460-453607/2-A		114	113
460-138271-A-1-A MS		124	123
460-138271-A-1-B MSD		125	123

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	35-150

Surrogate Recovery Report

8151A Herbicides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCPAA1 %Rec	DCPAA2 %Rec
460-138284-1	SB-2(1-3')	125	108
460-138284-2	SB-2(10-12')	139	122
460-138284-3	SB-6(1-3')	128	112
460-138284-4	SB-6(10-12')	136	109
460-138284-5	SB-7(1-3')	130	109
460-138284-6	SB-7(5-7')	118	112
460-138284-7	SB-8(1-3')	122	109
460-138284-8	SB-8(5-7')	130	108
460-138284-9	SB-9(1-3')	130	107
460-138284-10	SB-9(5-7')	129	103
460-138284-11	SB-3(1-3')	134	108
460-138284-12	SB-3(10-12')	137	108
460-138284-13	SB-4(1-3')	131	105
460-138284-14	SB-4(10-12')	130	109
MB 460-453880/1-A		98	89
LCS 460-453880/2-A		136	135
460-138284-1 MS	SB-2(1-3') MS	122	125
460-138284-1 MSD	SB-2(1-3') MSD	123	125

Surrogate	Acceptance Limits
DCPAA = 2,4-Dichlorophenylacetic acid	80-141

Neutral Leach or MeOH Extraction Blank - Batch: 460-453341

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-453341/1-A	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	460-453341	Lab File ID:	K71496.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	08/03/2017 1316	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2009				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.000571	J	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138284-1

Neutral Leach or MeOH Extraction Blank - Batch: 460-453341

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-453341/1-A	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	460-453341	Lab File ID:	K71496.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	08/03/2017 1316	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	08/01/2017 2009				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	78 - 135
4-Bromofluorobenzene	118	67 - 126
Dibromofluoromethane (Surr)	115	61 - 149
Toluene-d8 (Surr)	99	73 - 121

Method Blank TICs- Batch: 460-453341

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Method Blank - Batch: 460-453717

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-453717/7	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71495.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1252	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.0010	U	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453717

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-453717/7	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71495.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1252	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	78 - 135
4-Bromofluorobenzene	115	67 - 126
Dibromofluoromethane (Surr)	112	61 - 149
Toluene-d8 (Surr)	98	73 - 121

Method Blank TICs- Batch: 460-453717

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-453717

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-453717/3	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71491.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1118	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-453717/30	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71504.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1626	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	102	101	80 - 125	1	30		
1,1,2,2-Tetrachloroethane	79	77	72 - 131	3	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	93	99	78 - 132	7	30		
1,1,2-Trichloroethane	89	88	76 - 124	2	30		
1,1-Dichloroethane	94	94	80 - 124	0	30		
1,1-Dichloroethene	101	101	79 - 132	0	30		
1,2,3-Trichlorobenzene	106	102	75 - 123	4	30		
1,2,4-Trichlorobenzene	106	101	74 - 124	5	30		
1,2,4-Trimethylbenzene	86	84	77 - 123	3	30		
1,2-Dibromo-3-Chloropropane	83	81	65 - 129	2	30		
1,2-Dichlorobenzene	97	96	80 - 121	2	30		
1,2-Dichloroethane	97	96	68 - 120	1	30		
1,2-Dichloropropane	87	86	77 - 124	1	30		
1,3,5-Trimethylbenzene	86	84	76 - 126	3	30		
1,3-Dichlorobenzene	96	96	79 - 124	0	30		
1,4-Dichlorobenzene	97	95	79 - 121	3	30		
1,4-Dioxane	109	102	67 - 150	6	30		
2-Butanone (MEK)	114	115	61 - 140	1	30		
2-Hexanone	103	95	78 - 120	7	30		
4-Isopropyltoluene	87	86	79 - 125	1	30		
4-Methyl-2-pentanone (MIBK)	106	105	80 - 120	1	30		
Acetone	114	119	75 - 120	5	30		
Benzene	92	90	75 - 127	2	30		
Bromoform	106	107	19 - 150	1	30		
Bromomethane	99	97	59 - 136	2	30		
Carbon disulfide	88	88	74 - 130	0	30		
Carbon tetrachloride	103	104	77 - 138	1	30		
Chlorobenzene	95	94	80 - 120	1	30		
Chlorobromomethane	109	109	80 - 125	0	30		
Chlorodibromomethane	100	99	67 - 143	1	30		
Chloroethane	90	87	50 - 139	4	30		
Chloroform	98	98	80 - 122	0	30		
Chloromethane	84	81	66 - 128	3	30		
cis-1,2-Dichloroethene	101	98	80 - 123	3	30		
cis-1,3-Dichloropropene	86	84	75 - 124	3	30		

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-453717

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-453717/3	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71491.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1118	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-453717/30	Analysis Batch:	460-453717	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71504.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1626	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	97	97	67 - 135	0	30		
Dichlorobromomethane	95	96	76 - 129	1	30		
Dichlorodifluoromethane	88	85	72 - 127	3	30		
Ethylbenzene	93	91	79 - 124	3	30		
Ethylene Dibromide	94	95	80 - 122	1	30		
Isopropylbenzene	97	94	80 - 125	2	30		
Methyl acetate	89	87	73 - 123	3	30		
Methyl tert-butyl ether	100	97	80 - 120	3	30		
Methylcyclohexane	102	100	71 - 137	2	30		
Methylene Chloride	100	98	79 - 128	1	30		
m-Xylene & p-Xylene	92	91	79 - 121	1	30		
Naphthalene	94	89	76 - 120	5	30		
n-Butylbenzene	83	82	75 - 131	1	30		
N-Propylbenzene	82	80	75 - 132	2	30		
o-Xylene	96	94	79 - 123	2	30		
sec-Butylbenzene	86	85	78 - 130	0	30		
Styrene	96	95	78 - 123	1	30		
tert-Butylbenzene	91	91	77 - 123	0	30		
Tetrachloroethene	109	110	73 - 130	0	30		
Toluene	92	90	75 - 122	1	30		
trans-1,2-Dichloroethene	102	99	80 - 129	3	30		
trans-1,3-Dichloropropene	88	84	72 - 121	5	30		
Trichloroethene	96	97	79 - 122	0	30		
Trichlorofluoromethane	103	96	68 - 136	7	30		
Vinyl chloride	88	82	70 - 134	7	30		
Xylenes, Total	94	93	79 - 122	1	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	99	78 - 135
4-Bromofluorobenzene	118	112	67 - 126
Dibromofluoromethane (Surr)	111	106	61 - 149
Toluene-d8 (Surr)	101	97	73 - 121

Method Blank - Batch: 460-453882

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-453882/6	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71523.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/04/2017 0044	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.0010	U	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453882

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-453882/6	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71523.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/04/2017 0044	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	78 - 135
4-Bromofluorobenzene	111	67 - 126
Dibromofluoromethane (Surr)	109	61 - 149
Toluene-d8 (Surr)	95	73 - 121

Method Blank TICs- Batch: 460-453882

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-453882

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-453882/3	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71520.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 2333	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-453882/4	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71521.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 2357	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	112	109	80 - 125	3	30		
1,1,2,2-Tetrachloroethane	79	81	72 - 131	4	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	111	107	78 - 132	3	30		
1,1,2-Trichloroethane	94	92	76 - 124	2	30		
1,1-Dichloroethane	104	101	80 - 124	3	30		
1,1-Dichloroethene	109	106	79 - 132	3	30		
1,2,3-Trichlorobenzene	105	101	75 - 123	4	30		
1,2,4-Trichlorobenzene	101	100	74 - 124	1	30		
1,2,4-Trimethylbenzene	84	86	77 - 123	2	30		
1,2-Dibromo-3-Chloropropane	83	84	65 - 129	1	30		
1,2-Dichlorobenzene	97	95	80 - 121	1	30		
1,2-Dichloroethane	104	100	68 - 120	4	30		
1,2-Dichloropropane	93	92	77 - 124	1	30		
1,3,5-Trimethylbenzene	87	87	76 - 126	0	30		
1,3-Dichlorobenzene	97	95	79 - 124	2	30		
1,4-Dichlorobenzene	96	95	79 - 121	1	30		
1,4-Dioxane	103	101	67 - 150	2	30		
2-Butanone (MEK)	105	106	61 - 140	1	30		
2-Hexanone	98	98	78 - 120	1	30		
4-Isopropyltoluene	88	88	79 - 125	0	30		
4-Methyl-2-pentanone (MIBK)	100	103	80 - 120	4	30		
Acetone	115	111	75 - 120	3	30		
Benzene	95	94	75 - 127	1	30		
Bromoform	111	104	19 - 150	6	30		
Bromomethane	106	92	59 - 136	14	30		
Carbon disulfide	98	94	74 - 130	5	30		
Carbon tetrachloride	112	111	77 - 138	0	30		
Chlorobenzene	100	97	80 - 120	3	30		
Chlorobromomethane	117	108	80 - 125	8	30		
Chlorodibromomethane	101	98	67 - 143	3	30		
Chloroethane	96	76	50 - 139	23	30		
Chloroform	106	102	80 - 122	4	30		
Chloromethane	98	90	66 - 128	9	30		
cis-1,2-Dichloroethene	103	99	80 - 123	4	30		
cis-1,3-Dichloropropene	88	90	75 - 124	1	30		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-453882

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-453882/3	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71520.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 2333	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-453882/4	Analysis Batch:	460-453882	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71521.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 2357	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	105	101	67 - 135	4	30		
Dichlorobromomethane	102	99	76 - 129	3	30		
Dichlorodifluoromethane	109	90	72 - 127	19	30		
Ethylbenzene	92	91	79 - 124	1	30		
Ethylene Dibromide	97	97	80 - 122	1	30		
Isopropylbenzene	96	95	80 - 125	1	30		
Methyl acetate	97	95	73 - 123	2	30		
Methyl tert-butyl ether	105	102	80 - 120	3	30		
Methylcyclohexane	113	108	71 - 137	4	30		
Methylene Chloride	104	100	79 - 128	4	30		
m-Xylene & p-Xylene	92	92	79 - 121	0	30		
Naphthalene	91	91	76 - 120	0	30		
n-Butylbenzene	84	84	75 - 131	0	30		
N-Propylbenzene	83	83	75 - 132	1	30		
o-Xylene	95	94	79 - 123	1	30		
sec-Butylbenzene	87	89	78 - 130	2	30		
Styrene	98	95	78 - 123	3	30		
tert-Butylbenzene	93	92	77 - 123	1	30		
Tetrachloroethene	108	105	73 - 130	3	30		
Toluene	93	94	75 - 122	1	30		
trans-1,2-Dichloroethene	106	103	80 - 129	2	30		
trans-1,3-Dichloropropene	94	89	72 - 121	5	30		
Trichloroethene	103	100	79 - 122	3	30		
Trichlorofluoromethane	112	98	68 - 136	13	30		
Vinyl chloride	100	89	70 - 134	11	30		
Xylenes, Total	94	93	79 - 122	1	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108	105	78 - 135
4-Bromofluorobenzene	115	112	67 - 126
Dibromofluoromethane (Surr)	113	108	61 - 149
Toluene-d8 (Surr)	99	99	73 - 121

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453670

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-453670/1-A	Analysis Batch:	460-454687	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	L19495.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/08/2017 1001	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453670

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-453670/1-A	Analysis Batch:	460-454687	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	L19495.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/08/2017 1001	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	74	10 - 103
2-Fluorobiphenyl	70	38 - 95
2-Fluorophenol (Surr)	73	25 - 92
Nitrobenzene-d5 (Surr)	78	37 - 94
Phenol-d5 (Surr)	77	32 - 91
Terphenyl-d14 (Surr)	98	24 - 109

Method Blank TICs- Batch: 460-453670

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Aldol condensation product	2.99	1.34	J A

Lab Control Sample - Batch: 460-453670

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453670/2-A	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46840.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/05/2017 2355	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	3.13	94	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	3.23	97	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.58	77	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	3.47	104	60 - 114	
2,4,5-Trichlorophenol	3.33	3.11	93	60 - 106	
2,4,6-Trichlorophenol	3.33	3.16	95	62 - 110	
2,4-Dichlorophenol	3.33	3.00	90	61 - 103	
2,4-Dimethylphenol	3.33	2.95	89	63 - 101	
2,4-Dinitrophenol	6.67	7.57	113	56 - 122	
2,4-Dinitrotoluene	3.33	3.43	103	66 - 122	
2,6-Dinitrotoluene	3.33	3.42	102	70 - 114	
2-Chloronaphthalene	3.33	3.10	93	63 - 107	
2-Chlorophenol	3.33	2.87	86	62 - 97	
2-Methylnaphthalene	3.33	3.16	95	65 - 104	
2-Methylphenol	3.33	2.87	86	61 - 103	
2-Nitroaniline	3.33	3.00	90	57 - 114	
2-Nitrophenol	3.33	3.13	94	65 - 104	
3,3'-Dichlorobenzidine	3.33	2.45	74	18 - 88	
3-Nitroaniline	3.33	2.39	72	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	7.89	118	67 - 120	
4-Bromophenyl phenyl ether	3.33	3.39	102	59 - 122	
4-Chloro-3-methylphenol	3.33	3.16	95	62 - 111	
4-Chloroaniline	3.33	2.43	73	18 - 94	
4-Chlorophenyl phenyl ether	3.33	3.27	98	66 - 110	
4-Methylphenol	3.33	2.90	87	61 - 105	
4-Nitroaniline	3.33	3.19	96	49 - 118	
4-Nitrophenol	6.67	7.05	106	43 - 141	
Acenaphthene	3.33	3.15	95	62 - 108	
Acenaphthylene	3.33	3.23	97	67 - 107	
Acetophenone	3.33	3.12	94	60 - 109	
Anthracene	3.33	3.19	96	69 - 111	
Benzo[a]anthracene	3.33	3.26	98	68 - 110	
Benzo[a]pyrene	3.33	3.42	103	72 - 115	
Benzo[b]fluoranthene	3.33	3.48	104	69 - 119	
Benzo[g,h,i]perylene	3.33	3.38	102	54 - 128	
Benzo[k]fluoranthene	3.33	3.14	94	70 - 115	
Bis(2-chloroethoxy)methane	3.33	2.94	88	65 - 106	
Bis(2-chloroethyl)ether	3.33	2.90	87	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	3.07	92	63 - 125	
Butyl benzyl phthalate	3.33	3.11	93	65 - 125	
Carbazole	3.33	3.29	99	66 - 115	

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample - Batch: 460-453670

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453670/2-A	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46840.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/05/2017 2355	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	3.26	98	70 - 111	
Dibenz(a,h)anthracene	3.33	3.39	102	60 - 130	
Dibenzofuran	3.33	3.18	95	67 - 107	
Diethyl phthalate	3.33	3.35	100	66 - 117	
Dimethyl phthalate	3.33	3.29	99	68 - 112	
Di-n-butyl phthalate	3.33	3.26	98	67 - 119	
Di-n-octyl phthalate	3.33	3.03	91	57 - 138	
Fluoranthene	3.33	3.36	101	64 - 114	
Fluorene	3.33	3.23	97	66 - 110	
Hexachlorobenzene	3.33	3.68	110	57 - 128	
Hexachlorobutadiene	3.33	3.37	101	60 - 108	
Hexachlorocyclopentadiene	3.33	3.53	106	50 - 129	
Hexachloroethane	3.33	2.94	88	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	4.12	123	53 - 137	
Isophorone	3.33	3.05	92	68 - 111	
Naphthalene	3.33	3.02	91	65 - 102	
Nitrobenzene	3.33	3.00	90	66 - 108	
N-Nitrosodi-n-propylamine	3.33	3.25	97	63 - 117	
N-Nitrosodiphenylamine	3.33	3.18	95	65 - 114	
Pentachlorophenol	6.67	7.26	109	56 - 116	
Phenanthrene	3.33	3.24	97	68 - 111	
Phenol	3.33	2.80	84	58 - 103	
Pyrene	3.33	3.14	94	64 - 121	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	116	*	10 - 103
2-Fluorobiphenyl	90		38 - 95
2-Fluorophenol (Surr)	85		25 - 92
Nitrobenzene-d5 (Surr)	87		37 - 94
Phenol-d5 (Surr)	82		32 - 91
Terphenyl-d14 (Surr)	90		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample - Batch: 460-453670

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453670/3-A	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46841.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/06/2017 0020	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	7.13	107	62 - 137	
Benzaldehyde	6.67	5.74	86	52 - 113	
Caprolactam	6.67	6.68	100	53 - 148	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	106	*	10 - 103
2-Fluorobiphenyl	81		38 - 95
2-Fluorophenol (Surr)	82		25 - 92
Nitrobenzene-d5 (Surr)	86		37 - 94
Phenol-d5 (Surr)	76		32 - 91
Terphenyl-d14 (Surr)	94		24 - 109

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453670

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138252-A-17-A MS	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46843.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0221 g
Analysis Date:	08/06/2017 0109			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138252-A-17-B MSD	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46844.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0436 g
Analysis Date:	08/06/2017 0133			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	83	80	64 - 108	4	30		
1,2,4,5-Tetrachlorobenzene	84	83	57 - 112	2	30		
2,2'-oxybis[1-chloropropane]	66	64	39 - 122	3	30		
2,3,4,6-Tetrachlorophenol	21	34	60 - 114	45	30	*	*
2,4,5-Trichlorophenol	51	59	60 - 106	16	30	*	*
2,4,6-Trichlorophenol	44	55	62 - 110	23	30	*	*
2,4-Dichlorophenol	67	71	61 - 103	4	30		
2,4-Dimethylphenol	79	77	63 - 101	3	30		
2,4-Dinitrophenol	0	0	56 - 122	NC	30	U *	U *
2,4-Dinitrotoluene	96	92	66 - 122	4	30		
2,6-Dinitrotoluene	97	94	70 - 114	3	30		
2-Chloronaphthalene	82	80	63 - 107	3	30		
2-Chlorophenol	70	71	62 - 97	1	30		
2-Methylnaphthalene	90	87	65 - 104	3	30		
2-Methylphenol	80	76	61 - 103	5	30		
2-Nitroaniline	80	78	57 - 114	3	30		
2-Nitrophenol	37	48	65 - 104	24	30	*	*
3,3'-Dichlorobenzidine	66	69	18 - 88	4	30		
3-Nitroaniline	78	75	30 - 94	5	30		
4,6-Dinitro-2-methylphenol	0	6	67 - 120	NC	30	U *	*
4-Bromophenyl phenyl ether	94	93	59 - 122	2	30		
4-Chloro-3-methylphenol	85	83	62 - 111	3	30		
4-Chloroaniline	66	64	18 - 94	4	30		
4-Chlorophenyl phenyl ether	92	88	66 - 110	5	30		
4-Methylphenol	80	78	61 - 105	3	30		
4-Nitroaniline	94	92	49 - 118	3	30		
4-Nitrophenol	56	65	43 - 141	15	30		
Acenaphthene	87	84	62 - 108	3	30		
Acenaphthylene	89	85	67 - 107	4	30		
Acetophenone	86	83	60 - 109	4	30		
Anthracene	91	90	69 - 111	1	30		
Atrazine	108	106	62 - 137	1	30		

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453670

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138252-A-17-A MS	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46843.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0221 g
Analysis Date:	08/06/2017 0109			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138252-A-17-B MSD	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46844.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0436 g
Analysis Date:	08/06/2017 0133			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	62	64	52 - 113	4	30		
Benzo[a]anthracene	91	90	68 - 110	2	30		
Benzo[a]pyrene	97	95	72 - 115	2	30		
Benzo[b]fluoranthene	92	90	69 - 119	2	30		
Benzo[g,h,i]perylene	96	96	54 - 128	0	30		
Benzo[k]fluoranthene	91	91	70 - 115	1	30		
Bis(2-chloroethoxy)methane	80	77	65 - 106	3	30		
Bis(2-chloroethyl)ether	76	73	64 - 105	4	30		
Bis(2-ethylhexyl) phthalate	85	82	63 - 125	3	30		
Butyl benzyl phthalate	87	85	65 - 125	2	30		
Caprolactam	77	79	53 - 148	2	30		
Carbazole	90	91	66 - 115	1	30		
Chrysene	90	89	70 - 111	1	30		
Dibenz(a,h)anthracene	94	93	60 - 130	2	30		
Dibenzofuran	87	84	67 - 107	4	30		
Diethyl phthalate	96	92	66 - 117	5	30		
Dimethyl phthalate	93	90	68 - 112	4	30		
Di-n-butyl phthalate	92	91	67 - 119	1	30		
Di-n-octyl phthalate	83	81	57 - 138	3	30		
Fluoranthene	95	96	64 - 114	1	30		
Fluorene	91	87	66 - 110	4	30		
Hexachlorobenzene	105	102	57 - 128	3	30		
Hexachlorobutadiene	92	89	60 - 108	4	30		
Hexachlorocyclopentadiene	75	78	50 - 129	4	30		
Hexachloroethane	81	79	63 - 99	2	30		
Indeno[1,2,3-cd]pyrene	115	114	53 - 137	1	30		
Isophorone	17	15	68 - 111	2	30	*	*
Naphthalene	83	81	65 - 102	2	30		
Nitrobenzene	78	76	66 - 108	4	30		
N-Nitrosodi-n-propylamine	90	86	63 - 117	5	30		
N-Nitrosodiphenylamine	87	87	65 - 114	1	30		
Pentachlorophenol	9	14	56 - 116	42	30	*	*

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453670

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138252-A-17-A MS	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46843.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0221 g
Analysis Date:	08/06/2017 0109			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138252-A-17-B MSD	Analysis Batch:	460-454258	Instrument ID:	CBNAMS11
Client Matrix:	Solid	Prep Batch:	460-453670	Lab File ID:	z46844.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0436 g
Analysis Date:	08/06/2017 0133			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0716			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	92	90	68 - 111	2	30		
Phenol	70	69	58 - 103	2	30		
Pyrene	90	88	64 - 121	2	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	50	68	10 - 103
2-Fluorobiphenyl	79	78	38 - 95
2-Fluorophenol (Surr)	64	65	25 - 92
Nitrobenzene-d5 (Surr)	78	74	37 - 94
Phenol-d5 (Surr)	70	69	32 - 91
Terphenyl-d14 (Surr)	87	83	24 - 109

Method Blank - Batch: 460-453671

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-453671/1-A	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	L19409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/07/2017 0031	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Method Blank - Batch: 460-453671

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-453671/1-A	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	L19409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/07/2017 0031	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	86	10 - 103
2-Fluorobiphenyl	85	38 - 95
2-Fluorophenol (Surr)	86	25 - 92
Nitrobenzene-d5 (Surr)	91	37 - 94
Phenol-d5 (Surr)	90	32 - 91
Terphenyl-d14 (Surr)	103	24 - 109

Method Blank TICs- Batch: 460-453671

Cas Number	Analyte	RT	Est. Result (mg	Qual
124-18-5	n-Decane	4.46	0.0165	J
	Tentatively Identified Compound		None	

Lab Control Sample - Batch: 460-453671

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453671/2-A	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	L19410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/07/2017 0053	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	3.14	94	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	3.14	94	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.99	90	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	3.15	94	60 - 114	
2,4,5-Trichlorophenol	3.33	3.03	91	60 - 106	
2,4,6-Trichlorophenol	3.33	3.17	95	62 - 110	
2,4-Dichlorophenol	3.33	3.04	91	61 - 103	
2,4-Dimethylphenol	3.33	3.05	92	63 - 101	
2,4-Dinitrophenol	6.67	6.74	101	56 - 122	
2,4-Dinitrotoluene	3.33	3.26	98	66 - 122	
2,6-Dinitrotoluene	3.33	3.37	101	70 - 114	
2-Chloronaphthalene	3.33	3.13	94	63 - 107	
2-Chlorophenol	3.33	2.97	89	62 - 97	
2-Methylnaphthalene	3.33	3.02	91	65 - 104	
2-Methylphenol	3.33	3.05	92	61 - 103	
2-Nitroaniline	3.33	3.21	96	57 - 114	
2-Nitrophenol	3.33	3.17	95	65 - 104	
3,3'-Dichlorobenzidine	3.33	2.54	76	18 - 88	
3-Nitroaniline	3.33	2.92	87	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	7.13	107	67 - 120	
4-Bromophenyl phenyl ether	3.33	3.22	97	59 - 122	
4-Chloro-3-methylphenol	3.33	3.03	91	62 - 111	
4-Chloroaniline	3.33	2.56	77	18 - 94	
4-Chlorophenyl phenyl ether	3.33	3.08	92	66 - 110	
4-Methylphenol	3.33	3.11	93	61 - 105	
4-Nitroaniline	3.33	3.47	104	49 - 118	
4-Nitrophenol	6.67	6.60	99	43 - 141	
Acenaphthene	3.33	3.18	95	62 - 108	
Acenaphthylene	3.33	3.19	96	67 - 107	
Acetophenone	3.33	3.11	93	60 - 109	
Anthracene	3.33	3.27	98	69 - 111	
Benzo[a]anthracene	3.33	3.32	100	68 - 110	
Benzo[a]pyrene	3.33	3.59	108	72 - 115	
Benzo[b]fluoranthene	3.33	3.57	107	69 - 119	
Benzo[g,h,i]perylene	3.33	3.07	92	54 - 128	
Benzo[k]fluoranthene	3.33	3.64	109	70 - 115	
Bis(2-chloroethoxy)methane	3.33	3.06	92	65 - 106	
Bis(2-chloroethyl)ether	3.33	3.06	92	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	3.07	92	63 - 125	
Butyl benzyl phthalate	3.33	3.17	95	65 - 125	
Carbazole	3.33	3.37	101	66 - 115	

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample - Batch: 460-453671

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453671/2-A	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	L19410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/07/2017 0053	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	3.24	97	70 - 111	
Dibenz(a,h)anthracene	3.33	3.06	92	60 - 130	
Dibenzofuran	3.33	3.15	95	67 - 107	
Diethyl phthalate	3.33	3.12	94	66 - 117	
Dimethyl phthalate	3.33	3.12	94	68 - 112	
Di-n-butyl phthalate	3.33	3.10	93	67 - 119	
Di-n-octyl phthalate	3.33	3.21	96	57 - 138	
Fluoranthene	3.33	3.11	93	64 - 114	
Fluorene	3.33	3.16	95	66 - 110	
Hexachlorobenzene	3.33	3.17	95	57 - 128	
Hexachlorobutadiene	3.33	3.03	91	60 - 108	
Hexachlorocyclopentadiene	3.33	3.42	103	50 - 129	
Hexachloroethane	3.33	2.94	88	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	3.37	101	53 - 137	
Isophorone	3.33	3.04	91	68 - 111	
Naphthalene	3.33	3.02	91	65 - 102	
Nitrobenzene	3.33	3.19	96	66 - 108	
N-Nitrosodi-n-propylamine	3.33	3.14	94	63 - 117	
N-Nitrosodiphenylamine	3.33	3.27	98	65 - 114	
Pentachlorophenol	6.67	6.14	92	56 - 116	
Phenanthrene	3.33	3.23	97	68 - 111	
Phenol	3.33	3.05	91	58 - 103	
Pyrene	3.33	3.35	100	64 - 121	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	98		10 - 103
2-Fluorobiphenyl	89		38 - 95
2-Fluorophenol (Surr)	88		25 - 92
Nitrobenzene-d5 (Surr)	91		37 - 94
Phenol-d5 (Surr)	92	*	32 - 91
Terphenyl-d14 (Surr)	103		24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample - Batch: 460-453671

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453671/3-A	Analysis Batch:	460-454380	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	L19411.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/07/2017 0114	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	6.47	97	62 - 137	
Benzaldehyde	6.67	6.28	94	52 - 113	
Caprolactam	6.67	6.57	98	53 - 148	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	86	10 - 103
2-Fluorobiphenyl	88	38 - 95
2-Fluorophenol (Surr)	88	25 - 92
Nitrobenzene-d5 (Surr)	93	37 - 94
Phenol-d5 (Surr)	88	32 - 91
Terphenyl-d14 (Surr)	106	24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453671

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138286-F-7-A MS	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	X263074.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0226 g
Analysis Date:	08/08/2017 0055			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138286-F-7-B MSD	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	X263075.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0475 g
Analysis Date:	08/08/2017 0119			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	78	75	64 - 108	4	30		
1,2,4,5-Tetrachlorobenzene	69	66	57 - 112	4	30		
2,2'-oxybis[1-chloropropane]	78	74	39 - 122	6	30		
2,3,4,6-Tetrachlorophenol	68	65	60 - 114	4	30		
2,4,5-Trichlorophenol	63	62	60 - 106	2	30		
2,4,6-Trichlorophenol	71	67	62 - 110	5	30		
2,4-Dichlorophenol	62	60	61 - 103	3	30		*
2,4-Dimethylphenol	66	64	63 - 101	3	30		
2,4-Dinitrophenol	38	31	56 - 122	23	30	*	*
2,4-Dinitrotoluene	98	93	66 - 122	6	30		
2,6-Dinitrotoluene	93	86	70 - 114	7	30		
2-Chloronaphthalene	72	69	63 - 107	5	30		
2-Chlorophenol	60	57	62 - 97	6	30	*	*
2-Methylnaphthalene	66	65	65 - 104	3	30		
2-Methylphenol	65	61	61 - 103	5	30		
2-Nitroaniline	87	82	57 - 114	6	30		
2-Nitrophenol	72	67	65 - 104	7	30		
3,3'-Dichlorobenzidine	29	22	18 - 88	28	30		
3-Nitroaniline	59	58	30 - 94	2	30		
4,6-Dinitro-2-methylphenol	56	49	67 - 120	14	30	*	*
4-Bromophenyl phenyl ether	72	69	59 - 122	3	30		
4-Chloro-3-methylphenol	66	67	62 - 111	0	30		
4-Chloroaniline	27	26	18 - 94	3	30		
4-Chlorophenyl phenyl ether	76	73	66 - 110	4	30		
4-Methylphenol	64	59	61 - 105	7	30		*
4-Nitroaniline	60	61	49 - 118	1	30		
4-Nitrophenol	89	85	43 - 141	5	30		
Acenaphthene	74	70	62 - 108	6	30		
Acenaphthylene	77	112	67 - 107	29	30		*
Acetophenone	77	72	60 - 109	7	30		
Anthracene	79	95	69 - 111	13	30		
Atrazine	100	96	62 - 137	4	30		

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453671

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138286-F-7-A MS	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	X263074.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0226 g
Analysis Date:	08/08/2017 0055			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138286-F-7-B MSD	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	X263075.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0475 g
Analysis Date:	08/08/2017 0119			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	66	61	52 - 113	7	30		
Benzo[a]anthracene	91	222	68 - 110	51	30		E *
Benzo[a]pyrene	88	214	72 - 115	46	30		E *
Benzo[b]fluoranthene	82	324	69 - 119	65	30	E	E *
Benzo[g,h,i]perylene	62	221	54 - 128	61	30		E *
Benzo[k]fluoranthene	94	136	70 - 115	25	30		*
Bis(2-chloroethoxy)methane	77	75	65 - 106	3	30		
Bis(2-chloroethyl)ether	73	69	64 - 105	6	30		
Bis(2-ethylhexyl) phthalate	79	76	63 - 125	4	30		
Butyl benzyl phthalate	75	64	65 - 125	10	30		*
Caprolactam	54	53	53 - 148	3	30		
Carbazole	88	83	66 - 115	5	30		
Chrysene	85	209	70 - 111	48	30		E *
Dibenz(a,h)anthracene	80	93	60 - 130	12	30		
Dibenzofuran	75	72	67 - 107	5	30		
Diethyl phthalate	96	95	66 - 117	2	30		
Dimethyl phthalate	97	91	68 - 112	6	30		
Di-n-butyl phthalate	101	97	67 - 119	4	30		
Di-n-octyl phthalate	73	75	57 - 138	3	30		
Fluoranthene	108	725	64 - 114	99	30	E	E *
Fluorene	76	70	66 - 110	8	30		
Hexachlorobenzene	72	71	57 - 128	1	30		
Hexachlorobutadiene	71	68	60 - 108	4	30		
Hexachlorocyclopentadiene	12	14	50 - 129	13	30	*	*
Hexachloroethane	55	52	63 - 99	5	30	*	*
Indeno[1,2,3-cd]pyrene	75	172	53 - 137	42	30		E *
Isophorone	85	82	68 - 111	4	30		
Naphthalene	71	70	65 - 102	2	30		
Nitrobenzene	70	67	66 - 108	6	30		
N-Nitrosodi-n-propylamine	78	73	63 - 117	6	30		
N-Nitrosodiphenylamine	80	77	65 - 114	3	30		
Pentachlorophenol	65	65	56 - 116	1	30		

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453671

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138286-F-7-A MS	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	X263074.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0226 g
Analysis Date:	08/08/2017 0055			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138286-F-7-B MSD	Analysis Batch:	460-454613	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-453671	Lab File ID:	X263075.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0475 g
Analysis Date:	08/08/2017 0119			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 0724			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	87	149	68 - 111	33	30		*
Phenol	63	59	58 - 103	6	30		
Pyrene	67	650	64 - 121	108	30	E	E *

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	69	67	10 - 103
2-Fluorobiphenyl	75	70	38 - 95
2-Fluorophenol (Surr)	57	53	25 - 92
Nitrobenzene-d5 (Surr)	75	72	37 - 94
Phenol-d5 (Surr)	58	54	32 - 91
Terphenyl-d14 (Surr)	55	53	24 - 109

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453807

Method: 8015D
Preparation: N/A

Lab Sample ID:	MB 460-453807/4	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107421.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1635	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL	RL
GRO	2.5	U	2.5	2.5

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	94	80 - 135

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-453807

Method: 8015D
Preparation: N/A

LCS Lab Sample ID:	LCS 460-453807/2	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107419.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1541	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 460-453807/3	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107420.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1608	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
GRO	98	94	80 - 120	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	98	94	80 - 135

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453727

Method: 8015D
Preparation: 3546

Lab Sample ID:	MB 460-453727/1-A	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010397.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/04/2017 0837	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
#2 Diesel Fuel	6.7	U	1.1	6.7
C10-C44	8.7	U	1.1	8.7

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	77	25 - 132

Lab Control Sample - Batch: 460-453727

Method: 8015D
Preparation: 3546

Lab Sample ID:	LCS 460-453727/2-A	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010398.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/04/2017 0849	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C44	133	100	75	68 - 133	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	93	25 - 132

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453727

Method: 8015D
Preparation: 3546

MS Lab Sample ID:	180-68692-C-1-A MS	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010405.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0199 g
Analysis Date:	08/04/2017 1014			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	180-68692-C-1-B MSD	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010406.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0021 g
Analysis Date:	08/04/2017 1026			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C44	63	59	68 - 133	7	30	*	*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	86	68	25 - 132

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453600

Method: 8081B
Preparation: 3546

Lab Sample ID:	MB 460-453600/1-A	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Client Matrix:	Solid	Prep Batch:	460-453600	Lab File ID:	P4003287.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/03/2017 0757	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2037			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.0067	U	0.0011	0.0067
4,4'-DDE	0.0067	U	0.00079	0.0067
4,4'-DDT	0.0067	U	0.0012	0.0067
Aldrin	0.0067	U	0.0010	0.0067
alpha-BHC	0.0020	U	0.00068	0.0020
beta-BHC	0.0020	U	0.00075	0.0020
Chlordane (technical)	0.067	U	0.016	0.067
delta-BHC	0.0020	U	0.00041	0.0020
Dieldrin	0.0020	U	0.00087	0.0020
Endosulfan I	0.0067	U	0.0010	0.0067
Endosulfan II	0.0067	U	0.0017	0.0067
Endosulfan sulfate	0.0067	U	0.00084	0.0067
Endrin	0.0067	U	0.00096	0.0067
Endrin aldehyde	0.0067	U	0.0016	0.0067
Endrin ketone	0.0067	U	0.0013	0.0067
gamma-BHC (Lindane)	0.0020	U	0.00062	0.0020
Heptachlor	0.0067	U	0.00079	0.0067
Heptachlor epoxide	0.0067	U	0.0010	0.0067
Methoxychlor	0.0067	U	0.0015	0.0067
Toxaphene	0.067	U	0.024	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	115	50 - 150
Tetrachloro-m-xylene	111	47 - 150

Lab Control Sample - Batch: 460-453600

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-453600/2-A	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Client Matrix:	Solid	Prep Batch:	460-453600	Lab File ID:	P4003288.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/03/2017 0809	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2037			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.141	106	64 - 129	
4,4'-DDE	0.133	0.136	102	65 - 129	
4,4'-DDT	0.133	0.149	112	59 - 124	
Aldrin	0.133	0.141	106	66 - 127	
alpha-BHC	0.133	0.141	106	69 - 131	
beta-BHC	0.133	0.136	102	69 - 127	
delta-BHC	0.133	0.141	106	64 - 129	
Dieldrin	0.133	0.143	107	65 - 128	
Endosulfan I	0.133	0.142	107	66 - 126	
Endosulfan II	0.133	0.143	107	64 - 124	
Endosulfan sulfate	0.133	0.144	108	62 - 123	
Endrin	0.133	0.148	111	58 - 126	
Endrin aldehyde	0.133	0.145	109	69 - 131	
Endrin ketone	0.133	0.139	104	62 - 125	
gamma-BHC (Lindane)	0.133	0.143	107	67 - 126	
Heptachlor	0.133	0.145	109	63 - 125	
Heptachlor epoxide	0.133	0.138	103	64 - 125	
Methoxychlor	0.133	0.138	103	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	106	50 - 150
Tetrachloro-m-xylene	106	47 - 150

Matrix Spike - Batch: 460-453600

Method: 8081B
Preparation: 3546

Lab Sample ID:	460-138325-A-6-E MS	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Client Matrix:	Solid	Prep Batch:	460-453600	Lab File ID:	P4003290.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0010 g
Analysis Date:	08/03/2017 0837	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2037			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
alpha-BHC	0.0040	U	0.270	0.211	78	69 - 131	
delta-BHC	0.0040	U	0.270	0.235	87	64 - 129	
gamma-BHC (Lindane)	0.0040	U	0.270	0.252	93	67 - 126	

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453600

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-138325-A-6-E MS	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Client Matrix:	Solid	Prep Batch:	460-453600	Lab File ID:	P4003290.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0010 g
Analysis Date:	08/03/2017 0837			Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2037			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138325-A-6-F MSD	Analysis Batch:	460-453677	Instrument ID:	CPESTGC4
Client Matrix:	Solid	Prep Batch:	460-453600	Lab File ID:	P4003291.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+14.9996 g
Analysis Date:	08/03/2017 0849			Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2037			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	80	92	64 - 129	13	30		
4,4'-DDE	75	86	65 - 129	14	30		
4,4'-DDT	85	97	59 - 124	13	30		
Aldrin	82	93	66 - 127	13	30		
alpha-BHC	78	98	69 - 131	22	30		p
beta-BHC	79	100	69 - 127	24	30		
delta-BHC	87	68	64 - 129	25	30		p
Dieldrin	79	90	65 - 128	12	30		
Endosulfan I	77	88	66 - 126	13	30		
Endosulfan II	79	89	64 - 124	12	30		
Endosulfan sulfate	85	93	62 - 123	10	30		
Endrin	83	94	58 - 126	13	30		
Endrin aldehyde	74	93	69 - 131	23	30		
Endrin ketone	80	89	62 - 125	11	30		
gamma-BHC (Lindane)	93	63	67 - 126	38	30		p *
Heptachlor	93	114	63 - 125	21	30		
Heptachlor epoxide	77	87	64 - 125	12	30		
Methoxychlor	84	95	56 - 123	12	30		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
DCB Decachlorobiphenyl	86		90		50 - 150
Tetrachloro-m-xylene	60	p	45	p *	47 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453607

Method: 8082A
Preparation: 3546

Lab Sample ID:	MB 460-453607/1-A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/03/2017 1627	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	0.067	U	0.0089	0.067
Aroclor 1221	0.067	U	0.0089	0.067
Aroclor 1232	0.067	U	0.0089	0.067
Aroclor 1242	0.067	U	0.0089	0.067
Aroclor 1248	0.067	U	0.0089	0.067
Aroclor 1254	0.067	U	0.0092	0.067
Aroclor 1260	0.067	U	0.0092	0.067
Aroclor 1268	0.067	U	0.0092	0.067
Aroclor-1262	0.067	U	0.0092	0.067
Polychlorinated biphenyls, Total	0.067	U	0.0092	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	128	35 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	121	35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Lab Control Sample - Batch: 460-453607

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-453607/2-A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/03/2017 1651	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.404	121	77 - 150	
Aroclor 1260	0.333	0.394	118	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	114	35 - 150

Lab Control Sample - Batch: 460-453607

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-453607/2-A	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/03/2017 1651	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.391	117	77 - 150	
Aroclor 1260	0.333	0.390	117	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	113	35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453607

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-138271-A-1-A MS	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006412.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0030 g
Analysis Date:	08/03/2017 1737			Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138271-A-1-B MSD	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006413.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0095 g
Analysis Date:	08/03/2017 1801			Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	122	132	77 - 150	7	30		
Aroclor 1260	127	131	79 - 150	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	124	125	35 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453607

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-138271-A-1-A MS	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006412.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0030 g
Analysis Date:	08/03/2017 1737			Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138271-A-1-B MSD	Analysis Batch:	460-453815	Instrument ID:	CPESTGC7
Client Matrix:	Solid	Prep Batch:	460-453607	Lab File ID:	7R006413.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0095 g
Analysis Date:	08/03/2017 1801			Final Weight/Volume:	10 mL
Prep Date:	08/02/2017 2048			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	131	134	77 - 150	2	30		
Aroclor 1260	126	129	79 - 150	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	123	123	35 - 150

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453880

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 460-453880/1-A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146784.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/04/2017 0958	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	0.017	U	0.0078	0.017
2,4-D	0.017	U	0.0078	0.017
Silvex (2,4,5-TP)	0.017	U	0.011	0.017

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	98	80 - 141

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	89	80 - 141

Lab Control Sample - Batch: 460-453880

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-453880/2-A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146796.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/04/2017 1255	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0500	0.0414	83	53 - 134	
2,4-D	0.200	0.152	76	39 - 119	
Silvex (2,4,5-TP)	0.0500	0.0446	89	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	136	80 - 141

Lab Control Sample - Batch: 460-453880

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-453880/2-A	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146796.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/04/2017 1255	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0500	0.0381	76	53 - 134	
2,4-D	0.200	0.138	69	39 - 119	
Silvex (2,4,5-TP)	0.0500	0.0437	87	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	135	80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453880

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138284-1	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146786.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0129 g
Analysis Date:	08/04/2017 1027			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138284-1	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146787.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0133 g
Analysis Date:	08/04/2017 1042			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	109	108	53 - 134	1	30		
2,4-D	98	96	39 - 119	2	30		
Silvex (2,4,5-TP)	129	140	58 - 150	8	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	125	125	80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453880

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138284-1	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146786.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0129 g
Analysis Date:	08/04/2017 1027			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138284-1	Analysis Batch:	460-453964	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-453880	Lab File ID:	ZR146787.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0133 g
Analysis Date:	08/04/2017 1042			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2238			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	101	100	53 - 134	0	30		
2,4-D	87	86	39 - 119	1	30		
Silvex (2,4,5-TP)	119	118	58 - 150	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	122	123	80 - 141

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453373

Method: 6010C
Preparation: 3050B

Lab Sample ID:	MB 460-453373/1-A ^2	Analysis Batch:	460-453492	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	08/02/2017 1217	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.24	2.0
Arsenic	1.5	U	0.37	1.5
Barium	20.0	U	1.6	20.0
Beryllium	0.20	U	0.023	0.20
Cadmium	0.40	U	0.060	0.40
Chromium	1.0	U	0.28	1.0
Cobalt	5.0	U	0.57	5.0
Copper	2.5	U	0.57	2.5
Lead	1.0	U	0.30	1.0
Manganese	1.5	U	0.16	1.5
Nickel	4.0	U	0.38	4.0
Selenium	2.0	U	0.61	2.0
Silver	1.0	U	0.15	1.0
Thallium	2.0	U	0.59	2.0
Vanadium	5.0	U	0.60	5.0
Zinc	3.0	U	0.26	3.0

Client: AKRF Inc

Job Number: 460-138284-1

LCS-Certified Reference Material - Batch: 460-453373

Method: 6010C
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-453373/2-A	Analysis Batch:	460-453492	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	08/02/2017 1221	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	65.1	38.67	59.4	0.2 - 212.0	
Arsenic	147	134.8	91.7	83.0 - 117.0	
Barium	314	303.9	96.8	82.2 - 117.8	
Beryllium	53.4	53.67	100.5	82.8 - 117.2	
Cadmium	193	193.5	100.3	82.4 - 117.6	
Chromium	82.6	78.49	95.0	81.8 - 118.2	
Cobalt	81.3	85.27	104.9	83.4 - 116.6	
Copper	171	162.6	95.1	83.6 - 116.4	
Lead	92.3	88.51	95.9	82.8 - 117.0	
Manganese	222	219.6	98.9	82.0 - 118.0	
Nickel	137	144.0	105.1	82.5 - 118.2	
Selenium	187	182.5	97.6	79.1 - 121.4	
Silver	40.7	37.43	92.0	79.6 - 120.4	
Thallium	153	159.6	104.3	81.0 - 119.0	
Vanadium	86.6	83.24	96.1	77.6 - 122.4	
Zinc	189	196.3	103.8	79.9 - 120.1	

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike - Batch: 460-453373

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138232-A-1-C MS	Analysis Batch:	460-453492	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	08/02/2017 1236	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	4.1	U	54.1	25.28	47	75 - 125	N
Arsenic	1.5	J	216	202.6	93	75 - 125	
Barium	73.3		216	299.1	104	75 - 125	
Beryllium	0.32	J	5.41	5.60	98	75 - 125	
Cadmium	0.82	U	5.41	5.32	98	75 - 125	
Chromium	13.1		21.6	35.75	105	75 - 125	
Cobalt	5.5	J	54.1	61.23	103	75 - 125	
Copper	21.4		27.1	48.98	102	75 - 125	
Lead	12.1		54.1	64.75	97	75 - 125	
Manganese	362		54.1	417.9	103	75 - 125	4
Nickel	13.5		54.1	66.70	98	75 - 125	
Selenium	4.1	U	216	206.6	95	75 - 125	
Silver	2.0	U	5.41	5.11	94	75 - 125	
Thallium	4.1	U	216	224.9	104	75 - 125	
Vanadium	16.8		54.1	70.96	100	75 - 125	
Zinc	35.5		54.1	90.75	102	75 - 125	

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-453373

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138232-A-1-B DU	Analysis Batch:	460-453492	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453373	Lab File ID:	453373.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	08/02/2017 1224	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/02/2017 0127				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	4.1	U	4.4	NC	20	U
Arsenic	1.5	J	1.39	5	20	J
Barium	73.3		78.18	7	20	
Beryllium	0.32	J	0.369	13	20	J
Cadmium	0.82	U	0.87	NC	20	U
Chromium	13.1		14.30	9	20	
Cobalt	5.5	J	5.87	6	20	J
Copper	21.4		22.58	6	20	
Lead	12.1		12.67	5	20	
Manganese	362		387.1	7	20	
Nickel	13.5		14.36	6	20	
Selenium	4.1	U	4.4	NC	20	U
Silver	2.0	U	2.2	NC	20	U
Thallium	4.1	U	4.4	NC	20	U
Vanadium	16.8		17.95	6	20	
Zinc	35.5		37.77	6	20	

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	MB 460-453640/1-A	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	08/03/2017 1313	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.24	2.0
Arsenic	1.5	U	0.37	1.5
Barium	20.0	U	1.6	20.0
Beryllium	0.20	U	0.023	0.20
Cadmium	0.40	U	0.060	0.40
Chromium	1.0	U	0.28	1.0
Cobalt	5.0	U	0.57	5.0
Copper	2.5	U	0.57	2.5
Lead	1.0	U	0.30	1.0
Manganese	1.5	U	0.16	1.5
Nickel	4.0	U	0.38	4.0
Selenium	2.0	U	0.61	2.0
Silver	1.0	U	0.15	1.0
Thallium	2.0	U	0.59	2.0
Vanadium	5.0	U	0.60	5.0
Zinc	3.0	U	0.26	3.0

Client: AKRF Inc

Job Number: 460-138284-1

LCS-Certified Reference Material - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-453640/2-A	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	08/03/2017 1317	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	65.1	46.98	72.2	0.2 - 212.0	
Arsenic	147	124.6	84.8	83.0 - 117.0	
Barium	314	280.4	89.3	82.2 - 117.8	
Beryllium	53.4	48.57	91.0	82.8 - 117.2	
Cadmium	193	181.1	93.8	82.4 - 117.6	
Chromium	82.6	74.53	90.2	81.8 - 118.2	
Cobalt	81.3	80.04	98.4	83.4 - 116.6	
Copper	171	154.7	90.5	83.6 - 116.4	
Lead	92.3	82.22	89.1	82.8 - 117.0	
Manganese	222	205.5	92.6	82.0 - 118.0	
Nickel	137	136.6	99.7	82.5 - 118.2	
Selenium	187	164.7	88.1	79.1 - 121.4	
Silver	40.7	34.88	85.7	79.6 - 120.4	
Thallium	153	151.3	98.9	81.0 - 119.0	
Vanadium	86.6	79.75	92.1	77.6 - 122.4	
Zinc	189	185.1	98.0	79.9 - 120.1	

Client: AKRF Inc

Job Number: 460-138284-1

Matrix Spike - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138335-A-1-C MS	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.04 g
Analysis Date:	08/03/2017 1333	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	4.3	U	53.8	20.73	39	75 - 125	N
Arsenic	3.3	U	215	185.2	86	75 - 125	
Barium	100		215	286.0	86	75 - 125	
Beryllium	1.1		5.38	5.94	90	75 - 125	
Cadmium	0.87	U	5.38	4.65	86	75 - 125	
Chromium	38.0		21.5	56.83	87	75 - 125	
Cobalt	16.6		53.8	65.47	91	75 - 125	
Copper	24.4		26.9	42.17	66	75 - 125	N
Lead	9.3		53.8	62.48	99	75 - 125	
Manganese	751		53.8	726.4	-45	75 - 125	4
Nickel	28.7		53.8	74.34	85	75 - 125	
Selenium	4.3	U	215	188.1	87	75 - 125	
Silver	2.2	U	5.38	4.68	87	75 - 125	
Thallium	4.3	U	215	202.4	94	75 - 125	
Vanadium	70.0		53.8	122.7	98	75 - 125	
Zinc	57.2		53.8	100.9	81	75 - 125	

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138335-A-1-B DU	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	08/03/2017 1321	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	4.3	U	4.3	NC	20	U
Arsenic	3.3	U	3.3	NC	20	U
Barium	100		101.1	0.9	20	
Beryllium	1.1		1.13	4	20	
Cadmium	0.87	U	0.87	NC	20	U
Chromium	38.0		38.34	0.8	20	
Cobalt	16.6		16.65	0.4	20	
Copper	24.4		24.64	0.9	20	
Lead	9.3		9.42	1	20	
Manganese	751		753.3	0.3	20	
Nickel	28.7		29.03	1	20	
Selenium	4.3	U	4.3	NC	20	U
Silver	2.2	U	2.2	NC	20	U
Thallium	4.3	U	4.3	NC	20	U
Vanadium	70.0		70.52	0.8	20	
Zinc	57.2		57.52	0.5	20	

Method Blank - Batch: 460-453913

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-453913/9-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0814	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-453913

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-453913/10-	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0816	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	16.58	93.2	66.9 - 133.1	

Matrix Spike - Batch: 460-453913

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138495-A-3-I MS	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 0821	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.038	0.0861	0.124	101	75 - 125	

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-453913

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138495-A-3-H DU	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453913	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 0820	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0356				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.038	0.0420	10	20	

Method Blank - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-453914/1-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0904	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-453914/2-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0906	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	12.96	72.8	66.9 - 133.1	

Matrix Spike - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138286-F-7-G MS ^3	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	3.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1141	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	1.0	0.0816	0.848	-181	75 - 125	4

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138286-A-7-E DU ^3	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	3.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1139	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	1.0	1.03	3	20	

Client: AKRF Inc

Job Number: 460-138284-1

Method Blank - Batch: 460-453922

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-453922/1-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453922	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 1115	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0523				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-453922

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-453922/2-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453922	Lab File ID:	453913HG1.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 1117	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0523				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	16.68	93.7	66.9 - 133.1	

Matrix Spike - Batch: 460-453922

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138132-F-1-C MS	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453922	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.65 g
Analysis Date:	08/04/2017 1122	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0523				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.079	0.0856	0.184	123	75 - 125	

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-453922

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138132-F-1-B DU	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453922	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.65 g
Analysis Date:	08/04/2017 1120	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0523				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.079	0.0837	6	20	

Method Blank - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	MB 460-454251/1-A	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium, hexavalent	2.0	U	0.40	2.0

Lab Control Sample Insoluble - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	LCSI 460-454251/3-A	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	708	686.7	97	80 - 120	

LCS-Certified Reference Material - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	LCSSRM 460-454251/2-A	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	16.8	15.53	92.6	84.1 - 114.3	

Matrix Spike Soluble - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138292-F-7-F MSS	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	2.3	U	45.2	41.85	93	75 - 125	

Matrix Spike Insoluble - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138292-F-7-G MSI	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	2.3	U	800	740.2	93	75 - 125	

Duplicate - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138292-F-7-E DU	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chromium, hexavalent	2.3	U	2.3	NC	20	U

Method Blank - Batch: 480-371474

Method: 9012B
Preparation: 9012B

Lab Sample ID:	MB 480-371474/1-A	Analysis Batch:	480-371553	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371474	Lab File ID:	OM_8-10-2017_12-48-3
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.5451 g
Analysis Date:	08/10/2017 1254	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/10/2017 1001				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.92	U	0.44	0.92

LCS-Certified Reference Material - Batch: 480-371474

Method: 9012B
Preparation: 9012B

Lab Sample ID:	LCSSRM 480-371474/2-A	Analysis Batch:	480-371553	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371474	Lab File ID:	OM_8-10-2017_12-48-3
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	.5242 g
Analysis Date:	08/10/2017 1256	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/10/2017 1001				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	86.4	68.68	79.5	29.1 - 119.2	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-371474

Method: 9012B
Preparation: 9012B

MS Lab Sample ID:	460-138494-F-4-B MS	Analysis Batch:	480-371553	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371474	Lab File ID:	OM_8-10-2017_12-48-3
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.5376 g
Analysis Date:	08/10/2017 1258			Final Weight/Volume:	50 mL
Prep Date:	08/10/2017 1001				
Leach Date:	N/A				

MSD Lab Sample ID:	460-138494-F-4-C MSD	Analysis Batch:	480-371553	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371474	Lab File ID:	OM_8-10-2017_12-48-3
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.5565 g
Analysis Date:	08/10/2017 1300			Final Weight/Volume:	50 mL
Prep Date:	08/10/2017 1001				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cyanide, Total	111	108	85 - 115	6	15		

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-454126

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-138284-10	Analysis Batch:	460-454126	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/04/2017 2001	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	12.3	11.3	9	20	
Percent Solids	87.7	88.8	1	20	

Client: AKRF Inc

Job Number: 460-138284-1

Duplicate - Batch: 460-454128

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-138286-A-7 DU	Analysis Batch:	460-454128	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/04/2017 2041	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	7.2	7.2	0	20	
Percent Solids	92.8	92.8	0	20	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

urham Road
w Jersey 08817
2) 549-3900 Fax: (732) 549-3679

480-138284 Chain of Custody

CHAIN OF CUSTODY / ANA

Name (for report and invoice): Rebecca Kinal	Samplers Name (Printed): Jacob Menken	Site/Project Identification: St. John's Villa Phase II
Company: AMEC INC.	P. O. #: 89215	State (Location of site): NJ ☐ NY ☒ Other:
Address: 470 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP ☐
City: NY State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone: 914-922- Fax: 2362		Job No: 138284

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	SVOC + TICs	Pest.	Herb.	PCBs	TAL metals (Hg)	TAL metals				Sample Numbers
SB-2 (1-3')	7/31/17	840	Soil	6	X	X	X	X	X		X				1
SB-2 (10-12)		855			X	X	X	X	X		X				2
SB-6 (1-3')		1005			X	X	X	X	X		X				3
SB-6 (10-12)		1015			X	X	X	X	X		X				4
SB-7 (1-3')		1035			X	X	X	X	X		X				5
SB-7 (5-7')		1050			X	X	X	X	X		X				6
SB-8 (1-3')		1150			X	X	X	X	X		X				7
SB-8 (5-7')		1210			X	X	X	X	X		X				8
SB-9 (1-3')		1335			X	X	X	X	X		X				9
SB-9 (5-7')		1345			X	X	X	X	X		X				10
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH; 6 = Other ____, 7 = Other ____				Soil:	1	1	1	1	1		1				
				Water:											

Special Instructions: CAT. A, TCL + CP-51 Table 3

Water Metals Filtered (Yes/No)? ____

Relinquished by: Jacob Menken	Company: AMEC INC.	Date / Time: 8/1/17 915	Received by: 1)	Company: T.A.
Relinquished by: 2)	Company: T.A.	Date / Time: 8/1/17 1200	Received by: 2)	Company: TA Edison
Relinquished by: 3)	Company:	Date / Time:	Received by: 3)	Company: 8/1/17
Relinquished by: 4)	Company:	Date / Time:	Received by: 4)	Company: 1200

SHORT HOLD

Laboratory Cen ... Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-No ...), North Carolina (No 578)

TAL - 5016 (0715)

2.2. 1618 no CP

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Rebecca Final	Samplers Name (Printed): Jacob Menken	Site/Project Identification: St. John's Villa Phase II
Company: AKRF, INC	P. O. #: 89215	State (Location of site): NJ: X NY: Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard: X	Regulatory Program: DKQP:
City: NY State: NY	Rush Charges Authorized For: 2 Week: 1 Week: Other:	LAB USE ONLY: Project No: Job No: 38284
Phone: 917-922-2362 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	SVOC + TICs	Pest.	Herb.	PCBs	TAL Metals	Cyanide	Hex. Chrom.	DRO/GRO TPH			Sample Numbers
SB-3 (1-3')	7/31/17	1440	Soil	6	X	X	X	X	X	X						11
SB-3 (10-12')		1455		6	X	X	X	X	X	X						12
SB-4 (1-3')		1520		6	X	X	X	X	X	X						13
SB-4 (10-12')		1530		6	X	X	X	X	X	X						14
SB-8WC		1150		3							X	X	X			15
Preservation Used: 1 = ICE, 2 – HCl, 3 – H_2SO_4, 4 – HNO_3, 5 – NaOH; 6 = Other, 7 = Other				Soil:	1	1	1	1	1	1	1	1	1			
				Water:												

Special Instructions: CAT. A, TCL + CP-51 Table 3

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) Jacob Menken	AKRF, INC	8/1/17 915	1)	TA
2)	TA	8/1/17 1200	2)	TA Edison
3)		/	3)	
4)		/	4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL-0018 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

7.2 IR# 8 no CS

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 138284

[redacted]

Cooler Temperatures

[redacted]								
[redacted]								
[redacted]								

TAL-S Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH 5-8)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: _____ Date: 8/1/17

EDS-WI-038, Rev 4 06/09/2014

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138284-1

Login Number: 138284
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2°C, IR #8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138284-1

Login Number: 138284
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 08/09/17 03:00 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 #1
COC is present.	False	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

Job Number: 200-39823-1

SDG Number: 200-39823-1

Job Description: St. John Villa

For:
AKRF Inc
34 South Broadway
Suite 314
White Plains, NY 10601

Attention: Becky Kinal

Approved for release.
Kristine A Dusablon
Project Manager II
8/31/2017 3:52 PM

Kristine A Dusablon, Project Manager II
30 Community Drive, South Burlington, VT, 05403
(802)660-1990
kris.dusablon@testamericainc.com
08/31/2017

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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Sample Receipt Checklist 913

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: AKRF Inc

Project: NYSCA Projects

Report Number: 200-39823-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 08/24/2017; the samples arrived in good condition.

VOLATILE ORGANIC COMPOUNDS
Samples SV-8, SV-7, SV-6, SV-9, SV-10, SV-12, SV-11, SV-14, SV-13, SV-16, SV-18 and SV-17 were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 08/25/2017 and 08/26/2017.

Samples SV-7[49.2X], SV-6[10X], SV-9[30.3X], SV-10[30.5X], SV-16[49.5X], SV-18[60.1X] and SV-17[48.1X] required dilution prior to analysis, due to the abundance of non-target analytes. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Client Sample ID: SV-8 — Lab Sample ID: 200-39823-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.20		0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.057	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.23	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.12	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.43	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	1.1		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Toluene	0.70		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.23		0.20	0.0091	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.095	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.24		0.20	0.057	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.62		0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.36	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Chloromethane	0.47	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.52	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	1.9	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	7.8		1.4	0.066	ug/m3	1		TO-15	Total/NA
Toluene	2.6		0.75	0.13	ug/m3	1		TO-15	Total/NA
Trichloroethene	1.2		1.1	0.049	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.47	J	0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.2		0.98	0.28	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-7 — Lab Sample ID: 200-39823-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	3.7	J	9.8	1.7	ppb v/v	49.2		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	14	J	37	6.5	ug/m3	49.2		TO-15	Total/NA

Client Sample ID: SV-6 — Lab Sample ID: 200-39823-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.83	J	2.0	0.098	ppb v/v	10		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	5.6	J	14	0.66	ug/m3	10		TO-15	Total/NA

Client Sample ID: SV-9 — Lab Sample ID: 200-39823-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m,p-Xylene	2.5	J	15	2.3	ppb v/v	30.3		TO-15	Total/NA
Xylene, o-	2.1	J	6.1	1.2	ppb v/v	30.3		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m,p-Xylene	11	J	66	10	ug/m3	30.3		TO-15	Total/NA
Xylene, o-	9.0	J	26	5.3	ug/m3	30.3		TO-15	Total/NA

Client Sample ID: SV-10 — Lab Sample ID: 200-39823-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.7	J	6.1	1.1	ppb v/v	30.5		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-10 (Continued) — Lab Sample ID: 200-39823-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	6.5	J	23	4.0	ug/m3	30.5		TO-15	Total/NA

Client Sample ID: SV-12 — Lab Sample ID: 200-39823-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15	J	0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.098	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.19	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.065	J	0.20	0.050	ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethane	0.040	J	0.20	0.017	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.49		0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	1.3		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.22	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	2.2		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Toluene	0.94		0.20	0.035	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.090	J	0.20	0.026	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.054	J	0.20	0.0091	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.12	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.44		0.20	0.057	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.38		0.20	0.040	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.49	J	0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.62	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Chloromethane	0.39	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.39	J	1.2	0.30	ug/m3	1		TO-15	Total/NA
1,1-Dichloroethane	0.16	J	0.81	0.069	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.1		0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	5.8		2.2	0.33	ug/m3	1		TO-15	Total/NA
Naphthalene	1.1	J	2.6	0.52	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	15		1.4	0.066	ug/m3	1		TO-15	Total/NA
Toluene	3.6		0.75	0.13	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.49	J	1.1	0.14	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.29	J	1.1	0.049	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.60	J	0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	2.2		0.98	0.28	ug/m3	1		TO-15	Total/NA
Xylene, o-	1.7		0.87	0.17	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-11 — Lab Sample ID: 200-39823-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.39		0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.060	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.19	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	13		0.20	0.029	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.38		0.20	0.050	ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethane	0.087	J	0.20	0.017	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	3.7		0.20	0.034	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.35	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	8.5		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.36	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-11 (Continued) — Lab Sample ID: 200-39823-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	11		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Toluene	1.7		0.20	0.035	ppb v/v	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.24		0.20	0.050	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.12	J	0.20	0.026	ppb v/v	1		TO-15	Total/NA
Trichloroethene	5.2		0.20	0.0091	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.32		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.3		0.20	0.057	ppb v/v	1		TO-15	Total/NA
Xylene, o-	1.7		0.20	0.040	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.2		0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.37	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Chloromethane	0.39	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	51		0.79	0.11	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	2.3		1.2	0.30	ug/m3	1		TO-15	Total/NA
1,1-Dichloroethane	0.35	J	0.81	0.069	ug/m3	1		TO-15	Total/NA
Ethylbenzene	16		0.87	0.15	ug/m3	1		TO-15	Total/NA
Methylene Chloride	1.2	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
m,p-Xylene	37		2.2	0.33	ug/m3	1		TO-15	Total/NA
Naphthalene	1.9	J	2.6	0.52	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	72		1.4	0.066	ug/m3	1		TO-15	Total/NA
Toluene	6.4		0.75	0.13	ug/m3	1		TO-15	Total/NA
trans-1,2-Dichloroethene	0.94		0.79	0.20	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.65	J	1.1	0.14	ug/m3	1		TO-15	Total/NA
Trichloroethene	28		1.1	0.049	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.6		0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	6.2		0.98	0.28	ug/m3	1		TO-15	Total/NA
Xylene, o-	7.5		0.87	0.17	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-14 — Lab Sample ID: 200-39823-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.67		0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.064	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.22		0.20	0.050	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	2.3		0.20	0.034	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.079	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	5.4		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.33	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.23		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Toluene	3.1		0.20	0.035	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	5.5		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	8.3		0.20	0.057	ppb v/v	1		TO-15	Total/NA
Xylene, o-	2.1		0.20	0.040	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.40	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	1.3		1.2	0.30	ug/m3	1		TO-15	Total/NA
Ethylbenzene	9.9		0.87	0.15	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.27	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
m,p-Xylene	23		2.2	0.33	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-14 (Continued) — Lab Sample ID: 200-39823-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.7	J	2.6	0.52	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.6		1.4	0.066	ug/m3	1		TO-15	Total/NA
Toluene	12		0.75	0.13	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	27		0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	41		0.98	0.28	ug/m3	1		TO-15	Total/NA
Xylene, o-	9.0		0.87	0.17	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-13 — Lab Sample ID: 200-39823-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.48		0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.093	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.25	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.053	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.71		0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.74		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.11	J	0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Toluene	0.46		0.20	0.035	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.027	J	0.20	0.026	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.13	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.58	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Chloromethane	0.51	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethane	0.22	J	0.81	0.14	ug/m3	1		TO-15	Total/NA
Ethylbenzene	3.1		0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	3.2		2.2	0.33	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.74	J	1.4	0.066	ug/m3	1		TO-15	Total/NA
Toluene	1.7		0.75	0.13	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.15	J	1.1	0.14	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.55	J	0.87	0.17	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-16 — Lab Sample ID: 200-39823-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.7	J	9.9	0.84	ppb v/v	49.5		TO-15	Total/NA
Ethylbenzene	2.1	J	9.9	1.7	ppb v/v	49.5		TO-15	Total/NA
Toluene	2.6	J	9.9	1.7	ppb v/v	49.5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	11	J	40	3.4	ug/m3	49.5		TO-15	Total/NA
Ethylbenzene	9.3	J	43	7.3	ug/m3	49.5		TO-15	Total/NA
Toluene	9.9	J	37	6.5	ug/m3	49.5		TO-15	Total/NA

Client Sample ID: SV-18 — Lab Sample ID: 200-39823-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	4.4	J	12	2.1	ppb v/v	60.1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	17	J	45	7.9	ug/m3	60.1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Client Sample ID: SV-17

Lab Sample ID: 200-39823-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.0	J	9.6	0.82	ppb v/v	48.1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.2	J	39	3.3	ug/m3	48.1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-8

Lab Sample ID: 200-39823-1

Date Collected: 08/22/17 10:40

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.20**		0.20	0.028	ppb v/v			08/25/17 19:04	1
Carbon tetrachloride	**0.057**	**J**	0.20	0.011	ppb v/v			08/25/17 19:04	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/25/17 19:04	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/25/17 19:04	1
Chloromethane	**0.23**	**J**	0.50	0.16	ppb v/v			08/25/17 19:04	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/25/17 19:04	1
1,3-Dichlorobenzene	0.050	U	0.20	0.050	ppb v/v			08/25/17 19:04	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/25/17 19:04	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/25/17 19:04	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/25/17 19:04	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/25/17 19:04	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/25/17 19:04	1
Ethylbenzene	**0.12**	**J**	0.20	0.034	ppb v/v			08/25/17 19:04	1
Methylene Chloride	0.068	U	0.50	0.068	ppb v/v			08/25/17 19:04	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/25/17 19:04	1
m,p-Xylene	**0.43**	**J**	0.50	0.077	ppb v/v			08/25/17 19:04	1
Naphthalene	0.10	U	0.50	0.10	ppb v/v			08/25/17 19:04	1
Tetrachloroethene	**1.1**		0.20	0.0098	ppb v/v			08/25/17 19:04	1
Toluene	**0.70**		0.20	0.035	ppb v/v			08/25/17 19:04	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/25/17 19:04	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/25/17 19:04	1
Trichloroethene	**0.23**		0.20	0.0091	ppb v/v			08/25/17 19:04	1
1,3,5-Trimethylbenzene	**0.095**	**J**	0.20	0.040	ppb v/v			08/25/17 19:04	1
1,2,4-Trimethylbenzene	**0.24**		0.20	0.057	ppb v/v			08/25/17 19:04	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/25/17 19:04	1
Xylene, o-	0.040	U	0.20	0.040	ppb v/v			08/25/17 19:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.62**		0.64	0.089	ug/m3			08/25/17 19:04	1
Carbon tetrachloride	**0.36**	**J**	1.3	0.069	ug/m3			08/25/17 19:04	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/25/17 19:04	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/25/17 19:04	1
Chloromethane	**0.47**	**J**	1.0	0.33	ug/m3			08/25/17 19:04	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/25/17 19:04	1
1,3-Dichlorobenzene	0.30	U	1.2	0.30	ug/m3			08/25/17 19:04	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/25/17 19:04	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/25/17 19:04	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/25/17 19:04	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/25/17 19:04	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/25/17 19:04	1
Ethylbenzene	**0.52**	**J**	0.87	0.15	ug/m3			08/25/17 19:04	1
Methylene Chloride	0.24	U	1.7	0.24	ug/m3			08/25/17 19:04	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/25/17 19:04	1
m,p-Xylene	**1.9**	**J**	2.2	0.33	ug/m3			08/25/17 19:04	1
Naphthalene	0.52	U	2.6	0.52	ug/m3			08/25/17 19:04	1
Tetrachloroethene	**7.8**		1.4	0.066	ug/m3			08/25/17 19:04	1
Toluene	**2.6**		0.75	0.13	ug/m3			08/25/17 19:04	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/25/17 19:04	1
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/25/17 19:04	1

Client Sample ID: SV-8

Lab Sample ID: 200-39823-1
Matrix: Air
Date Collected: 08/22/17 10:40
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**1.2**		1.1	0.049	ug/m3			08/25/17 19:04	1
1,3,5-Trimethylbenzene	**0.47**	**J**	0.98	0.20	ug/m3			08/25/17 19:04	1
1,2,4-Trimethylbenzene	**1.2**		0.98	0.28	ug/m3			08/25/17 19:04	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/25/17 19:04	1
Xylene, o-	0.17	U	0.87	0.17	ug/m3			08/25/17 19:04	1

Client Sample ID: SV-7

Lab Sample ID: 200-39823-2
Matrix: Air
Date Collected: 08/22/17 11:33
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.4	U	9.8	1.4	ppb v/v			08/25/17 19:55	49.2
Carbon tetrachloride	0.54	U	9.8	0.54	ppb v/v			08/25/17 19:55	49.2
Chlorobenzene	1.2	U	9.8	1.2	ppb v/v			08/25/17 19:55	49.2
Chloroethane	6.4	U	25	6.4	ppb v/v			08/25/17 19:55	49.2
Chloromethane	7.9	U	25	7.9	ppb v/v			08/25/17 19:55	49.2
cis-1,2-Dichloroethene	1.4	U	9.8	1.4	ppb v/v			08/25/17 19:55	49.2
1,3-Dichlorobenzene	2.5	U	9.8	2.5	ppb v/v			08/25/17 19:55	49.2
1,2-Dichlorobenzene	2.2	U	9.8	2.2	ppb v/v			08/25/17 19:55	49.2
1,1-Dichloroethane	0.84	U	9.8	0.84	ppb v/v			08/25/17 19:55	49.2
1,2-Dichloroethane	1.7	U	9.8	1.7	ppb v/v			08/25/17 19:55	49.2
1,1-Dichloroethene	1.7	U	9.8	1.7	ppb v/v			08/25/17 19:55	49.2
1,2-Dichloropropane	1.7	U	9.8	1.7	ppb v/v			08/25/17 19:55	49.2
Ethylbenzene	1.7	U	9.8	1.7	ppb v/v			08/25/17 19:55	49.2
Methylene Chloride	3.3	U	25	3.3	ppb v/v			08/25/17 19:55	49.2
Methyl tert-butyl ether	2.0	U	9.8	2.0	ppb v/v			08/25/17 19:55	49.2
m,p-Xylene	3.8	U	25	3.8	ppb v/v			08/25/17 19:55	49.2
Naphthalene	4.9	U	25	4.9	ppb v/v			08/25/17 19:55	49.2
Tetrachloroethene	0.48	U	9.8	0.48	ppb v/v			08/25/17 19:55	49.2
Toluene	**3.7**	**J**	9.8	1.7	ppb v/v			08/25/17 19:55	49.2
trans-1,2-Dichloroethene	2.5	U	9.8	2.5	ppb v/v			08/25/17 19:55	49.2
1,1,1-Trichloroethane	1.3	U	9.8	1.3	ppb v/v			08/25/17 19:55	49.2
Trichloroethene	0.45	U	9.8	0.45	ppb v/v			08/25/17 19:55	49.2
1,3,5-Trimethylbenzene	2.0	U	9.8	2.0	ppb v/v			08/25/17 19:55	49.2
1,2,4-Trimethylbenzene	2.8	U	9.8	2.8	ppb v/v			08/25/17 19:55	49.2
Vinyl chloride	0.89	U	9.8	0.89	ppb v/v			08/25/17 19:55	49.2
Xylene, o-	2.0	U	9.8	2.0	ppb v/v			08/25/17 19:55	49.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.4	U	31	4.4	ug/m3			08/25/17 19:55	49.2
Carbon tetrachloride	3.4	U	62	3.4	ug/m3			08/25/17 19:55	49.2
Chlorobenzene	5.7	U	45	5.7	ug/m3			08/25/17 19:55	49.2
Chloroethane	17	U	65	17	ug/m3			08/25/17 19:55	49.2
Chloromethane	16	U	51	16	ug/m3			08/25/17 19:55	49.2
cis-1,2-Dichloroethene	5.7	U	39	5.7	ug/m3			08/25/17 19:55	49.2
1,3-Dichlorobenzene	15	U	59	15	ug/m3			08/25/17 19:55	49.2
1,2-Dichlorobenzene	13	U	59	13	ug/m3			08/25/17 19:55	49.2

Client Sample ID: SV-7

Lab Sample ID: 200-39823-2

Date Collected: 08/22/17 11:33

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	3.4	U	40	3.4	ug/m3			08/25/17 19:55	49.2
1,2-Dichloroethane	6.8	U	40	6.8	ug/m3			08/25/17 19:55	49.2
1,1-Dichloroethene	6.8	U	39	6.8	ug/m3			08/25/17 19:55	49.2
1,2-Dichloropropane	8.0	U	45	8.0	ug/m3			08/25/17 19:55	49.2
Ethylbenzene	7.3	U	43	7.3	ug/m3			08/25/17 19:55	49.2
Methylene Chloride	12	U	85	12	ug/m3			08/25/17 19:55	49.2
Methyl tert-butyl ether	7.3	U	35	7.3	ug/m3			08/25/17 19:55	49.2
m,p-Xylene	16	U	110	16	ug/m3			08/25/17 19:55	49.2
Naphthalene	26	U	130	26	ug/m3			08/25/17 19:55	49.2
Tetrachloroethene	3.3	U	67	3.3	ug/m3			08/25/17 19:55	49.2
Toluene	**14**	**J**	37	6.5	ug/m3			08/25/17 19:55	49.2
trans-1,2-Dichloroethene	9.8	U	39	9.8	ug/m3			08/25/17 19:55	49.2
1,1,1-Trichloroethane	7.0	U	54	7.0	ug/m3			08/25/17 19:55	49.2
Trichloroethene	2.4	U	53	2.4	ug/m3			08/25/17 19:55	49.2
1,3,5-Trimethylbenzene	9.7	U	48	9.7	ug/m3			08/25/17 19:55	49.2
1,2,4-Trimethylbenzene	14	U	48	14	ug/m3			08/25/17 19:55	49.2
Vinyl chloride	2.3	U	25	2.3	ug/m3			08/25/17 19:55	49.2
Xylene, o-	8.5	U	43	8.5	ug/m3			08/25/17 19:55	49.2

Client Sample ID: SV-6

Lab Sample ID: 200-39823-3

Date Collected: 08/22/17 12:00

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.28	U	2.0	0.28	ppb v/v			08/25/17 20:45	10
Carbon tetrachloride	0.11	U	2.0	0.11	ppb v/v			08/25/17 20:45	10
Chlorobenzene	0.25	U	2.0	0.25	ppb v/v			08/25/17 20:45	10
Chloroethane	1.3	U	5.0	1.3	ppb v/v			08/25/17 20:45	10
Chloromethane	1.6	U	5.0	1.6	ppb v/v			08/25/17 20:45	10
cis-1,2-Dichloroethene	0.29	U	2.0	0.29	ppb v/v			08/25/17 20:45	10
1,3-Dichlorobenzene	0.50	U	2.0	0.50	ppb v/v			08/25/17 20:45	10
1,2-Dichlorobenzene	0.45	U	2.0	0.45	ppb v/v			08/25/17 20:45	10
1,1-Dichloroethane	0.17	U	2.0	0.17	ppb v/v			08/25/17 20:45	10
1,2-Dichloroethane	0.34	U	2.0	0.34	ppb v/v			08/25/17 20:45	10
1,1-Dichloroethene	0.35	U	2.0	0.35	ppb v/v			08/25/17 20:45	10
1,2-Dichloropropane	0.35	U	2.0	0.35	ppb v/v			08/25/17 20:45	10
Ethylbenzene	0.34	U	2.0	0.34	ppb v/v			08/25/17 20:45	10
Methylene Chloride	0.68	U	5.0	0.68	ppb v/v			08/25/17 20:45	10
Methyl tert-butyl ether	0.41	U	2.0	0.41	ppb v/v			08/25/17 20:45	10
m,p-Xylene	0.77	U	5.0	0.77	ppb v/v			08/25/17 20:45	10
Naphthalene	1.0	U	5.0	1.0	ppb v/v			08/25/17 20:45	10
Tetrachloroethene	**0.83**	**J**	2.0	0.098	ppb v/v			08/25/17 20:45	10
Toluene	0.35	U	2.0	0.35	ppb v/v			08/25/17 20:45	10
trans-1,2-Dichloroethene	0.50	U	2.0	0.50	ppb v/v			08/25/17 20:45	10
1,1,1-Trichloroethane	0.26	U	2.0	0.26	ppb v/v			08/25/17 20:45	10
Trichloroethene	0.091	U	2.0	0.091	ppb v/v			08/25/17 20:45	10
1,3,5-Trimethylbenzene	0.40	U	2.0	0.40	ppb v/v			08/25/17 20:45	10

Client Sample ID: SV-6

Lab Sample ID: 200-39823-3

Date Collected: 08/22/17 12:00
Matrix: Air
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.57	U	2.0	0.57	ppb v/v			08/25/17 20:45	10
Vinyl chloride	0.18	U	2.0	0.18	ppb v/v			08/25/17 20:45	10
Xylene, o-	0.40	U	2.0	0.40	ppb v/v			08/25/17 20:45	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.89	U	6.4	0.89	ug/m3			08/25/17 20:45	10
Carbon tetrachloride	0.69	U	13	0.69	ug/m3			08/25/17 20:45	10
Chlorobenzene	1.2	U	9.2	1.2	ug/m3			08/25/17 20:45	10
Chloroethane	3.4	U	13	3.4	ug/m3			08/25/17 20:45	10
Chloromethane	3.3	U	10	3.3	ug/m3			08/25/17 20:45	10
cis-1,2-Dichloroethene	1.1	U	7.9	1.1	ug/m3			08/25/17 20:45	10
1,3-Dichlorobenzene	3.0	U	12	3.0	ug/m3			08/25/17 20:45	10
1,2-Dichlorobenzene	2.7	U	12	2.7	ug/m3			08/25/17 20:45	10
1,1-Dichloroethane	0.69	U	8.1	0.69	ug/m3			08/25/17 20:45	10
1,2-Dichloroethane	1.4	U	8.1	1.4	ug/m3			08/25/17 20:45	10
1,1-Dichloroethene	1.4	U	7.9	1.4	ug/m3			08/25/17 20:45	10
1,2-Dichloropropane	1.6	U	9.2	1.6	ug/m3			08/25/17 20:45	10
Ethylbenzene	1.5	U	8.7	1.5	ug/m3			08/25/17 20:45	10
Methylene Chloride	2.4	U	17	2.4	ug/m3			08/25/17 20:45	10
Methyl tert-butyl ether	1.5	U	7.2	1.5	ug/m3			08/25/17 20:45	10
m,p-Xylene	3.3	U	22	3.3	ug/m3			08/25/17 20:45	10
Naphthalene	5.2	U	26	5.2	ug/m3			08/25/17 20:45	10
Tetrachloroethene	**5.6**	**J**	14	0.66	ug/m3			08/25/17 20:45	10
Toluene	1.3	U	7.5	1.3	ug/m3			08/25/17 20:45	10
trans-1,2-Dichloroethene	2.0	U	7.9	2.0	ug/m3			08/25/17 20:45	10
1,1,1-Trichloroethane	1.4	U	11	1.4	ug/m3			08/25/17 20:45	10
Trichloroethene	0.49	U	11	0.49	ug/m3			08/25/17 20:45	10
1,3,5-Trimethylbenzene	2.0	U	9.8	2.0	ug/m3			08/25/17 20:45	10
1,2,4-Trimethylbenzene	2.8	U	9.8	2.8	ug/m3			08/25/17 20:45	10
Vinyl chloride	0.46	U	5.1	0.46	ug/m3			08/25/17 20:45	10
Xylene, o-	1.7	U	8.7	1.7	ug/m3			08/25/17 20:45	10

Client Sample ID: SV-9

Lab Sample ID: 200-39823-4

Date Collected: 08/22/17 14:41
Matrix: Air
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.85	U	6.1	0.85	ppb v/v			08/25/17 21:35	30.3
Carbon tetrachloride	0.33	U	6.1	0.33	ppb v/v			08/25/17 21:35	30.3
Chlorobenzene	0.76	U	6.1	0.76	ppb v/v			08/25/17 21:35	30.3
Chloroethane	3.9	U	15	3.9	ppb v/v			08/25/17 21:35	30.3
Chloromethane	4.8	U	15	4.8	ppb v/v			08/25/17 21:35	30.3
cis-1,2-Dichloroethene	0.88	U	6.1	0.88	ppb v/v			08/25/17 21:35	30.3
1,3-Dichlorobenzene	1.5	U	6.1	1.5	ppb v/v			08/25/17 21:35	30.3
1,2-Dichlorobenzene	1.4	U	6.1	1.4	ppb v/v			08/25/17 21:35	30.3
1,1-Dichloroethane	0.52	U	6.1	0.52	ppb v/v			08/25/17 21:35	30.3
1,2-Dichloroethane	1.0	U	6.1	1.0	ppb v/v			08/25/17 21:35	30.3

Client Sample ID: SV-9

Date Collected: 08/22/17 14:41
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39823-4

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.1	U	6.1	1.1	ppb v/v			08/25/17 21:35	30.3
1,2-Dichloropropane	1.1	U	6.1	1.1	ppb v/v			08/25/17 21:35	30.3
Ethylbenzene	1.0	U	6.1	1.0	ppb v/v			08/25/17 21:35	30.3
Methylene Chloride	2.1	U	15	2.1	ppb v/v			08/25/17 21:35	30.3
Methyl tert-butyl ether	1.2	U	6.1	1.2	ppb v/v			08/25/17 21:35	30.3
m,p-Xylene	**2.5**	**J**	15	2.3	ppb v/v			08/25/17 21:35	30.3
Naphthalene	3.0	U	15	3.0	ppb v/v			08/25/17 21:35	30.3
Tetrachloroethene	0.30	U	6.1	0.30	ppb v/v			08/25/17 21:35	30.3
Toluene	1.1	U	6.1	1.1	ppb v/v			08/25/17 21:35	30.3
trans-1,2-Dichloroethene	1.5	U	6.1	1.5	ppb v/v			08/25/17 21:35	30.3
1,1,1-Trichloroethane	0.79	U	6.1	0.79	ppb v/v			08/25/17 21:35	30.3
Trichloroethene	0.28	U	6.1	0.28	ppb v/v			08/25/17 21:35	30.3
1,3,5-Trimethylbenzene	1.2	U	6.1	1.2	ppb v/v			08/25/17 21:35	30.3
1,2,4-Trimethylbenzene	1.7	U	6.1	1.7	ppb v/v			08/25/17 21:35	30.3
Vinyl chloride	0.55	U	6.1	0.55	ppb v/v			08/25/17 21:35	30.3
Xylene, o-	**2.1**	**J**	6.1	1.2	ppb v/v			08/25/17 21:35	30.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.7	U	19	2.7	ug/m3			08/25/17 21:35	30.3
Carbon tetrachloride	2.1	U	38	2.1	ug/m3			08/25/17 21:35	30.3
Chlorobenzene	3.5	U	28	3.5	ug/m3			08/25/17 21:35	30.3
Chloroethane	10	U	40	10	ug/m3			08/25/17 21:35	30.3
Chloromethane	10	U	31	10	ug/m3			08/25/17 21:35	30.3
cis-1,2-Dichloroethene	3.5	U	24	3.5	ug/m3			08/25/17 21:35	30.3
1,3-Dichlorobenzene	9.1	U	36	9.1	ug/m3			08/25/17 21:35	30.3
1,2-Dichlorobenzene	8.2	U	36	8.2	ug/m3			08/25/17 21:35	30.3
1,1-Dichloroethane	2.1	U	25	2.1	ug/m3			08/25/17 21:35	30.3
1,2-Dichloroethane	4.2	U	25	4.2	ug/m3			08/25/17 21:35	30.3
1,1-Dichloroethene	4.2	U	24	4.2	ug/m3			08/25/17 21:35	30.3
1,2-Dichloropropane	4.9	U	28	4.9	ug/m3			08/25/17 21:35	30.3
Ethylbenzene	4.5	U	26	4.5	ug/m3			08/25/17 21:35	30.3
Methylene Chloride	7.2	U	53	7.2	ug/m3			08/25/17 21:35	30.3
Methyl tert-butyl ether	4.5	U	22	4.5	ug/m3			08/25/17 21:35	30.3
m,p-Xylene	**11**	**J**	66	10	ug/m3			08/25/17 21:35	30.3
Naphthalene	16	U	79	16	ug/m3			08/25/17 21:35	30.3
Tetrachloroethene	2.0	U	41	2.0	ug/m3			08/25/17 21:35	30.3
Toluene	4.0	U	23	4.0	ug/m3			08/25/17 21:35	30.3
trans-1,2-Dichloroethene	6.0	U	24	6.0	ug/m3			08/25/17 21:35	30.3
1,1,1-Trichloroethane	4.3	U	33	4.3	ug/m3			08/25/17 21:35	30.3
Trichloroethene	1.5	U	33	1.5	ug/m3			08/25/17 21:35	30.3
1,3,5-Trimethylbenzene	6.0	U	30	6.0	ug/m3			08/25/17 21:35	30.3
1,2,4-Trimethylbenzene	8.5	U	30	8.5	ug/m3			08/25/17 21:35	30.3
Vinyl chloride	1.4	U	15	1.4	ug/m3			08/25/17 21:35	30.3
Xylene, o-	**9.0**	**J**	26	5.3	ug/m3			08/25/17 21:35	30.3

Client Sample ID: SV-10

Date Collected: 08/22/17 15:06
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39823-5

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.85	U	6.1	0.85	ppb v/v			08/25/17 22:25	30.5
Carbon tetrachloride	0.34	U	6.1	0.34	ppb v/v			08/25/17 22:25	30.5
Chlorobenzene	0.76	U	6.1	0.76	ppb v/v			08/25/17 22:25	30.5
Chloroethane	4.0	U	15	4.0	ppb v/v			08/25/17 22:25	30.5
Chloromethane	4.9	U	15	4.9	ppb v/v			08/25/17 22:25	30.5
cis-1,2-Dichloroethene	0.88	U	6.1	0.88	ppb v/v			08/25/17 22:25	30.5
1,3-Dichlorobenzene	1.5	U	6.1	1.5	ppb v/v			08/25/17 22:25	30.5
1,2-Dichlorobenzene	1.4	U	6.1	1.4	ppb v/v			08/25/17 22:25	30.5
1,1-Dichloroethane	0.52	U	6.1	0.52	ppb v/v			08/25/17 22:25	30.5
1,2-Dichloroethane	1.0	U	6.1	1.0	ppb v/v			08/25/17 22:25	30.5
1,1-Dichloroethene	1.1	U	6.1	1.1	ppb v/v			08/25/17 22:25	30.5
1,2-Dichloropropane	1.1	U	6.1	1.1	ppb v/v			08/25/17 22:25	30.5
Ethylbenzene	1.0	U	6.1	1.0	ppb v/v			08/25/17 22:25	30.5
Methylene Chloride	2.1	U	15	2.1	ppb v/v			08/25/17 22:25	30.5
Methyl tert-butyl ether	1.3	U	6.1	1.3	ppb v/v			08/25/17 22:25	30.5
m,p-Xylene	2.3	U	15	2.3	ppb v/v			08/25/17 22:25	30.5
Naphthalene	3.1	U	15	3.1	ppb v/v			08/25/17 22:25	30.5
Tetrachloroethene	0.30	U	6.1	0.30	ppb v/v			08/25/17 22:25	30.5
Toluene	**1.7**	**J**	6.1	1.1	ppb v/v			08/25/17 22:25	30.5
trans-1,2-Dichloroethene	1.5	U	6.1	1.5	ppb v/v			08/25/17 22:25	30.5
1,1,1-Trichloroethane	0.79	U	6.1	0.79	ppb v/v			08/25/17 22:25	30.5
Trichloroethene	0.28	U	6.1	0.28	ppb v/v			08/25/17 22:25	30.5
1,3,5-Trimethylbenzene	1.2	U	6.1	1.2	ppb v/v			08/25/17 22:25	30.5
1,2,4-Trimethylbenzene	1.7	U	6.1	1.7	ppb v/v			08/25/17 22:25	30.5
Vinyl chloride	0.55	U	6.1	0.55	ppb v/v			08/25/17 22:25	30.5
Xylene, o-	1.2	U	6.1	1.2	ppb v/v			08/25/17 22:25	30.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.7	U	19	2.7	ug/m3			08/25/17 22:25	30.5
Carbon tetrachloride	2.1	U	38	2.1	ug/m3			08/25/17 22:25	30.5
Chlorobenzene	3.5	U	28	3.5	ug/m3			08/25/17 22:25	30.5
Chloroethane	10	U	40	10	ug/m3			08/25/17 22:25	30.5
Chloromethane	10	U	31	10	ug/m3			08/25/17 22:25	30.5
cis-1,2-Dichloroethene	3.5	U	24	3.5	ug/m3			08/25/17 22:25	30.5
1,3-Dichlorobenzene	9.2	U	37	9.2	ug/m3			08/25/17 22:25	30.5
1,2-Dichlorobenzene	8.3	U	37	8.3	ug/m3			08/25/17 22:25	30.5
1,1-Dichloroethane	2.1	U	25	2.1	ug/m3			08/25/17 22:25	30.5
1,2-Dichloroethane	4.2	U	25	4.2	ug/m3			08/25/17 22:25	30.5
1,1-Dichloroethene	4.2	U	24	4.2	ug/m3			08/25/17 22:25	30.5
1,2-Dichloropropane	4.9	U	28	4.9	ug/m3			08/25/17 22:25	30.5
Ethylbenzene	4.5	U	26	4.5	ug/m3			08/25/17 22:25	30.5
Methylene Chloride	7.2	U	53	7.2	ug/m3			08/25/17 22:25	30.5
Methyl tert-butyl ether	4.5	U	22	4.5	ug/m3			08/25/17 22:25	30.5
m,p-Xylene	10	U	66	10	ug/m3			08/25/17 22:25	30.5
Naphthalene	16	U	80	16	ug/m3			08/25/17 22:25	30.5
Tetrachloroethene	2.0	U	41	2.0	ug/m3			08/25/17 22:25	30.5
Toluene	**6.5**	**J**	23	4.0	ug/m3			08/25/17 22:25	30.5
trans-1,2-Dichloroethene	6.0	U	24	6.0	ug/m3			08/25/17 22:25	30.5
1,1,1-Trichloroethane	4.3	U	33	4.3	ug/m3			08/25/17 22:25	30.5

Client Sample ID: SV-10

Lab Sample ID: 200-39823-5

Date Collected: 08/22/17 15:06

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.5	U	33	1.5	ug/m3			08/25/17 22:25	30.5
1,3,5-Trimethylbenzene	6.0	U	30	6.0	ug/m3			08/25/17 22:25	30.5
1,2,4-Trimethylbenzene	8.5	U	30	8.5	ug/m3			08/25/17 22:25	30.5
Vinyl chloride	1.4	U	16	1.4	ug/m3			08/25/17 22:25	30.5
Xylene, o-	5.3	U	26	5.3	ug/m3			08/25/17 22:25	30.5

Client Sample ID: SV-12

Lab Sample ID: 200-39823-6

Date Collected: 08/22/17 15:51

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.15**	**J**	0.20	0.028	ppb v/v			08/25/17 23:16	1
Carbon tetrachloride	**0.098**	**J**	0.20	0.011	ppb v/v			08/25/17 23:16	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/25/17 23:16	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/25/17 23:16	1
Chloromethane	**0.19**	**J**	0.50	0.16	ppb v/v			08/25/17 23:16	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/25/17 23:16	1
1,3-Dichlorobenzene	**0.065**	**J**	0.20	0.050	ppb v/v			08/25/17 23:16	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/25/17 23:16	1
1,1-Dichloroethane	**0.040**	**J**	0.20	0.017	ppb v/v			08/25/17 23:16	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/25/17 23:16	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/25/17 23:16	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/25/17 23:16	1
Ethylbenzene	**0.49**		0.20	0.034	ppb v/v			08/25/17 23:16	1
Methylene Chloride	0.068	U	0.50	0.068	ppb v/v			08/25/17 23:16	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/25/17 23:16	1
m,p-Xylene	**1.3**		0.50	0.077	ppb v/v			08/25/17 23:16	1
Naphthalene	**0.22**	**J**	0.50	0.10	ppb v/v			08/25/17 23:16	1
Tetrachloroethene	**2.2**		0.20	0.0098	ppb v/v			08/25/17 23:16	1
Toluene	**0.94**		0.20	0.035	ppb v/v			08/25/17 23:16	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/25/17 23:16	1
1,1,1-Trichloroethane	**0.090**	**J**	0.20	0.026	ppb v/v			08/25/17 23:16	1
Trichloroethene	**0.054**	**J**	0.20	0.0091	ppb v/v			08/25/17 23:16	1
1,3,5-Trimethylbenzene	**0.12**	**J**	0.20	0.040	ppb v/v			08/25/17 23:16	1
1,2,4-Trimethylbenzene	**0.44**		0.20	0.057	ppb v/v			08/25/17 23:16	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/25/17 23:16	1
Xylene, o-	**0.38**		0.20	0.040	ppb v/v			08/25/17 23:16	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.49**	**J**	0.64	0.089	ug/m3			08/25/17 23:16	1
Carbon tetrachloride	**0.62**	**J**	1.3	0.069	ug/m3			08/25/17 23:16	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/25/17 23:16	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/25/17 23:16	1
Chloromethane	**0.39**	**J**	1.0	0.33	ug/m3			08/25/17 23:16	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/25/17 23:16	1
1,3-Dichlorobenzene	**0.39**	**J**	1.2	0.30	ug/m3			08/25/17 23:16	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/25/17 23:16	1

Client Sample ID: SV-12

Lab Sample ID: 200-39823-6

Date Collected: 08/22/17 15:51
Matrix: Air
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**0.16**	**J**	0.81	0.069	ug/m3			08/25/17 23:16	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/25/17 23:16	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/25/17 23:16	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/25/17 23:16	1
Ethylbenzene	**2.1**		0.87	0.15	ug/m3			08/25/17 23:16	1
Methylene Chloride	0.24	U	1.7	0.24	ug/m3			08/25/17 23:16	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/25/17 23:16	1
m,p-Xylene	**5.8**		2.2	0.33	ug/m3			08/25/17 23:16	1
Naphthalene	**1.1**	**J**	2.6	0.52	ug/m3			08/25/17 23:16	1
Tetrachloroethene	**15**		1.4	0.066	ug/m3			08/25/17 23:16	1
Toluene	**3.6**		0.75	0.13	ug/m3			08/25/17 23:16	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/25/17 23:16	1
1,1,1-Trichloroethane	**0.49**	**J**	1.1	0.14	ug/m3			08/25/17 23:16	1
Trichloroethene	**0.29**	**J**	1.1	0.049	ug/m3			08/25/17 23:16	1
1,3,5-Trimethylbenzene	**0.60**	**J**	0.98	0.20	ug/m3			08/25/17 23:16	1
1,2,4-Trimethylbenzene	**2.2**		0.98	0.28	ug/m3			08/25/17 23:16	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/25/17 23:16	1
Xylene, o-	**1.7**		0.87	0.17	ug/m3			08/25/17 23:16	1

Client Sample ID: SV-11

Lab Sample ID: 200-39823-7

Date Collected: 08/22/17 16:10
Matrix: Air
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.39**		0.20	0.028	ppb v/v			08/26/17 00:06	1
Carbon tetrachloride	**0.060**	**J**	0.20	0.011	ppb v/v			08/26/17 00:06	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/26/17 00:06	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/26/17 00:06	1
Chloromethane	**0.19**	**J**	0.50	0.16	ppb v/v			08/26/17 00:06	1
cis-1,2-Dichloroethene	**13**		0.20	0.029	ppb v/v			08/26/17 00:06	1
1,3-Dichlorobenzene	**0.38**		0.20	0.050	ppb v/v			08/26/17 00:06	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/26/17 00:06	1
1,1-Dichloroethane	**0.087**	**J**	0.20	0.017	ppb v/v			08/26/17 00:06	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/26/17 00:06	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/26/17 00:06	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/26/17 00:06	1
Ethylbenzene	**3.7**		0.20	0.034	ppb v/v			08/26/17 00:06	1
Methylene Chloride	**0.35**	**J**	0.50	0.068	ppb v/v			08/26/17 00:06	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/26/17 00:06	1
m,p-Xylene	**8.5**		0.50	0.077	ppb v/v			08/26/17 00:06	1
Naphthalene	**0.36**	**J**	0.50	0.10	ppb v/v			08/26/17 00:06	1
Tetrachloroethene	**11**		0.20	0.0098	ppb v/v			08/26/17 00:06	1
Toluene	**1.7**		0.20	0.035	ppb v/v			08/26/17 00:06	1
trans-1,2-Dichloroethene	**0.24**		0.20	0.050	ppb v/v			08/26/17 00:06	1
1,1,1-Trichloroethane	**0.12**	**J**	0.20	0.026	ppb v/v			08/26/17 00:06	1
Trichloroethene	**5.2**		0.20	0.0091	ppb v/v			08/26/17 00:06	1
1,3,5-Trimethylbenzene	**0.32**		0.20	0.040	ppb v/v			08/26/17 00:06	1

Client Sample ID: SV-11

Lab Sample ID: 200-39823-7

Date Collected: 08/22/17 16:10

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**1.3**		0.20	0.057	ppb v/v			08/26/17 00:06	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/26/17 00:06	1
Xylene, o-	**1.7**		0.20	0.040	ppb v/v			08/26/17 00:06	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.2**		0.64	0.089	ug/m3			08/26/17 00:06	1
Carbon tetrachloride	**0.37**	**J**	1.3	0.069	ug/m3			08/26/17 00:06	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/26/17 00:06	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/26/17 00:06	1
Chloromethane	**0.39**	**J**	1.0	0.33	ug/m3			08/26/17 00:06	1
cis-1,2-Dichloroethene	**51**		0.79	0.11	ug/m3			08/26/17 00:06	1
1,3-Dichlorobenzene	**2.3**		1.2	0.30	ug/m3			08/26/17 00:06	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/26/17 00:06	1
1,1-Dichloroethane	**0.35**	**J**	0.81	0.069	ug/m3			08/26/17 00:06	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/26/17 00:06	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/26/17 00:06	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/26/17 00:06	1
Ethylbenzene	**16**		0.87	0.15	ug/m3			08/26/17 00:06	1
Methylene Chloride	**1.2**	**J**	1.7	0.24	ug/m3			08/26/17 00:06	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/26/17 00:06	1
m,p-Xylene	**37**		2.2	0.33	ug/m3			08/26/17 00:06	1
Naphthalene	**1.9**	**J**	2.6	0.52	ug/m3			08/26/17 00:06	1
Tetrachloroethene	**72**		1.4	0.066	ug/m3			08/26/17 00:06	1
Toluene	**6.4**		0.75	0.13	ug/m3			08/26/17 00:06	1
trans-1,2-Dichloroethene	**0.94**		0.79	0.20	ug/m3			08/26/17 00:06	1
1,1,1-Trichloroethane	**0.65**	**J**	1.1	0.14	ug/m3			08/26/17 00:06	1
Trichloroethene	**28**		1.1	0.049	ug/m3			08/26/17 00:06	1
1,3,5-Trimethylbenzene	**1.6**		0.98	0.20	ug/m3			08/26/17 00:06	1
1,2,4-Trimethylbenzene	**6.2**		0.98	0.28	ug/m3			08/26/17 00:06	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/26/17 00:06	1
Xylene, o-	**7.5**		0.87	0.17	ug/m3			08/26/17 00:06	1

Client Sample ID: SV-14

Lab Sample ID: 200-39823-8

Date Collected: 08/23/17 10:03

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.67**		0.20	0.028	ppb v/v			08/26/17 00:56	1
Carbon tetrachloride	**0.064**	**J**	0.20	0.011	ppb v/v			08/26/17 00:56	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/26/17 00:56	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/26/17 00:56	1
Chloromethane	0.16	U	0.50	0.16	ppb v/v			08/26/17 00:56	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/26/17 00:56	1
1,3-Dichlorobenzene	**0.22**		0.20	0.050	ppb v/v			08/26/17 00:56	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/26/17 00:56	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/26/17 00:56	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/26/17 00:56	1

Client Sample ID: SV-14

Date Collected: 08/23/17 10:03
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39823-8

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/26/17 00:56	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/26/17 00:56	1
Ethylbenzene	**2.3**		0.20	0.034	ppb v/v			08/26/17 00:56	1
Methylene Chloride	**0.079**	**J**	0.50	0.068	ppb v/v			08/26/17 00:56	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/26/17 00:56	1
m,p-Xylene	**5.4**		0.50	0.077	ppb v/v			08/26/17 00:56	1
Naphthalene	**0.33**	**J**	0.50	0.10	ppb v/v			08/26/17 00:56	1
Tetrachloroethene	**0.23**		0.20	0.0098	ppb v/v			08/26/17 00:56	1
Toluene	**3.1**		0.20	0.035	ppb v/v			08/26/17 00:56	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/26/17 00:56	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/26/17 00:56	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/26/17 00:56	1
1,3,5-Trimethylbenzene	**5.5**		0.20	0.040	ppb v/v			08/26/17 00:56	1
1,2,4-Trimethylbenzene	**8.3**		0.20	0.057	ppb v/v			08/26/17 00:56	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/26/17 00:56	1
Xylene, o-	**2.1**		0.20	0.040	ppb v/v			08/26/17 00:56	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.1**		0.64	0.089	ug/m3			08/26/17 00:56	1
Carbon tetrachloride	**0.40**	**J**	1.3	0.069	ug/m3			08/26/17 00:56	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/26/17 00:56	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/26/17 00:56	1
Chloromethane	0.33	U	1.0	0.33	ug/m3			08/26/17 00:56	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/26/17 00:56	1
1,3-Dichlorobenzene	**1.3**		1.2	0.30	ug/m3			08/26/17 00:56	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/26/17 00:56	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/26/17 00:56	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/26/17 00:56	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/26/17 00:56	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/26/17 00:56	1
Ethylbenzene	**9.9**		0.87	0.15	ug/m3			08/26/17 00:56	1
Methylene Chloride	**0.27**	**J**	1.7	0.24	ug/m3			08/26/17 00:56	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/26/17 00:56	1
m,p-Xylene	**23**		2.2	0.33	ug/m3			08/26/17 00:56	1
Naphthalene	**1.7**	**J**	2.6	0.52	ug/m3			08/26/17 00:56	1
Tetrachloroethene	**1.6**		1.4	0.066	ug/m3			08/26/17 00:56	1
Toluene	**12**		0.75	0.13	ug/m3			08/26/17 00:56	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/26/17 00:56	1
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/26/17 00:56	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/26/17 00:56	1
1,3,5-Trimethylbenzene	**27**		0.98	0.20	ug/m3			08/26/17 00:56	1
1,2,4-Trimethylbenzene	**41**		0.98	0.28	ug/m3			08/26/17 00:56	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/26/17 00:56	1
Xylene, o-	**9.0**		0.87	0.17	ug/m3			08/26/17 00:56	1

Client Sample ID: SV-13

Date Collected: 08/23/17 10:06
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39823-9

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.48**		0.20	0.028	ppb v/v			08/26/17 01:47	1
Carbon tetrachloride	**0.093**	**J**	0.20	0.011	ppb v/v			08/26/17 01:47	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/26/17 01:47	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/26/17 01:47	1
Chloromethane	**0.25**	**J**	0.50	0.16	ppb v/v			08/26/17 01:47	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/26/17 01:47	1
1,3-Dichlorobenzene	0.050	U	0.20	0.050	ppb v/v			08/26/17 01:47	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/26/17 01:47	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/26/17 01:47	1
1,2-Dichloroethane	**0.053**	**J**	0.20	0.034	ppb v/v			08/26/17 01:47	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/26/17 01:47	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/26/17 01:47	1
Ethylbenzene	**0.71**		0.20	0.034	ppb v/v			08/26/17 01:47	1
Methylene Chloride	0.068	U	0.50	0.068	ppb v/v			08/26/17 01:47	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/26/17 01:47	1
m,p-Xylene	**0.74**		0.50	0.077	ppb v/v			08/26/17 01:47	1
Naphthalene	0.10	U	0.50	0.10	ppb v/v			08/26/17 01:47	1
Tetrachloroethene	**0.11**	**J**	0.20	0.0098	ppb v/v			08/26/17 01:47	1
Toluene	**0.46**		0.20	0.035	ppb v/v			08/26/17 01:47	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/26/17 01:47	1
1,1,1-Trichloroethane	**0.027**	**J**	0.20	0.026	ppb v/v			08/26/17 01:47	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/26/17 01:47	1
1,3,5-Trimethylbenzene	0.040	U	0.20	0.040	ppb v/v			08/26/17 01:47	1
1,2,4-Trimethylbenzene	0.057	U	0.20	0.057	ppb v/v			08/26/17 01:47	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/26/17 01:47	1
Xylene, o-	**0.13**	**J**	0.20	0.040	ppb v/v			08/26/17 01:47	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.5**		0.64	0.089	ug/m3			08/26/17 01:47	1
Carbon tetrachloride	**0.58**	**J**	1.3	0.069	ug/m3			08/26/17 01:47	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/26/17 01:47	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/26/17 01:47	1
Chloromethane	**0.51**	**J**	1.0	0.33	ug/m3			08/26/17 01:47	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/26/17 01:47	1
1,3-Dichlorobenzene	0.30	U	1.2	0.30	ug/m3			08/26/17 01:47	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/26/17 01:47	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/26/17 01:47	1
1,2-Dichloroethane	**0.22**	**J**	0.81	0.14	ug/m3			08/26/17 01:47	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/26/17 01:47	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/26/17 01:47	1
Ethylbenzene	**3.1**		0.87	0.15	ug/m3			08/26/17 01:47	1
Methylene Chloride	0.24	U	1.7	0.24	ug/m3			08/26/17 01:47	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/26/17 01:47	1
m,p-Xylene	**3.2**		2.2	0.33	ug/m3			08/26/17 01:47	1
Naphthalene	0.52	U	2.6	0.52	ug/m3			08/26/17 01:47	1
Tetrachloroethene	**0.74**	**J**	1.4	0.066	ug/m3			08/26/17 01:47	1
Toluene	**1.7**		0.75	0.13	ug/m3			08/26/17 01:47	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/26/17 01:47	1
1,1,1-Trichloroethane	**0.15**	**J**	1.1	0.14	ug/m3			08/26/17 01:47	1

Client Sample ID: SV-13

Lab Sample ID: 200-39823-9

Date Collected: 08/23/17 10:06
Matrix: Air
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/26/17 01:47	1
1,3,5-Trimethylbenzene	0.20	U	0.98	0.20	ug/m3			08/26/17 01:47	1
1,2,4-Trimethylbenzene	0.28	U	0.98	0.28	ug/m3			08/26/17 01:47	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/26/17 01:47	1
Xylene, o-	**0.55**	**J**	0.87	0.17	ug/m3			08/26/17 01:47	1

Client Sample ID: SV-16

Lab Sample ID: 200-39823-10

Date Collected: 08/23/17 11:15
Matrix: Air
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.4	U	9.9	1.4	ppb v/v			08/26/17 02:37	49.5
Carbon tetrachloride	0.54	U	9.9	0.54	ppb v/v			08/26/17 02:37	49.5
Chlorobenzene	1.2	U	9.9	1.2	ppb v/v			08/26/17 02:37	49.5
Chloroethane	6.4	U	25	6.4	ppb v/v			08/26/17 02:37	49.5
Chloromethane	7.9	U	25	7.9	ppb v/v			08/26/17 02:37	49.5
cis-1,2-Dichloroethene	1.4	U	9.9	1.4	ppb v/v			08/26/17 02:37	49.5
1,3-Dichlorobenzene	2.5	U	9.9	2.5	ppb v/v			08/26/17 02:37	49.5
1,2-Dichlorobenzene	2.2	U	9.9	2.2	ppb v/v			08/26/17 02:37	49.5
1,1-Dichloroethane	**2.7**	**J**	9.9	0.84	ppb v/v			08/26/17 02:37	49.5
1,2-Dichloroethane	1.7	U	9.9	1.7	ppb v/v			08/26/17 02:37	49.5
1,1-Dichloroethene	1.7	U	9.9	1.7	ppb v/v			08/26/17 02:37	49.5
1,2-Dichloropropane	1.7	U	9.9	1.7	ppb v/v			08/26/17 02:37	49.5
Ethylbenzene	**2.1**	**J**	9.9	1.7	ppb v/v			08/26/17 02:37	49.5
Methylene Chloride	3.4	U	25	3.4	ppb v/v			08/26/17 02:37	49.5
Methyl tert-butyl ether	2.0	U	9.9	2.0	ppb v/v			08/26/17 02:37	49.5
m,p-Xylene	3.8	U	25	3.8	ppb v/v			08/26/17 02:37	49.5
Naphthalene	5.0	U	25	5.0	ppb v/v			08/26/17 02:37	49.5
Tetrachloroethene	0.49	U	9.9	0.49	ppb v/v			08/26/17 02:37	49.5
Toluene	**2.6**	**J**	9.9	1.7	ppb v/v			08/26/17 02:37	49.5
trans-1,2-Dichloroethene	2.5	U	9.9	2.5	ppb v/v			08/26/17 02:37	49.5
1,1,1-Trichloroethane	1.3	U	9.9	1.3	ppb v/v			08/26/17 02:37	49.5
Trichloroethene	0.45	U	9.9	0.45	ppb v/v			08/26/17 02:37	49.5
1,3,5-Trimethylbenzene	2.0	U	9.9	2.0	ppb v/v			08/26/17 02:37	49.5
1,2,4-Trimethylbenzene	2.8	U	9.9	2.8	ppb v/v			08/26/17 02:37	49.5
Vinyl chloride	0.89	U	9.9	0.89	ppb v/v			08/26/17 02:37	49.5
Xylene, o-	2.0	U	9.9	2.0	ppb v/v			08/26/17 02:37	49.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.4	U	32	4.4	ug/m3			08/26/17 02:37	49.5
Carbon tetrachloride	3.4	U	62	3.4	ug/m3			08/26/17 02:37	49.5
Chlorobenzene	5.7	U	46	5.7	ug/m3			08/26/17 02:37	49.5
Chloroethane	17	U	65	17	ug/m3			08/26/17 02:37	49.5
Chloromethane	16	U	51	16	ug/m3			08/26/17 02:37	49.5
cis-1,2-Dichloroethene	5.7	U	39	5.7	ug/m3			08/26/17 02:37	49.5
1,3-Dichlorobenzene	15	U	60	15	ug/m3			08/26/17 02:37	49.5
1,2-Dichlorobenzene	13	U	60	13	ug/m3			08/26/17 02:37	49.5

Client Sample ID: SV-16

Lab Sample ID: 200-39823-10

Date Collected: 08/23/17 11:15

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**11**	**J**	40	3.4	ug/m3			08/26/17 02:37	49.5
1,2-Dichloroethane	6.8	U	40	6.8	ug/m3			08/26/17 02:37	49.5
1,1-Dichloroethene	6.9	U	39	6.9	ug/m3			08/26/17 02:37	49.5
1,2-Dichloropropane	8.0	U	46	8.0	ug/m3			08/26/17 02:37	49.5
Ethylbenzene	**9.3**	**J**	43	7.3	ug/m3			08/26/17 02:37	49.5
Methylene Chloride	12	U	86	12	ug/m3			08/26/17 02:37	49.5
Methyl tert-butyl ether	7.3	U	36	7.3	ug/m3			08/26/17 02:37	49.5
m,p-Xylene	17	U	110	17	ug/m3			08/26/17 02:37	49.5
Naphthalene	26	U	130	26	ug/m3			08/26/17 02:37	49.5
Tetrachloroethene	3.3	U	67	3.3	ug/m3			08/26/17 02:37	49.5
Toluene	**9.9**	**J**	37	6.5	ug/m3			08/26/17 02:37	49.5
trans-1,2-Dichloroethene	9.8	U	39	9.8	ug/m3			08/26/17 02:37	49.5
1,1,1-Trichloroethane	7.0	U	54	7.0	ug/m3			08/26/17 02:37	49.5
Trichloroethene	2.4	U	53	2.4	ug/m3			08/26/17 02:37	49.5
1,3,5-Trimethylbenzene	9.7	U	49	9.7	ug/m3			08/26/17 02:37	49.5
1,2,4-Trimethylbenzene	14	U	49	14	ug/m3			08/26/17 02:37	49.5
Vinyl chloride	2.3	U	25	2.3	ug/m3			08/26/17 02:37	49.5
Xylene, o-	8.6	U	43	8.6	ug/m3			08/26/17 02:37	49.5

Client Sample ID: SV-18

Lab Sample ID: 200-39823-11

Date Collected: 08/23/17 12:11

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.7	U	12	1.7	ppb v/v			08/26/17 03:28	60.1
Carbon tetrachloride	0.66	U	12	0.66	ppb v/v			08/26/17 03:28	60.1
Chlorobenzene	1.5	U	12	1.5	ppb v/v			08/26/17 03:28	60.1
Chloroethane	7.8	U	30	7.8	ppb v/v			08/26/17 03:28	60.1
Chloromethane	9.6	U	30	9.6	ppb v/v			08/26/17 03:28	60.1
cis-1,2-Dichloroethene	1.7	U	12	1.7	ppb v/v			08/26/17 03:28	60.1
1,3-Dichlorobenzene	3.0	U	12	3.0	ppb v/v			08/26/17 03:28	60.1
1,2-Dichlorobenzene	2.7	U	12	2.7	ppb v/v			08/26/17 03:28	60.1
1,1-Dichloroethane	1.0	U	12	1.0	ppb v/v			08/26/17 03:28	60.1
1,2-Dichloroethane	2.0	U	12	2.0	ppb v/v			08/26/17 03:28	60.1
1,1-Dichloroethene	2.1	U	12	2.1	ppb v/v			08/26/17 03:28	60.1
1,2-Dichloropropane	2.1	U	12	2.1	ppb v/v			08/26/17 03:28	60.1
Ethylbenzene	2.0	U	12	2.0	ppb v/v			08/26/17 03:28	60.1
Methylene Chloride	4.1	U	30	4.1	ppb v/v			08/26/17 03:28	60.1
Methyl tert-butyl ether	2.5	U	12	2.5	ppb v/v			08/26/17 03:28	60.1
m,p-Xylene	4.6	U	30	4.6	ppb v/v			08/26/17 03:28	60.1
Naphthalene	6.0	U	30	6.0	ppb v/v			08/26/17 03:28	60.1
Tetrachloroethene	0.59	U	12	0.59	ppb v/v			08/26/17 03:28	60.1
Toluene	**4.4**	**J**	12	2.1	ppb v/v			08/26/17 03:28	60.1
trans-1,2-Dichloroethene	3.0	U	12	3.0	ppb v/v			08/26/17 03:28	60.1
1,1,1-Trichloroethane	1.6	U	12	1.6	ppb v/v			08/26/17 03:28	60.1
Trichloroethene	0.55	U	12	0.55	ppb v/v			08/26/17 03:28	60.1
1,3,5-Trimethylbenzene	2.4	U	12	2.4	ppb v/v			08/26/17 03:28	60.1

Client Sample ID: SV-18

Lab Sample ID: 200-39823-11

Date Collected: 08/23/17 12:11

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	3.4	U	12	3.4	ppb v/v			08/26/17 03:28	60.1
Vinyl chloride	1.1	U	12	1.1	ppb v/v			08/26/17 03:28	60.1
Xylene, o-	2.4	U	12	2.4	ppb v/v			08/26/17 03:28	60.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.4	U	38	5.4	ug/m3			08/26/17 03:28	60.1
Carbon tetrachloride	4.2	U	76	4.2	ug/m3			08/26/17 03:28	60.1
Chlorobenzene	6.9	U	55	6.9	ug/m3			08/26/17 03:28	60.1
Chloroethane	21	U	79	21	ug/m3			08/26/17 03:28	60.1
Chloromethane	20	U	62	20	ug/m3			08/26/17 03:28	60.1
cis-1,2-Dichloroethene	6.9	U	48	6.9	ug/m3			08/26/17 03:28	60.1
1,3-Dichlorobenzene	18	U	72	18	ug/m3			08/26/17 03:28	60.1
1,2-Dichlorobenzene	16	U	72	16	ug/m3			08/26/17 03:28	60.1
1,1-Dichloroethane	4.1	U	49	4.1	ug/m3			08/26/17 03:28	60.1
1,2-Dichloroethane	8.3	U	49	8.3	ug/m3			08/26/17 03:28	60.1
1,1-Dichloroethene	8.3	U	48	8.3	ug/m3			08/26/17 03:28	60.1
1,2-Dichloropropane	9.7	U	56	9.7	ug/m3			08/26/17 03:28	60.1
Ethylbenzene	8.9	U	52	8.9	ug/m3			08/26/17 03:28	60.1
Methylene Chloride	14	U	100	14	ug/m3			08/26/17 03:28	60.1
Methyl tert-butyl ether	8.9	U	43	8.9	ug/m3			08/26/17 03:28	60.1
m,p-Xylene	20	U	130	20	ug/m3			08/26/17 03:28	60.1
Naphthalene	32	U	160	32	ug/m3			08/26/17 03:28	60.1
Tetrachloroethene	4.0	U	82	4.0	ug/m3			08/26/17 03:28	60.1
Toluene	**17**	**J**	45	7.9	ug/m3			08/26/17 03:28	60.1
trans-1,2-Dichloroethene	12	U	48	12	ug/m3			08/26/17 03:28	60.1
1,1,1-Trichloroethane	8.5	U	66	8.5	ug/m3			08/26/17 03:28	60.1
Trichloroethene	2.9	U	65	2.9	ug/m3			08/26/17 03:28	60.1
1,3,5-Trimethylbenzene	12	U	59	12	ug/m3			08/26/17 03:28	60.1
1,2,4-Trimethylbenzene	17	U	59	17	ug/m3			08/26/17 03:28	60.1
Vinyl chloride	2.8	U	31	2.8	ug/m3			08/26/17 03:28	60.1
Xylene, o-	10	U	52	10	ug/m3			08/26/17 03:28	60.1

Client Sample ID: SV-17

Lab Sample ID: 200-39823-12

Date Collected: 08/23/17 12:36

Matrix: Air

Date Received: 08/24/17 10:30

Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.3	U	9.6	1.3	ppb v/v			08/26/17 04:18	48.1
Carbon tetrachloride	0.53	U	9.6	0.53	ppb v/v			08/26/17 04:18	48.1
Chlorobenzene	1.2	U	9.6	1.2	ppb v/v			08/26/17 04:18	48.1
Chloroethane	6.3	U	24	6.3	ppb v/v			08/26/17 04:18	48.1
Chloromethane	7.7	U	24	7.7	ppb v/v			08/26/17 04:18	48.1
cis-1,2-Dichloroethene	1.4	U	9.6	1.4	ppb v/v			08/26/17 04:18	48.1
1,3-Dichlorobenzene	2.4	U	9.6	2.4	ppb v/v			08/26/17 04:18	48.1
1,2-Dichlorobenzene	2.2	U	9.6	2.2	ppb v/v			08/26/17 04:18	48.1
1,1-Dichloroethane	**1.0**	**J**	9.6	0.82	ppb v/v			08/26/17 04:18	48.1
1,2-Dichloroethane	1.6	U	9.6	1.6	ppb v/v			08/26/17 04:18	48.1

Client Sample ID: SV-17

Date Collected: 08/23/17 12:36
Date Received: 08/24/17 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39823-12

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.7	U	9.6	1.7	ppb v/v			08/26/17 04:18	48.1
1,2-Dichloropropane	1.7	U	9.6	1.7	ppb v/v			08/26/17 04:18	48.1
Ethylbenzene	1.6	U	9.6	1.6	ppb v/v			08/26/17 04:18	48.1
Methylene Chloride	3.3	U	24	3.3	ppb v/v			08/26/17 04:18	48.1
Methyl tert-butyl ether	2.0	U	9.6	2.0	ppb v/v			08/26/17 04:18	48.1
m,p-Xylene	3.7	U	24	3.7	ppb v/v			08/26/17 04:18	48.1
Naphthalene	4.8	U	24	4.8	ppb v/v			08/26/17 04:18	48.1
Tetrachloroethene	0.47	U	9.6	0.47	ppb v/v			08/26/17 04:18	48.1
Toluene	1.7	U	9.6	1.7	ppb v/v			08/26/17 04:18	48.1
trans-1,2-Dichloroethene	2.4	U	9.6	2.4	ppb v/v			08/26/17 04:18	48.1
1,1,1-Trichloroethane	1.3	U	9.6	1.3	ppb v/v			08/26/17 04:18	48.1
Trichloroethene	0.44	U	9.6	0.44	ppb v/v			08/26/17 04:18	48.1
1,3,5-Trimethylbenzene	1.9	U	9.6	1.9	ppb v/v			08/26/17 04:18	48.1
1,2,4-Trimethylbenzene	2.7	U	9.6	2.7	ppb v/v			08/26/17 04:18	48.1
Vinyl chloride	0.87	U	9.6	0.87	ppb v/v			08/26/17 04:18	48.1
Xylene, o-	1.9	U	9.6	1.9	ppb v/v			08/26/17 04:18	48.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.3	U	31	4.3	ug/m3			08/26/17 04:18	48.1
Carbon tetrachloride	3.3	U	61	3.3	ug/m3			08/26/17 04:18	48.1
Chlorobenzene	5.5	U	44	5.5	ug/m3			08/26/17 04:18	48.1
Chloroethane	17	U	63	17	ug/m3			08/26/17 04:18	48.1
Chloromethane	16	U	50	16	ug/m3			08/26/17 04:18	48.1
cis-1,2-Dichloroethene	5.5	U	38	5.5	ug/m3			08/26/17 04:18	48.1
1,3-Dichlorobenzene	14	U	58	14	ug/m3			08/26/17 04:18	48.1
1,2-Dichlorobenzene	13	U	58	13	ug/m3			08/26/17 04:18	48.1
1,1-Dichloroethane	**4.2**	**J**	39	3.3	ug/m3			08/26/17 04:18	48.1
1,2-Dichloroethane	6.6	U	39	6.6	ug/m3			08/26/17 04:18	48.1
1,1-Dichloroethene	6.7	U	38	6.7	ug/m3			08/26/17 04:18	48.1
1,2-Dichloropropane	7.8	U	44	7.8	ug/m3			08/26/17 04:18	48.1
Ethylbenzene	7.1	U	42	7.1	ug/m3			08/26/17 04:18	48.1
Methylene Chloride	11	U	84	11	ug/m3			08/26/17 04:18	48.1
Methyl tert-butyl ether	7.1	U	35	7.1	ug/m3			08/26/17 04:18	48.1
m,p-Xylene	16	U	100	16	ug/m3			08/26/17 04:18	48.1
Naphthalene	25	U	130	25	ug/m3			08/26/17 04:18	48.1
Tetrachloroethene	3.2	U	65	3.2	ug/m3			08/26/17 04:18	48.1
Toluene	6.3	U	36	6.3	ug/m3			08/26/17 04:18	48.1
trans-1,2-Dichloroethene	9.5	U	38	9.5	ug/m3			08/26/17 04:18	48.1
1,1,1-Trichloroethane	6.8	U	52	6.8	ug/m3			08/26/17 04:18	48.1
Trichloroethene	2.4	U	52	2.4	ug/m3			08/26/17 04:18	48.1
1,3,5-Trimethylbenzene	9.5	U	47	9.5	ug/m3			08/26/17 04:18	48.1
1,2,4-Trimethylbenzene	13	U	47	13	ug/m3			08/26/17 04:18	48.1
Vinyl chloride	2.2	U	25	2.2	ug/m3			08/26/17 04:18	48.1
Xylene, o-	8.4	U	42	8.4	ug/m3			08/26/17 04:18	48.1

Default Detection Limits

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.20	0.026	ppb v/v	TO-15
1,1,1-Trichloroethane	1.1	0.14	ug/m3	TO-15
1,1-Dichloroethane	0.20	0.017	ppb v/v	TO-15
1,1-Dichloroethane	0.81	0.069	ug/m3	TO-15
1,1-Dichloroethene	0.20	0.035	ppb v/v	TO-15
1,1-Dichloroethene	0.79	0.14	ug/m3	TO-15
1,2,4-Trimethylbenzene	0.20	0.057	ppb v/v	TO-15
1,2,4-Trimethylbenzene	0.98	0.28	ug/m3	TO-15
1,2-Dichlorobenzene	0.20	0.045	ppb v/v	TO-15
1,2-Dichlorobenzene	1.2	0.27	ug/m3	TO-15
1,2-Dichloroethane	0.20	0.034	ppb v/v	TO-15
1,2-Dichloroethane	0.81	0.14	ug/m3	TO-15
1,2-Dichloropropane	0.20	0.035	ppb v/v	TO-15
1,2-Dichloropropane	0.92	0.16	ug/m3	TO-15
1,3,5-Trimethylbenzene	0.20	0.040	ppb v/v	TO-15
1,3,5-Trimethylbenzene	0.98	0.20	ug/m3	TO-15
1,3-Dichlorobenzene	0.20	0.050	ppb v/v	TO-15
1,3-Dichlorobenzene	1.2	0.30	ug/m3	TO-15
Benzene	0.20	0.028	ppb v/v	TO-15
Benzene	0.64	0.089	ug/m3	TO-15
Carbon tetrachloride	0.20	0.011	ppb v/v	TO-15
Carbon tetrachloride	1.3	0.069	ug/m3	TO-15
Chlorobenzene	0.20	0.025	ppb v/v	TO-15
Chlorobenzene	0.92	0.12	ug/m3	TO-15
Chloroethane	0.50	0.13	ppb v/v	TO-15
Chloroethane	1.3	0.34	ug/m3	TO-15
Chloromethane	0.50	0.16	ppb v/v	TO-15
Chloromethane	1.0	0.33	ug/m3	TO-15
cis-1,2-Dichloroethene	0.20	0.029	ppb v/v	TO-15
cis-1,2-Dichloroethene	0.79	0.11	ug/m3	TO-15
Ethylbenzene	0.20	0.034	ppb v/v	TO-15
Ethylbenzene	0.87	0.15	ug/m3	TO-15
m,p-Xylene	0.50	0.077	ppb v/v	TO-15
m,p-Xylene	2.2	0.33	ug/m3	TO-15
Methyl tert-butyl ether	0.20	0.041	ppb v/v	TO-15
Methyl tert-butyl ether	0.72	0.15	ug/m3	TO-15
Methylene Chloride	0.50	0.068	ppb v/v	TO-15
Methylene Chloride	1.7	0.24	ug/m3	TO-15
Naphthalene	0.50	0.10	ppb v/v	TO-15
Naphthalene	2.6	0.52	ug/m3	TO-15
Tetrachloroethene	0.20	0.0098	ppb v/v	TO-15
Tetrachloroethene	1.4	0.066	ug/m3	TO-15
Toluene	0.20	0.035	ppb v/v	TO-15
Toluene	0.75	0.13	ug/m3	TO-15
trans-1,2-Dichloroethene	0.20	0.050	ppb v/v	TO-15
trans-1,2-Dichloroethene	0.79	0.20	ug/m3	TO-15
Trichloroethene	0.20	0.0091	ppb v/v	TO-15
Trichloroethene	1.1	0.049	ug/m3	TO-15
Vinyl chloride	0.20	0.018	ppb v/v	TO-15
Vinyl chloride	0.51	0.046	ug/m3	TO-15
Xylene, o-	0.20	0.040	ppb v/v	TO-15
Xylene, o-	0.87	0.17	ug/m3	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-120218/4
Matrix: Air
Analysis Batch: 120218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.028	U	0.20	0.028	ppb v/v			08/25/17 12:20	1
Carbon tetrachloride	0.011	U	0.20	0.011	ppb v/v			08/25/17 12:20	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/25/17 12:20	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/25/17 12:20	1
Chloromethane	0.16	U	0.50	0.16	ppb v/v			08/25/17 12:20	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/25/17 12:20	1
1,3-Dichlorobenzene	0.050	U	0.20	0.050	ppb v/v			08/25/17 12:20	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/25/17 12:20	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/25/17 12:20	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/25/17 12:20	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/25/17 12:20	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/25/17 12:20	1
Ethylbenzene	0.034	U	0.20	0.034	ppb v/v			08/25/17 12:20	1
Methylene Chloride	0.068	U	0.50	0.068	ppb v/v			08/25/17 12:20	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/25/17 12:20	1
m,p-Xylene	0.077	U	0.50	0.077	ppb v/v			08/25/17 12:20	1
Naphthalene	0.10	U	0.50	0.10	ppb v/v			08/25/17 12:20	1
Tetrachloroethene	0.0098	U	0.20	0.0098	ppb v/v			08/25/17 12:20	1
Toluene	0.035	U	0.20	0.035	ppb v/v			08/25/17 12:20	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/25/17 12:20	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/25/17 12:20	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/25/17 12:20	1
1,3,5-Trimethylbenzene	0.040	U	0.20	0.040	ppb v/v			08/25/17 12:20	1
1,2,4-Trimethylbenzene	0.057	U	0.20	0.057	ppb v/v			08/25/17 12:20	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/25/17 12:20	1
Xylene, o-	0.040	U	0.20	0.040	ppb v/v			08/25/17 12:20	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.089	U	0.64	0.089	ug/m3			08/25/17 12:20	1
Carbon tetrachloride	0.069	U	1.3	0.069	ug/m3			08/25/17 12:20	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/25/17 12:20	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/25/17 12:20	1
Chloromethane	0.33	U	1.0	0.33	ug/m3			08/25/17 12:20	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/25/17 12:20	1
1,3-Dichlorobenzene	0.30	U	1.2	0.30	ug/m3			08/25/17 12:20	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/25/17 12:20	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/25/17 12:20	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/25/17 12:20	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/25/17 12:20	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/25/17 12:20	1
Ethylbenzene	0.15	U	0.87	0.15	ug/m3			08/25/17 12:20	1
Methylene Chloride	0.24	U	1.7	0.24	ug/m3			08/25/17 12:20	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/25/17 12:20	1
m,p-Xylene	0.33	U	2.2	0.33	ug/m3			08/25/17 12:20	1
Naphthalene	0.52	U	2.6	0.52	ug/m3			08/25/17 12:20	1
Tetrachloroethene	0.066	U	1.4	0.066	ug/m3			08/25/17 12:20	1
Toluene	0.13	U	0.75	0.13	ug/m3			08/25/17 12:20	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/25/17 12:20	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-120218/4
Matrix: Air
Analysis Batch: 120218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/25/17 12:20	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/25/17 12:20	1
1,3,5-Trimethylbenzene	0.20	U	0.98	0.20	ug/m3			08/25/17 12:20	1
1,2,4-Trimethylbenzene	0.28	U	0.98	0.28	ug/m3			08/25/17 12:20	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/25/17 12:20	1
Xylene, o-	0.17	U	0.87	0.17	ug/m3			08/25/17 12:20	1

Lab Sample ID: LCS 200-120218/3
Matrix: Air
Analysis Batch: 120218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	8.99		ppb v/v		90	67 - 127
Carbon tetrachloride	10.0	9.59		ppb v/v		96	62 - 143
Chlorobenzene	10.0	9.48		ppb v/v		95	68 - 128
Chloroethane	10.0	9.06		ppb v/v		91	65 - 125
Chloromethane	10.0	8.61		ppb v/v		86	57 - 126
cis-1,2-Dichloroethene	10.0	9.40		ppb v/v		94	67 - 127
1,3-Dichlorobenzene	10.0	9.86		ppb v/v		99	67 - 127
1,2-Dichlorobenzene	10.0	9.75		ppb v/v		97	67 - 127
1,1-Dichloroethane	10.0	9.49		ppb v/v		95	66 - 126
1,2-Dichloroethane	10.0	9.06		ppb v/v		91	67 - 132
1,1-Dichloroethene	10.0	9.13		ppb v/v		91	67 - 127
1,2-Dichloropropane	10.0	9.28		ppb v/v		93	67 - 127
Ethylbenzene	10.0	9.51		ppb v/v		95	68 - 128
Methylene Chloride	10.0	9.20		ppb v/v		92	62 - 122
Methyl tert-butyl ether	10.0	9.75		ppb v/v		97	67 - 127
m,p-Xylene	20.0	19.0		ppb v/v		95	68 - 128
Naphthalene	10.0	8.24		ppb v/v		82	50 - 121
Tetrachloroethene	10.0	9.32		ppb v/v		93	70 - 130
Toluene	10.0	9.45		ppb v/v		94	67 - 127
trans-1,2-Dichloroethene	10.0	9.92		ppb v/v		99	72 - 132
1,1,1-Trichloroethane	10.0	9.07		ppb v/v		91	70 - 130
Trichloroethene	10.0	9.17		ppb v/v		92	68 - 128
1,3,5-Trimethylbenzene	10.0	9.61		ppb v/v		96	65 - 125
1,2,4-Trimethylbenzene	10.0	9.75		ppb v/v		98	65 - 125
Vinyl chloride	10.0	9.21		ppb v/v		92	62 - 125
Xylene, o-	10.0	9.47		ppb v/v		95	67 - 127

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	32	28.7		ug/m3		90	67 - 127
Carbon tetrachloride	63	60.3		ug/m3		96	62 - 143
Chlorobenzene	46	43.6		ug/m3		95	68 - 128
Chloroethane	26	23.9		ug/m3		91	65 - 125
Chloromethane	21	17.8		ug/m3		86	57 - 126
cis-1,2-Dichloroethene	40	37.3		ug/m3		94	67 - 127
1,3-Dichlorobenzene	60	59.3		ug/m3		99	67 - 127
1,2-Dichlorobenzene	60	58.6		ug/m3		97	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-120218/3
Matrix: Air
Analysis Batch: 120218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	40	38.4		ug/m3		95	66 - 126
1,2-Dichloroethane	40	36.7		ug/m3		91	67 - 132
1,1-Dichloroethene	40	36.2		ug/m3		91	67 - 127
1,2-Dichloropropane	46	42.9		ug/m3		93	67 - 127
Ethylbenzene	43	41.3		ug/m3		95	68 - 128
Methylene Chloride	35	32.0		ug/m3		92	62 - 122
Methyl tert-butyl ether	36	35.1		ug/m3		97	67 - 127
m,p-Xylene	87	82.6		ug/m3		95	68 - 128
Naphthalene	52	43.2		ug/m3		82	50 - 121
Tetrachloroethene	68	63.2		ug/m3		93	70 - 130
Toluene	38	35.6		ug/m3		94	67 - 127
trans-1,2-Dichloroethene	40	39.3		ug/m3		99	72 - 132
1,1,1-Trichloroethane	55	49.5		ug/m3		91	70 - 130
Trichloroethene	54	49.3		ug/m3		92	68 - 128
1,3,5-Trimethylbenzene	49	47.2		ug/m3		96	65 - 125
1,2,4-Trimethylbenzene	49	47.9		ug/m3		98	65 - 125
Vinyl chloride	26	23.5		ug/m3		92	62 - 125
Xylene, o-	43	41.1		ug/m3		95	67 - 127

QC Association Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Air - GC/MS VOA

Analysis Batch: 120218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-39823-1	SV-8	Total/NA	Air	TO-15	
200-39823-2	SV-7	Total/NA	Air	TO-15	
200-39823-3	SV-6	Total/NA	Air	TO-15	
200-39823-4	SV-9	Total/NA	Air	TO-15	
200-39823-5	SV-10	Total/NA	Air	TO-15	
200-39823-6	SV-12	Total/NA	Air	TO-15	
200-39823-7	SV-11	Total/NA	Air	TO-15	
200-39823-8	SV-14	Total/NA	Air	TO-15	
200-39823-9	SV-13	Total/NA	Air	TO-15	
200-39823-10	SV-16	Total/NA	Air	TO-15	
200-39823-11	SV-18	Total/NA	Air	TO-15	
200-39823-12	SV-17	Total/NA	Air	TO-15	
MB 200-120218/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-120218/3	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Client Sample ID: SV-8
Date Collected: 08/22/17 10:40
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	120218	08/25/17 19:04	K1P	TAL BUR

Client Sample ID: SV-7
Date Collected: 08/22/17 11:33
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		49.2	120218	08/25/17 19:55	K1P	TAL BUR

Client Sample ID: SV-6
Date Collected: 08/22/17 12:00
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		10	120218	08/25/17 20:45	K1P	TAL BUR

Client Sample ID: SV-9
Date Collected: 08/22/17 14:41
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		30.3	120218	08/25/17 21:35	K1P	TAL BUR

Client Sample ID: SV-10
Date Collected: 08/22/17 15:06
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		30.5	120218	08/25/17 22:25	K1P	TAL BUR

Client Sample ID: SV-12
Date Collected: 08/22/17 15:51
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	120218	08/25/17 23:16	K1P	TAL BUR

Lab Chronicle

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Client Sample ID: SV-11
Date Collected: 08/22/17 16:10
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-7
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	120218	08/26/17 00:06	K1P	TAL BUR

Client Sample ID: SV-14
Date Collected: 08/23/17 10:03
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-8
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	120218	08/26/17 00:56	K1P	TAL BUR

Client Sample ID: SV-13
Date Collected: 08/23/17 10:06
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-9
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	120218	08/26/17 01:47	K1P	TAL BUR

Client Sample ID: SV-16
Date Collected: 08/23/17 11:15
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-10
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		49.5	120218	08/26/17 02:37	K1P	TAL BUR

Client Sample ID: SV-18
Date Collected: 08/23/17 12:11
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-11
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		60.1	120218	08/26/17 03:28	K1P	TAL BUR

Client Sample ID: SV-17
Date Collected: 08/23/17 12:36
Date Received: 08/24/17 10:30

Lab Sample ID: 200-39823-12
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		48.1	120218	08/26/17 04:18	K1P	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Laboratory: TestAmerica Burlington

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10391	04-01-18

Method Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: AKRF Inc
Project/Site: St. John Villa

TestAmerica Job ID: 200-39823-1
SDG: 200-39823-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-39823-1	SV-8	Air	08/22/17 10:40	08/24/17 10:30
200-39823-2	SV-7	Air	08/22/17 11:33	08/24/17 10:30
200-39823-3	SV-6	Air	08/22/17 12:00	08/24/17 10:30
200-39823-4	SV-9	Air	08/22/17 14:41	08/24/17 10:30
200-39823-5	SV-10	Air	08/22/17 15:06	08/24/17 10:30
200-39823-6	SV-12	Air	08/22/17 15:51	08/24/17 10:30
200-39823-7	SV-11	Air	08/22/17 16:10	08/24/17 10:30
200-39823-8	SV-14	Air	08/23/17 10:03	08/24/17 10:30
200-39823-9	SV-13	Air	08/23/17 10:06	08/24/17 10:30
200-39823-10	SV-16	Air	08/23/17 11:15	08/24/17 10:30
200-39823-11	SV-18	Air	08/23/17 12:11	08/24/17 10:30
200-39823-12	SV-17	Air	08/23/17 12:36	08/24/17 10:30

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Instrument ID: CHG.i Analysis Batch Number: 120200

Lab Sample ID: IC 200-120200/3 Client Sample ID:

Date Analyzed: 08/24/17 17:24 Lab File ID: 200-26567-003.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	11.84	Incomplete Integration	daiglep	08/25/17 09:20
Tetrachloroethene	15.49	Incomplete Integration	daiglep	08/25/17 09:20

Lab Sample ID: IC 200-120200/4 Client Sample ID:

Date Analyzed: 08/24/17 18:14 Lab File ID: 200-26567-004.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrylonitrile	7.35	Baseline	daiglep	08/25/17 09:21
1,2-Dichloropropane	12.40	Incomplete Integration	daiglep	08/25/17 09:22
Bromoform	19.17	Baseline	daiglep	08/25/17 08:48

Lab Sample ID: IC 200-120200/5 Client Sample ID:

Date Analyzed: 08/24/17 19:05 Lab File ID: 200-26567-005.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	9.85	Incomplete Integration	daiglep	08/25/17 09:24
cis-1,3-Dichloropropene	13.85	Incomplete Integration	daiglep	08/25/17 09:24

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Instrument ID: CHG.i Analysis Batch Number: 120218

Lab Sample ID: MB 200-120218/4 Client Sample ID:

Date Analyzed: 08/25/17 12:20 Lab File ID: 200-26579-004.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	25.15	Assign Peak	puangmalee k	08/28/17 10:47

Lab Sample ID: 200-39823-1 Client Sample ID: SV-8

Date Analyzed: 08/25/17 19:04 Lab File ID: 200-26579-012.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	11.85	Assign Peak	puangmalee k	08/28/17 11:29

Lab Sample ID: 200-39823-3 Client Sample ID: SV-6

Date Analyzed: 08/25/17 20:45 Lab File ID: 200-26579-014.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	14.44	Assign Peak	puangmalee k	08/28/17 11:33
m,p-Xylene	17.81	Assign Peak	puangmalee k	08/28/17 11:33

Lab Sample ID: 200-39823-4 Client Sample ID: SV-9

Date Analyzed: 08/25/17 21:35 Lab File ID: 200-26579-015.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,4-Trimethylbenzene	21.08	Assign Peak	puangmalee k	08/28/17 11:35

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Instrument ID: CHG.i Analysis Batch Number: 120218

Lab Sample ID: 200-39823-5 Client Sample ID: SV-10

Date Analyzed: 08/25/17 22:25 Lab File ID: 200-26579-016.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	14.44	Assign Peak	puangmalee k	08/28/17 11:37
1,3,5-Trimethylbenzene	20.46	Assign Peak	puangmalee k	08/28/17 11:38

Lab Sample ID: 200-39823-6 Client Sample ID: SV-12

Date Analyzed: 08/25/17 23:16 Lab File ID: 200-26579-017.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	6.78	Assign Peak	puangmalee k	08/28/17 11:39

Lab Sample ID: 200-39823-7 Client Sample ID: SV-11

Date Analyzed: 08/26/17 00:06 Lab File ID: 200-26579-018.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	7.18	Assign Peak	puangmalee k	08/28/17 11:41

Lab Sample ID: 200-39823-9 Client Sample ID: SV-13

Date Analyzed: 08/26/17 01:47 Lab File ID: 200-26579-020.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	9.84	Assign Peak	puangmalee k	08/28/17 11:58

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Instrument ID: CHG.i Analysis Batch Number: 120218

Lab Sample ID: 200-39823-10 Client Sample ID: SV-16

Date Analyzed: 08/26/17 02:37 Lab File ID: 200-26579-021.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylbenzene	17.56	Assign Peak	puangmalee k	08/28/17 12:02
Xylene, o-	18.67	Assign Peak	puangmalee k	08/28/17 12:03

Lab Sample ID: 200-39823-11 Client Sample ID: SV-18

Date Analyzed: 08/26/17 03:28 Lab File ID: 200-26579-022.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylbenzene	17.57	Assign Peak	puangmalee k	08/28/17 12:08

Lab Sample ID: 200-39823-12 Client Sample ID: SV-17

Date Analyzed: 08/26/17 04:18 Lab File ID: 200-26579-023.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	14.43	Assign Peak	puangmalee k	08/28/17 12:18
Ethylbenzene	17.55	Assign Peak	puangmalee k	08/28/17 12:18
m,p-Xylene	17.81	Assign Peak	puangmalee k	08/28/17 12:19

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL1w_00176	10/21/17	08/22/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00143	155 mL	1,1,1-Trichloroethane	0.20044 ppb v/v
							1,1,2,2-Tetrachloroethane	0.20044 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.20044 ppb v/v
							1,1,2-Trichloroethane	0.20044 ppb v/v
							1,1-Dichloroethane	0.20044 ppb v/v
							1,1-Dichloroethene	0.20044 ppb v/v
							1,2,3-Trichlorobenzene	0.20044 ppb v/v
							1,2,3-Trichloropropane	0.20044 ppb v/v
							1,2,4-Trichlorobenzene	0.20044 ppb v/v
							1,2,4-Trimethylbenzene	0.20044 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20044 ppb v/v
							1,2-Dichlorobenzene	0.20044 ppb v/v
							1,2-Dichloroethane	0.20044 ppb v/v
							1,2-Dichloropropane	0.20044 ppb v/v
							1,3,5-Trimethylbenzene	0.20044 ppb v/v
							1,3-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dioxane	0.20044 ppb v/v
							2-Butanone (MEK)	0.20044 ppb v/v
							2-Chlorotoluene	0.20044 ppb v/v
							2-Hexanone	0.20044 ppb v/v
							2-Methyl-2-propanol	0.20044 ppb v/v
							2-Methylbutane	0.20044 ppb v/v
							3-Chloro-1-propene	0.20044 ppb v/v
							4-Ethyltoluene	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	0.20044 ppb v/v
							4-Methyl-2-pentanone (MIBK)	0.20044 ppb v/v
							Acetone	0.20044 ppb v/v
							Acetonitrile	0.20044 ppb v/v
							Acrolein	0.20044 ppb v/v
							Acrylonitrile	0.20044 ppb v/v
							Alpha Methyl Styrene	0.20044 ppb v/v
							Benzene	0.20044 ppb v/v
							Benzyl chloride	0.20044 ppb v/v
							Bromoform	0.20044 ppb v/v
							Bromomethane	0.20044 ppb v/v
							Butadiene	0.20044 ppb v/v
							Butane	0.20044 ppb v/v
							Carbon disulfide	0.20044 ppb v/v
							Carbon tetrachloride	0.20044 ppb v/v
							Chlorobenzene	0.20044 ppb v/v
							Chlorodibromomethane	0.20044 ppb v/v
							Chlorodifluoromethane	0.20044 ppb v/v
							Chloroethane	0.20044 ppb v/v
							Chloroform	0.20044 ppb v/v
							Chloromethane	0.20044 ppb v/v
							cis-1,2-Dichloroethene	0.20044 ppb v/v
							cis-1,3-Dichloropropene	0.20044 ppb v/v
							Cyclohexane	0.20044 ppb v/v
							Dibromomethane	0.20044 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	0.20044 ppb v/v
							Dichlorodifluoromethane	0.20044 ppb v/v
							Dodecane	0.20044 ppb v/v
							Ethyl acetate	0.20044 ppb v/v
							Ethyl ether	0.20044 ppb v/v
							Ethylbenzene	0.20044 ppb v/v
							Ethylene Dibromide	0.20044 ppb v/v
							Hexachlorobutadiene	0.20044 ppb v/v
							Hexane	0.20044 ppb v/v
							Isooctane	0.20044 ppb v/v
							Isopropyl alcohol	0.20044 ppb v/v
							Isopropylbenzene	0.20044 ppb v/v
							m,p-Xylene	0.400879 ppb v/v
							Methyl methacrylate	0.20044 ppb v/v
							Methyl tert-butyl ether	0.20044 ppb v/v
							Methylene Chloride	0.20044 ppb v/v
							n-Butanol	0.20044 ppb v/v
							n-Butylbenzene	0.20044 ppb v/v
							n-Decane	0.20044 ppb v/v
							n-Heptane	0.20044 ppb v/v
							n-Nonane	0.20044 ppb v/v
							n-Octane	0.20044 ppb v/v
							N-Propylbenzene	0.20044 ppb v/v
							Naphthalene	0.20044 ppb v/v
							Pentane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	0.20044 ppb v/v
							sec-Butylbenzene	0.20044 ppb v/v
							Styrene	0.20044 ppb v/v
							tert-Butylbenzene	0.20044 ppb v/v
							Tetrachloroethene	0.20044 ppb v/v
							Tetrahydrofuran	0.20044 ppb v/v
							Toluene	0.20044 ppb v/v
							trans-1,2-Dichloroethene	0.20044 ppb v/v
							trans-1,3-Dichloropropene	0.20044 ppb v/v
							Trichloroethene	0.20044 ppb v/v
							Trichlorofluoromethane	0.20044 ppb v/v
							Undecane	0.20044 ppb v/v
							Vinyl acetate	0.20044 ppb v/v
							Vinyl bromide	0.20044 ppb v/v
							Vinyl chloride	0.20044 ppb v/v
							Xylene, o-	0.20044 ppb v/v
							Ethanol	0.400944 ppb v/v
.ATTO15CAL6w_00143	10/21/17	08/21/17	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00093	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2-Butanone (MEK)	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Hexanone	19.9961 ppb v/v
							2-Methyl-2-propanol	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloro-1-propene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (MIBK)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Butadiene	19.9961 ppb v/v
							Butane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodibromomethane	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorobromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Ethylene Dibromide	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexane	19.9961 ppb v/v
							Isooctane	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							Isopropylbenzene	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							N-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl bromide	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00087	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL2w_00242	10/21/17	08/22/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00143	387 mL	1,1,1-Trichloroethane	0.500453 ppb v/v
							1,1,2,2-Tetrachloroethane	0.500453 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.500453 ppb v/v
							1,1,2-Trichloroethane	0.500453 ppb v/v
							1,1-Dichloroethane	0.500453 ppb v/v
							1,1-Dichloroethene	0.500453 ppb v/v
							1,2,3-Trichlorobenzene	0.500453 ppb v/v
							1,2,3-Trichloropropane	0.500453 ppb v/v
							1,2,4-Trichlorobenzene	0.500453 ppb v/v
							1,2,4-Trimethylbenzene	0.500453 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.500453 ppb v/v
							1,2-Dichlorobenzene	0.500453 ppb v/v
							1,2-Dichloroethane	0.500453 ppb v/v
							1,2-Dichloropropane	0.500453 ppb v/v
							1,3,5-Trimethylbenzene	0.500453 ppb v/v
							1,3-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dioxane	0.500453 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Butanone (MEK)	0.500453 ppb v/v
							2-Chlorotoluene	0.500453 ppb v/v
							2-Hexanone	0.500453 ppb v/v
							2-Methyl-2-propanol	0.500453 ppb v/v
							2-Methylbutane	0.500453 ppb v/v
							3-Chloro-1-propene	0.500453 ppb v/v
							4-Ethyltoluene	0.500453 ppb v/v
							4-Isopropyltoluene	0.500453 ppb v/v
							4-Methyl-2-pentanone (MIBK)	0.500453 ppb v/v
							Acetone	0.500453 ppb v/v
							Acetonitrile	0.500453 ppb v/v
							Acrolein	0.500453 ppb v/v
							Acrylonitrile	0.500453 ppb v/v
							Alpha Methyl Styrene	0.500453 ppb v/v
							Benzene	0.500453 ppb v/v
							Benzyl chloride	0.500453 ppb v/v
							Bromoform	0.500453 ppb v/v
							Bromomethane	0.500453 ppb v/v
							Butadiene	0.500453 ppb v/v
							Butane	0.500453 ppb v/v
							Carbon disulfide	0.500453 ppb v/v
							Carbon tetrachloride	0.500453 ppb v/v
							Chlorobenzene	0.500453 ppb v/v
							Chlorodibromomethane	0.500453 ppb v/v
							Chlorodifluoromethane	0.500453 ppb v/v

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	0.500453 ppb v/v
							Chloroform	0.500453 ppb v/v
							Chloromethane	0.500453 ppb v/v
							cis-1,2-Dichloroethene	0.500453 ppb v/v
							cis-1,3-Dichloropropene	0.500453 ppb v/v
							Cyclohexane	0.500453 ppb v/v
							Dibromomethane	0.500453 ppb v/v
							Dichlorobromomethane	0.500453 ppb v/v
							Dichlorodifluoromethane	0.500453 ppb v/v
							Dodecane	0.500453 ppb v/v
							Ethyl acetate	0.500453 ppb v/v
							Ethyl ether	0.500453 ppb v/v
							Ethylbenzene	0.500453 ppb v/v
							Ethylene Dibromide	0.500453 ppb v/v
							Hexachlorobutadiene	0.500453 ppb v/v
							Hexane	0.500453 ppb v/v
							Isooctane	0.500453 ppb v/v
							Isopropyl alcohol	0.500453 ppb v/v
							Isopropylbenzene	0.500453 ppb v/v
							m,p-Xylene	1.00091 ppb v/v
							Methyl methacrylate	0.500453 ppb v/v
							Methyl tert-butyl ether	0.500453 ppb v/v
							Methylene Chloride	0.500453 ppb v/v
							n-Butanol	0.500453 ppb v/v
							n-Butylbenzene	0.500453 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	0.500453 ppb v/v
							n-Heptane	0.500453 ppb v/v
							n-Nonane	0.500453 ppb v/v
							n-Octane	0.500453 ppb v/v
							N-Propylbenzene	0.500453 ppb v/v
							Naphthalene	0.500453 ppb v/v
							Pentane	0.500453 ppb v/v
							Propene	0.500453 ppb v/v
							sec-Butylbenzene	0.500453 ppb v/v
							Styrene	0.500453 ppb v/v
							tert-Butylbenzene	0.500453 ppb v/v
							Tetrachloroethene	0.500453 ppb v/v
							Tetrahydrofuran	0.500453 ppb v/v
							Toluene	0.500453 ppb v/v
							trans-1,2-Dichloroethene	0.500453 ppb v/v
							trans-1,3-Dichloropropene	0.500453 ppb v/v
							Trichloroethene	0.500453 ppb v/v
							Trichlorofluoromethane	0.500453 ppb v/v
							Undecane	0.500453 ppb v/v
							Vinyl acetate	0.500453 ppb v/v
							Vinyl bromide	0.500453 ppb v/v
							Vinyl chloride	0.500453 ppb v/v
							Xylene, o-	0.500453 ppb v/v
							Ethanol	5.01064 ppb v/v
					ATTO15EthCALw_00087	124 mL	Ethanol	5.01064 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ATTO15CAL6w_00143	10/21/17	08/21/17	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00093	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2-Butanone (MEK)	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Hexanone	19.9961 ppb v/v
							2-Methyl-2-propanol	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloro-1-propene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (MIBK)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Butadiene	19.9961 ppb v/v
							Butane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodibromomethane	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Ethylene Dibromide	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Hexane	19.9961 ppb v/v
							Isooctane	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							Isopropylbenzene	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							N-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl bromide	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00087	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v

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SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
.ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL3w_00186	10/21/17	08/21/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00093	386 mL	1,1,1-Trichloroethane	4.99256 ppb v/v
							1,1,2,2-Tetrachloroethane	4.99256 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	4.99256 ppb v/v
							1,1,2-Trichloroethane	4.99256 ppb v/v
							1,1-Dichloroethane	4.99256 ppb v/v
							1,1-Dichloroethene	4.99256 ppb v/v
							1,2,3-Trichlorobenzene	4.99256 ppb v/v
							1,2,3-Trichloropropane	4.99256 ppb v/v
							1,2,4-Trichlorobenzene	4.99256 ppb v/v

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SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	4.99256 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.99256 ppb v/v
							1,2-Dichlorobenzene	4.99256 ppb v/v
							1,2-Dichloroethane	4.99256 ppb v/v
							1,2-Dichloropropane	4.99256 ppb v/v
							1,3,5-Trimethylbenzene	4.99256 ppb v/v
							1,3-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dioxane	4.99256 ppb v/v
							2-Butanone (MEK)	4.99256 ppb v/v
							2-Chlorotoluene	4.99256 ppb v/v
							2-Hexanone	4.99256 ppb v/v
							2-Methyl-2-propanol	4.99256 ppb v/v
							2-Methylbutane	4.99256 ppb v/v
							3-Chloro-1-propene	4.99256 ppb v/v
							4-Ethyltoluene	4.99256 ppb v/v
							4-Isopropyltoluene	4.99256 ppb v/v
							4-Methyl-2-pentanone (MIBK)	4.99256 ppb v/v
							Acetone	4.99256 ppb v/v
							Acetonitrile	4.99256 ppb v/v
							Acrolein	4.99256 ppb v/v
							Acrylonitrile	4.99256 ppb v/v
							Alpha Methyl Styrene	4.99256 ppb v/v
							Benzene	4.99256 ppb v/v
							Benzyl chloride	4.99256 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	4.99256 ppb v/v
							Bromomethane	4.99256 ppb v/v
							Butadiene	4.99256 ppb v/v
							Butane	4.99256 ppb v/v
							Carbon disulfide	4.99256 ppb v/v
							Carbon tetrachloride	4.99256 ppb v/v
							Chlorobenzene	4.99256 ppb v/v
							Chlorodibromomethane	4.99256 ppb v/v
							Chlorodifluoromethane	4.99256 ppb v/v
							Chloroethane	4.99256 ppb v/v
							Chloroform	4.99256 ppb v/v
							Chloromethane	4.99256 ppb v/v
							cis-1,2-Dichloroethene	4.99256 ppb v/v
							cis-1,3-Dichloropropene	4.99256 ppb v/v
							Cyclohexane	4.99256 ppb v/v
							Dibromomethane	4.99256 ppb v/v
							Dichlorobromomethane	4.99256 ppb v/v
							Dichlorodifluoromethane	4.99256 ppb v/v
							Dodecane	4.99256 ppb v/v
							Ethyl acetate	4.99256 ppb v/v
							Ethyl ether	4.99256 ppb v/v
							Ethylbenzene	4.99256 ppb v/v
							Ethylene Dibromide	4.99256 ppb v/v
							Hexachlorobutadiene	4.99256 ppb v/v
							Hexane	4.99256 ppb v/v

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SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isooctane	4.99256 ppb v/v
							Isopropyl alcohol	4.99256 ppb v/v
							Isopropylbenzene	4.99256 ppb v/v
							m,p-Xylene	9.98513 ppb v/v
							Methyl methacrylate	4.99256 ppb v/v
							Methyl tert-butyl ether	4.99256 ppb v/v
							Methylene Chloride	4.99256 ppb v/v
							n-Butanol	4.99256 ppb v/v
							n-Butylbenzene	4.99256 ppb v/v
							n-Decane	4.99256 ppb v/v
							n-Heptane	4.99256 ppb v/v
							n-Nonane	4.99256 ppb v/v
							n-Octane	4.99256 ppb v/v
							N-Propylbenzene	4.99256 ppb v/v
							Naphthalene	4.99256 ppb v/v
							Pentane	4.99256 ppb v/v
							Propene	4.99256 ppb v/v
							sec-Butylbenzene	4.99256 ppb v/v
							Styrene	4.99256 ppb v/v
							tert-Butylbenzene	4.99256 ppb v/v
							Tetrachloroethene	4.99256 ppb v/v
							Tetrahydrofuran	4.99256 ppb v/v
							Toluene	4.99256 ppb v/v
							trans-1,2-Dichloroethene	4.99256 ppb v/v
							trans-1,3-Dichloropropene	4.99256 ppb v/v

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	4.99256 ppb v/v
							Trichlorofluoromethane	4.99256 ppb v/v
							Undecane	4.99256 ppb v/v
							Vinyl acetate	4.99256 ppb v/v
							Vinyl bromide	4.99256 ppb v/v
							Vinyl chloride	4.99256 ppb v/v
							Xylene, o-	4.99256 ppb v/v
					ATTO15EthCALw_00087	309 mL	Ethanol	9.99159 ppb v/v
.ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00635	08/26/17	07/21/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00093	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,3-Trichlorobenzene	9.99806 ppb v/v
							1,2,3-Trichloropropane	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2-Butanone (MEK)	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	9.99806 ppb v/v
							2-Hexanone	9.99806 ppb v/v
							2-Methyl-2-propanol	9.99806 ppb v/v
							2-Methylbutane	9.99806 ppb v/v
							3-Chloro-1-propene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							4-Methyl-2-pentanone (MIBK)	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Acetonitrile	9.99806 ppb v/v
							Acrolein	9.99806 ppb v/v
							Acrylonitrile	9.99806 ppb v/v
							Alpha Methyl Styrene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Butadiene	9.99806 ppb v/v
							Butane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chlorodibromomethane	9.99806 ppb v/v
							Chlorodifluoromethane	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromomethane	9.99806 ppb v/v
							Dichlorobromomethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Dodecane	9.99806 ppb v/v
							Ethyl acetate	9.99806 ppb v/v
							Ethyl ether	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Ethylene Dibromide	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Hexane	9.99806 ppb v/v
							Isooctane	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							Isopropylbenzene	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butanol	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Decane	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Heptane	9.99806 ppb v/v
							n-Nonane	9.99806 ppb v/v
							n-Octane	9.99806 ppb v/v
							N-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Pentane	9.99806 ppb v/v
							Propene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Undecane	9.99806 ppb v/v
							Vinyl acetate	9.99806 ppb v/v
							Vinyl bromide	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
					ATTO15EthCALw_00084	464 mL	Ethanol	15.0036 ppb v/v
.ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL5w_00068	10/21/17	08/21/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00093	1160 mL	1,1,1-Trichloroethane	15.0036 ppb v/v
							1,1,2,2-Tetrachloroethane	15.0036 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	15.0036 ppb v/v
							1,1,2-Trichloroethane	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	15.0036 ppb v/v
							1,1-Dichloroethene	15.0036 ppb v/v
							1,2,3-Trichlorobenzene	15.0036 ppb v/v
							1,2,3-Trichloropropane	15.0036 ppb v/v
							1,2,4-Trichlorobenzene	15.0036 ppb v/v
							1,2,4-Trimethylbenzene	15.0036 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	15.0036 ppb v/v
							1,2-Dichlorobenzene	15.0036 ppb v/v
							1,2-Dichloroethane	15.0036 ppb v/v
							1,2-Dichloropropane	15.0036 ppb v/v
							1,3,5-Trimethylbenzene	15.0036 ppb v/v
							1,3-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dioxane	15.0036 ppb v/v
							2-Butanone (MEK)	15.0036 ppb v/v
							2-Chlorotoluene	15.0036 ppb v/v
							2-Hexanone	15.0036 ppb v/v
							2-Methyl-2-propanol	15.0036 ppb v/v
							2-Methylbutane	15.0036 ppb v/v
							3-Chloro-1-propene	15.0036 ppb v/v
							4-Ethyltoluene	15.0036 ppb v/v
							4-Isopropyltoluene	15.0036 ppb v/v
							4-Methyl-2-pentanone (MIBK)	15.0036 ppb v/v
							Acetone	15.0036 ppb v/v
							Acetonitrile	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	15.0036 ppb v/v
							Acrylonitrile	15.0036 ppb v/v
							Alpha Methyl Styrene	15.0036 ppb v/v
							Benzene	15.0036 ppb v/v
							Benzyl chloride	15.0036 ppb v/v
							Bromoform	15.0036 ppb v/v
							Bromomethane	15.0036 ppb v/v
							Butadiene	15.0036 ppb v/v
							Butane	15.0036 ppb v/v
							Carbon disulfide	15.0036 ppb v/v
							Carbon tetrachloride	15.0036 ppb v/v
							Chlorobenzene	15.0036 ppb v/v
							Chlorodibromomethane	15.0036 ppb v/v
							Chlorodifluoromethane	15.0036 ppb v/v
							Chloroethane	15.0036 ppb v/v
							Chloroform	15.0036 ppb v/v
							Chloromethane	15.0036 ppb v/v
							cis-1,2-Dichloroethene	15.0036 ppb v/v
							cis-1,3-Dichloropropene	15.0036 ppb v/v
							Cyclohexane	15.0036 ppb v/v
							Dibromomethane	15.0036 ppb v/v
							Dichlorobromomethane	15.0036 ppb v/v
							Dichlorodifluoromethane	15.0036 ppb v/v
							Dodecane	15.0036 ppb v/v
							Ethyl acetate	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	15.0036 ppb v/v
							Ethylbenzene	15.0036 ppb v/v
							Ethylene Dibromide	15.0036 ppb v/v
							Hexachlorobutadiene	15.0036 ppb v/v
							Hexane	15.0036 ppb v/v
							Isooctane	15.0036 ppb v/v
							Isopropyl alcohol	15.0036 ppb v/v
							Isopropylbenzene	15.0036 ppb v/v
							m,p-Xylene	30.0071 ppb v/v
							Methyl methacrylate	15.0036 ppb v/v
							Methyl tert-butyl ether	15.0036 ppb v/v
							Methylene Chloride	15.0036 ppb v/v
							n-Butanol	15.0036 ppb v/v
							n-Butylbenzene	15.0036 ppb v/v
							n-Decane	15.0036 ppb v/v
							n-Heptane	15.0036 ppb v/v
							n-Nonane	15.0036 ppb v/v
							n-Octane	15.0036 ppb v/v
							N-Propylbenzene	15.0036 ppb v/v
							Naphthalene	15.0036 ppb v/v
							Pentane	15.0036 ppb v/v
							Propene	15.0036 ppb v/v
							sec-Butylbenzene	15.0036 ppb v/v
							Styrene	15.0036 ppb v/v
							tert-Butylbenzene	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	15.0036 ppb v/v
							Tetrahydrofuran	15.0036 ppb v/v
							Toluene	15.0036 ppb v/v
							trans-1,2-Dichloroethene	15.0036 ppb v/v
							trans-1,3-Dichloropropene	15.0036 ppb v/v
							Trichloroethene	15.0036 ppb v/v
							Trichlorofluoromethane	15.0036 ppb v/v
							Undecane	15.0036 ppb v/v
							Vinyl acetate	15.0036 ppb v/v
							Vinyl bromide	15.0036 ppb v/v
							Vinyl chloride	15.0036 ppb v/v
							Xylene, o-	15.0036 ppb v/v
					ATTO15EthCALw_00087	620 mL	Ethanol	20.0479 ppb v/v
.ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL6w_00143	10/21/17	08/21/17	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00093	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2-Butanone (MEK)	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Hexanone	19.9961 ppb v/v
							2-Methyl-2-propanol	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloro-1-propene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (MIBK)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Butadiene	19.9961 ppb v/v
							Butane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodibromomethane	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorobromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Ethylene Dibromide	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Hexane	19.9961 ppb v/v
							Isooctane	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							Isopropylbenzene	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							N-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl bromide	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00087	1237 mL	Ethanol	39.9987 ppb v/v
.ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL7w_00070	10/21/17	08/21/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00093	3092 mL	1,1,1-Trichloroethane	39.9922 ppb v/v
							1,1,2,2-Tetrachloroethane	39.9922 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	39.9922 ppb v/v
							1,1,2-Trichloroethane	39.9922 ppb v/v
							1,1-Dichloroethane	39.9922 ppb v/v
							1,1-Dichloroethene	39.9922 ppb v/v
							1,2,3-Trichlorobenzene	39.9922 ppb v/v
							1,2,3-Trichloropropane	39.9922 ppb v/v
							1,2,4-Trichlorobenzene	39.9922 ppb v/v
							1,2,4-Trimethylbenzene	39.9922 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	39.9922 ppb v/v
							1,2-Dichlorobenzene	39.9922 ppb v/v
							1,2-Dichloroethane	39.9922 ppb v/v
							1,2-Dichloropropane	39.9922 ppb v/v
							1,3,5-Trimethylbenzene	39.9922 ppb v/v
							1,3-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dioxane	39.9922 ppb v/v
							2-Butanone (MEK)	39.9922 ppb v/v
							2-Chlorotoluene	39.9922 ppb v/v
							2-Hexanone	39.9922 ppb v/v
							2-Methyl-2-propanol	39.9922 ppb v/v
							2-Methylbutane	39.9922 ppb v/v
							3-Chloro-1-propene	39.9922 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Ethyltoluene	39.9922 ppb v/v
							4-Isopropyltoluene	39.9922 ppb v/v
							4-Methyl-2-pentanone (MIBK)	39.9922 ppb v/v
							Acetone	39.9922 ppb v/v
							Acetonitrile	39.9922 ppb v/v
							Acrolein	39.9922 ppb v/v
							Acrylonitrile	39.9922 ppb v/v
							Alpha Methyl Styrene	39.9922 ppb v/v
							Benzene	39.9922 ppb v/v
							Benzyl chloride	39.9922 ppb v/v
							Bromoform	39.9922 ppb v/v
							Bromomethane	39.9922 ppb v/v
							Butadiene	39.9922 ppb v/v
							Butane	39.9922 ppb v/v
							Carbon disulfide	39.9922 ppb v/v
							Carbon tetrachloride	39.9922 ppb v/v
							Chlorobenzene	39.9922 ppb v/v
							Chlorodibromomethane	39.9922 ppb v/v
							Chlorodifluoromethane	39.9922 ppb v/v
							Chloroethane	39.9922 ppb v/v
							Chloroform	39.9922 ppb v/v
							Chloromethane	39.9922 ppb v/v
							cis-1,2-Dichloroethene	39.9922 ppb v/v
							cis-1,3-Dichloropropene	39.9922 ppb v/v
							Cyclohexane	39.9922 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	39.9922 ppb v/v
							Dichlorobromomethane	39.9922 ppb v/v
							Dichlorodifluoromethane	39.9922 ppb v/v
							Dodecane	39.9922 ppb v/v
							Ethyl acetate	39.9922 ppb v/v
							Ethyl ether	39.9922 ppb v/v
							Ethylbenzene	39.9922 ppb v/v
							Ethylene Dibromide	39.9922 ppb v/v
							Hexachlorobutadiene	39.9922 ppb v/v
							Hexane	39.9922 ppb v/v
							Isooctane	39.9922 ppb v/v
							Isopropyl alcohol	39.9922 ppb v/v
							Isopropylbenzene	39.9922 ppb v/v
							m,p-Xylene	79.9845 ppb v/v
							Methyl methacrylate	39.9922 ppb v/v
							Methyl tert-butyl ether	39.9922 ppb v/v
							Methylene Chloride	39.9922 ppb v/v
							n-Butanol	39.9922 ppb v/v
							n-Butylbenzene	39.9922 ppb v/v
							n-Decane	39.9922 ppb v/v
							n-Heptane	39.9922 ppb v/v
							n-Nonane	39.9922 ppb v/v
							n-Octane	39.9922 ppb v/v
							N-Propylbenzene	39.9922 ppb v/v
							Naphthalene	39.9922 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	39.9922 ppb v/v
							Propene	39.9922 ppb v/v
							sec-Butylbenzene	39.9922 ppb v/v
							Styrene	39.9922 ppb v/v
							tert-Butylbenzene	39.9922 ppb v/v
							Tetrachloroethene	39.9922 ppb v/v
							Tetrahydrofuran	39.9922 ppb v/v
							Toluene	39.9922 ppb v/v
							trans-1,2-Dichloroethene	39.9922 ppb v/v
							trans-1,3-Dichloropropene	39.9922 ppb v/v
							Trichloroethene	39.9922 ppb v/v
							Trichlorofluoromethane	39.9922 ppb v/v
							Undecane	39.9922 ppb v/v
							Vinyl acetate	39.9922 ppb v/v
							Vinyl bromide	39.9922 ppb v/v
							Vinyl chloride	39.9922 ppb v/v
							Xylene, o-	39.9922 ppb v/v
					ATTO15EthCALw_00087	3092 mL	Ethanol	99.9806 ppb v/v
.ATTO15CALSTKi_00093	10/21/17	07/21/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00087	11/14/17	08/14/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00010	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00010	08/14/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15GIS_00015	05/12/22	Linde Gases, Lot CC-270535			(Purchased Reagent)		1,4-Difluorobenzene	100 ppb v/v
							Chlorobenzene-d5	100 ppb v/v
							Chlorobromomethane	100 ppb v/v
ATTO15LCSW_00705	08/26/17	07/23/17	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00085	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
.ATTO15LCSSTKi_00085	10/22/17	07/22/17	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00020	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							Benzene	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							Naphthalene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15LCSs_00020	12/19/17	Spectra Gases, Lot CC-250179			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							Benzene	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							Naphthalene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v

Reagent

ATTO15CALs_00026

Standard 1003117 was compared o the ISO certified standard in Knoxville in Chrom work list 23318 on instrument C.

Reagent

ATTO15EthCALs_00008

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9931 • 1-610-692-3026 • Fax 1-610-692-3729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Ethyl alcohol

CATALOG NUMBER	N-11685-1G
LOT NUMBER	5301900
DATE CERTIFIED	07/21/15
EXPIRATION DATE	07/31/21
CAS NUMBER	64-17-5
MOLECULAR FORMULA	C2H6O
MOLECULAR WEIGHT	46.07
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only
ISO GUIDE 34 CERTIFIED	( )

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell
CSMBTC

600 Tower Lane • P.O. Box 905 • West Chester, PA 19381-0905
1-800-452-9994 • 1-610-692-7026 • Fax 1-610-692-8999
info@chemservice.com • www.commarose.com

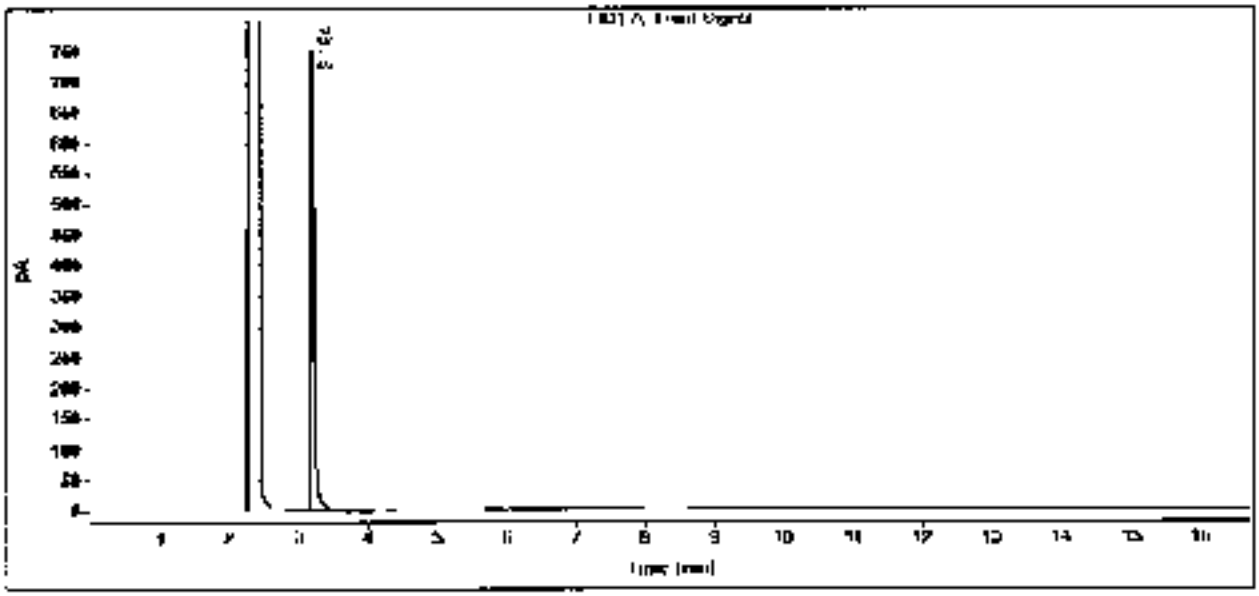
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\0715\SIG1006941.D

Sample name: N-11886

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	7/21/2015 10:30:34 AM	**Location:**	Vial 5
Acq. method.	MIX1.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.184	BB	0.0537	2394.4050	741.5187	100.0000
		Sum	2394.4050		

Reagent

ATTO15EthCALs_00010

CHEMSERVICE INC.

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9321 • 1-610-692-3026 • Fax 1-610-692-3729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Ethyl alcohol

CATALOG NUMBER	N-11685-1G
LOT NUMBER	5301900
DATE CERTIFIED	07/21/15
EXPIRATION DATE	07/31/21
CAS NUMBER	64-17-5
MOLECULAR FORMULA	C2H6O
MOLECULAR WEIGHT	46.07
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only
ISO GUIDE 34 CERTIFIED	( )

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell
CMMTC

CHEMSERVICE INC.

600 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-3799
info@chemservice.com • www.commerce.com

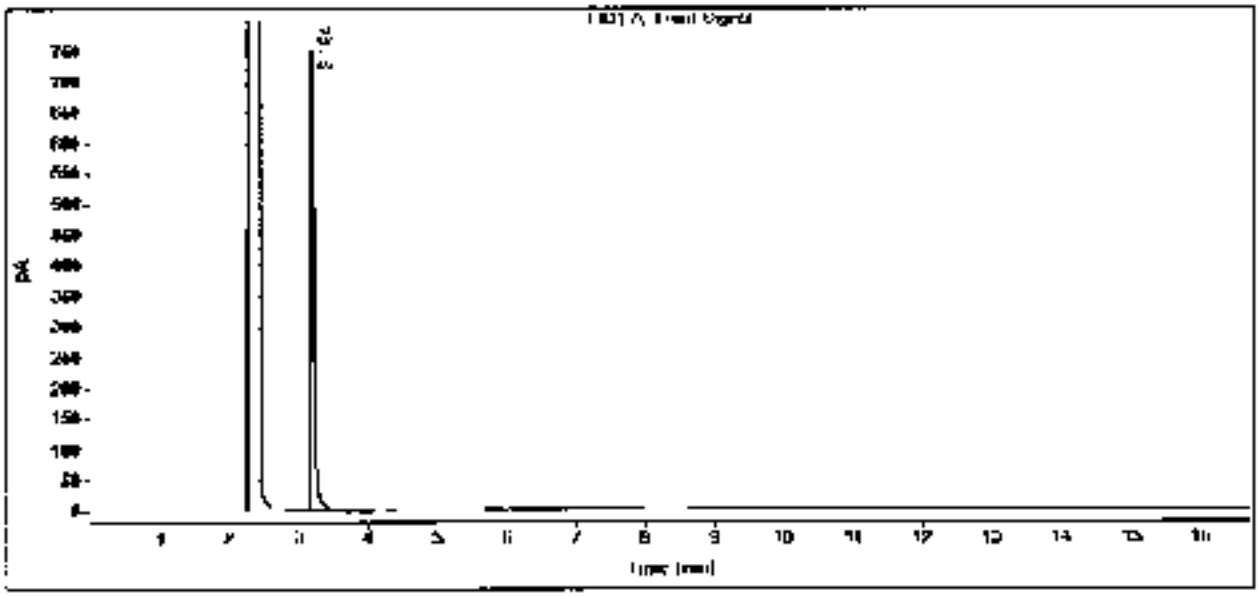
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\0715\SIG1006941.D

Sample name: N-11886

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	7/21/2015 10:30:34 AM	**Location:**	Vial 5
Acq. method.	MIX1.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.184	BB	0.0537	2394.4050	741.5187	100.0000
		Sum	2394.4050		

Reagent

ATTO15GIS_00015

THE LINDE GROUP

Linde

SHIPPED TO: Test America Inc
30 Community Drive Suite 11
South Burlington, VT 05403

PAGE: 1 of 1

ATT0156-15_0005
106702)

CERTIFICATE OF ANALYSIS

Sales#:	115057976	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1415934	**Cylinder #:**	CC-270535
Certification Date:	May-08-2017	**Cylinder Pressure:**	2000 psig
P.O.#:	2670546-Replacement	**Cylinder Valve:**	CGA 350 - Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24066974	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	4000 Liters
Expiration Date:	May-08-2018	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	10% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Bromochloromethane	74-97-5	100 ppb	108 ppb
1,4-Difluorobenzene	540-36-3	100 ppb	109 ppb
Chlorobenzene-d5	3114-55-4	100 ppb	103 ppb
4-Bromofluorobenzene	460-00-4	100 ppb	104 ppb
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Justin Kutz

DATE: May-08-2017

Linde Gas North America LLC

(908) 379-9700 Main (908) 329-9740 Fax
www.LindeUS.com

Reagent

ATTO15LCSs_00020

Standard 1003120 was compared o the ISO certified standard in Knoxville in Chrom work list 23318 on instrument C.

Method TO15

Volatile Organic Compounds (GC/MS) by Method TO15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Matrix: Air Level: Low Lab File ID: 200-26579-003.D

Lab ID: LCS 200-120218/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	10.0	8.99	90	67-127	
Carbon tetrachloride	10.0	9.59	96	62-143	
Chlorobenzene	10.0	9.48	95	68-128	
Chloroethane	10.0	9.06	91	65-125	
Chloromethane	10.0	8.61	86	57-126	
cis-1,2-Dichloroethene	10.0	9.40	94	67-127	
1,3-Dichlorobenzene	10.0	9.86	99	67-127	
1,2-Dichlorobenzene	10.0	9.75	97	67-127	
1,1-Dichloroethane	10.0	9.49	95	66-126	
1,2-Dichloroethane	10.0	9.06	91	67-132	
1,1-Dichloroethene	10.0	9.13	91	67-127	
1,2-Dichloropropane	10.0	9.28	93	67-127	
Ethylbenzene	10.0	9.51	95	68-128	
Methylene Chloride	10.0	9.20	92	62-122	
Methyl tert-butyl ether	10.0	9.75	97	67-127	
m,p-Xylene	20.0	19.0	95	68-128	
Naphthalene	10.0	8.24	82	50-121	
Tetrachloroethene	10.0	9.32	93	70-130	
Toluene	10.0	9.45	94	67-127	
trans-1,2-Dichloroethene	10.0	9.92	99	72-132	
1,1,1-Trichloroethane	10.0	9.07	91	70-130	
Trichloroethene	10.0	9.17	92	68-128	
1,3,5-Trimethylbenzene	10.0	9.61	96	65-125	
1,2,4-Trimethylbenzene	10.0	9.75	98	65-125	
Vinyl chloride	10.0	9.21	92	62-125	
Xylene, o-	10.0	9.47	95	67-127	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab File ID: 200-26579-004.D Lab Sample ID: MB 200-120218/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 08/25/2017 12:20

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-120218/3	200-26579-003.D	08/25/2017 11:29
SV-8	200-39823-1	200-26579-012.D	08/25/2017 19:04
SV-7	200-39823-2	200-26579-013.D	08/25/2017 19:55
SV-6	200-39823-3	200-26579-014.D	08/25/2017 20:45
SV-9	200-39823-4	200-26579-015.D	08/25/2017 21:35
SV-10	200-39823-5	200-26579-016.D	08/25/2017 22:25
SV-12	200-39823-6	200-26579-017.D	08/25/2017 23:16
SV-11	200-39823-7	200-26579-018.D	08/26/2017 00:06
SV-14	200-39823-8	200-26579-019.D	08/26/2017 00:56
SV-13	200-39823-9	200-26579-020.D	08/26/2017 01:47
SV-16	200-39823-10	200-26579-021.D	08/26/2017 02:37
SV-18	200-39823-11	200-26579-022.D	08/26/2017 03:28
SV-17	200-39823-12	200-26579-023.D	08/26/2017 04:18

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab File ID: 200-26567-001.D BFB Injection Date: 08/24/2017

Instrument ID: CHG.i BFB Injection Time: 15:51

Analysis Batch No.: 120200

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	22.8	
75	30.0 - 66.0% of mass 95	56.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	75.4	
175	4.0 - 9.0 % of mass 174	5.3	(7.0) 1
176	93.0 - 101.0% of mass 174	73.8	(97.9) 1
177	5.0 - 9.0% of mass 176	4.7	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-120200/3	200-26567-003.D	08/24/2017	17:24
	IC 200-120200/4	200-26567-004.D	08/24/2017	18:14
	IC 200-120200/5	200-26567-005.D	08/24/2017	19:05
	IC 200-120200/6	200-26567-006.D	08/24/2017	19:55
	ICIS 200-120200/7	200-26567-007.D	08/24/2017	20:45
	IC 200-120200/8	200-26567-008.D	08/24/2017	21:36
	IC 200-120200/9	200-26567-009.D	08/24/2017	22:27
	IC 200-120200/10	200-26567-010.D	08/24/2017	23:17
	ICV 200-120200/13	200-26567-013.D	08/25/2017	01:48

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab File ID: 200-26579-001.D BFB Injection Date: 08/25/2017

Instrument ID: CHG.i BFB Injection Time: 09:50

Analysis Batch No.: 120218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	23.5	
75	30.0 - 66.0% of mass 95	57.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	73.6	
175	4.0 - 9.0 % of mass 174	5.0	(6.9) 1
176	93.0 - 101.0% of mass 174	71.6	(97.4) 1
177	5.0 - 9.0% of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-120218/2	200-26579-002.D	08/25/2017	10:38
	LCS 200-120218/3	200-26579-003.D	08/25/2017	11:29
	MB 200-120218/4	200-26579-004.D	08/25/2017	12:20
SV-8	200-39823-1	200-26579-012.D	08/25/2017	19:04
SV-7	200-39823-2	200-26579-013.D	08/25/2017	19:55
SV-6	200-39823-3	200-26579-014.D	08/25/2017	20:45
SV-9	200-39823-4	200-26579-015.D	08/25/2017	21:35
SV-10	200-39823-5	200-26579-016.D	08/25/2017	22:25
SV-12	200-39823-6	200-26579-017.D	08/25/2017	23:16
SV-11	200-39823-7	200-26579-018.D	08/26/2017	00:06
SV-14	200-39823-8	200-26579-019.D	08/26/2017	00:56
SV-13	200-39823-9	200-26579-020.D	08/26/2017	01:47
SV-16	200-39823-10	200-26579-021.D	08/26/2017	02:37
SV-18	200-39823-11	200-26579-022.D	08/26/2017	03:28
SV-17	200-39823-12	200-26579-023.D	08/26/2017	04:18

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Sample No.: ICIS 200-120200/7 Date Analyzed: 08/24/2017 20:45

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-26567-007.D Heated Purge: (Y/N) N

Calibration ID: 37851

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		331845	9.47	1621997	11.37	1461208	17.34
UPPER LIMIT		464583	9.80	2270796	11.70	2045691	17.67
LOWER LIMIT		199107	9.14	973198	11.04	876725	17.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-120200/13		346190	9.47	1726100	11.37	1563714	17.34

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Sample No.: CCVIS 200-120218/2 Date Analyzed: 08/25/2017 10:38

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-26579-002.D Heated Purge: (Y/N) N

Calibration ID: 37851

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		341385	9.47	1730190	11.37	1605949	17.34
UPPER LIMIT		477939	9.80	2422266	11.70	2248329	17.67
LOWER LIMIT		204831	9.14	1038114	11.04	963569	17.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-120218/3		344490	9.47	1748889	11.37	1613757	17.34
MB 200-120218/4		336606	9.47	1795265	11.37	1541927	17.33
200-39823-1	SV-8	327077	9.48	1606694	11.38	1507781	17.34
200-39823-2	SV-7	346751	9.51	1736681	11.40	1663522	17.34
200-39823-3	SV-6	358768	9.47	1833878	11.38	1654043	17.33
200-39823-4	SV-9	346097	9.48	1647474	11.38	1531241	17.34
200-39823-5	SV-10	354951	9.47	1793694	11.38	1616318	17.33
200-39823-6	SV-12	336349	9.46	1729011	11.37	1503291	17.33
200-39823-7	SV-11	351747	9.47	1904531	11.37	1612904	17.33
200-39823-8	SV-14	350129	9.47	1860568	11.37	1590066	17.33
200-39823-9	SV-13	364356	9.47	1943549	11.37	1705661	17.33
200-39823-10	SV-16	349106	9.50	1729417	11.39	1588706	17.34
200-39823-11	SV-18	329665	9.48	1482511	11.38	1444665	17.34
200-39823-12	SV-17	345344	9.47	1701813	11.38	1581252	17.34

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-8 Lab Sample ID: 200-39823-1

Matrix: Air Lab File ID: 200-26579-012.D

Analysis Method: TO-15 Date Collected: 08/22/2017 10:40

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 19:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.20		0.20	0.028
56-23-5	Carbon tetrachloride	153.81	0.057	J	0.20	0.011
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
74-87-3	Chloromethane	50.49	0.23	J	0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	0.050	U	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
100-41-4	Ethylbenzene	106.17	0.12	J	0.20	0.034
75-09-2	Methylene Chloride	84.93	0.068	U	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
179601-23-1	m,p-Xylene	106.17	0.43	J	0.50	0.077
91-20-3	Naphthalene	128.17	0.10	U	0.50	0.10
127-18-4	Tetrachloroethene	165.83	1.1		0.20	0.0098
108-88-3	Toluene	92.14	0.70		0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
79-01-6	Trichloroethene	131.39	0.23		0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	0.095	J	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.24		0.20	0.057
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
95-47-6	Xylene, o-	106.17	0.040	U	0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-8 Lab Sample ID: 200-39823-1

Matrix: Air Lab File ID: 200-26579-012.D

Analysis Method: TO-15 Date Collected: 08/22/2017 10:40

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 19:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62		0.64	0.089
56-23-5	Carbon tetrachloride	153.81	0.36	J	1.3	0.069
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
74-87-3	Chloromethane	50.49	0.47	J	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
100-41-4	Ethylbenzene	106.17	0.52	J	0.87	0.15
75-09-2	Methylene Chloride	84.93	0.24	U	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
179601-23-1	m,p-Xylene	106.17	1.9	J	2.2	0.33
91-20-3	Naphthalene	128.17	0.52	U	2.6	0.52
127-18-4	Tetrachloroethene	165.83	7.8		1.4	0.066
108-88-3	Toluene	92.14	2.6		0.75	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
79-01-6	Trichloroethene	131.39	1.2		1.1	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.47	J	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	1.2		0.98	0.28
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
95-47-6	Xylene, o-	106.17	0.17	U	0.87	0.17

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D
Lims ID: 200-39823-A-1
Client ID: SV-8
Sample Type: Client
Inject. Date: 25-Aug-2017 19:04:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-012
Misc. Info.: 39823-01
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:30:20 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:30:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.513	3.513	0.000	98	5706	0.2263	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.483	9.467	0.016	81	327077	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117	10.104	10.088	0.016	87	5001	0.0568	
47 Benzene	78	10.569	10.553	0.016	95	17409	0.1954	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.382	11.372	0.010	94	1606694	10.0	
53 Trichloroethene	95	11.848	11.848	0.016	81	11581	0.2265	M
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.426	14.426	0.000	94	47694	0.7015	
68 Tetrachloroethene	166	15.491	15.486	0.005	93	74010	1.15	
* 74 Chlorobenzene-d5	117	17.336	17.337	-0.001	87	1507781	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.556	17.551	0.006	98	17814	0.1206	
78 m-Xylene & p-Xylene	106	17.802	17.807	-0.005	0	24875	0.4301	
79 o-Xylene	106		18.663				ND	
90 1,3,5-Trimethylbenzene	105	20.471	20.466	0.005	91	12774	0.0949	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	56	31929	0.2421	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

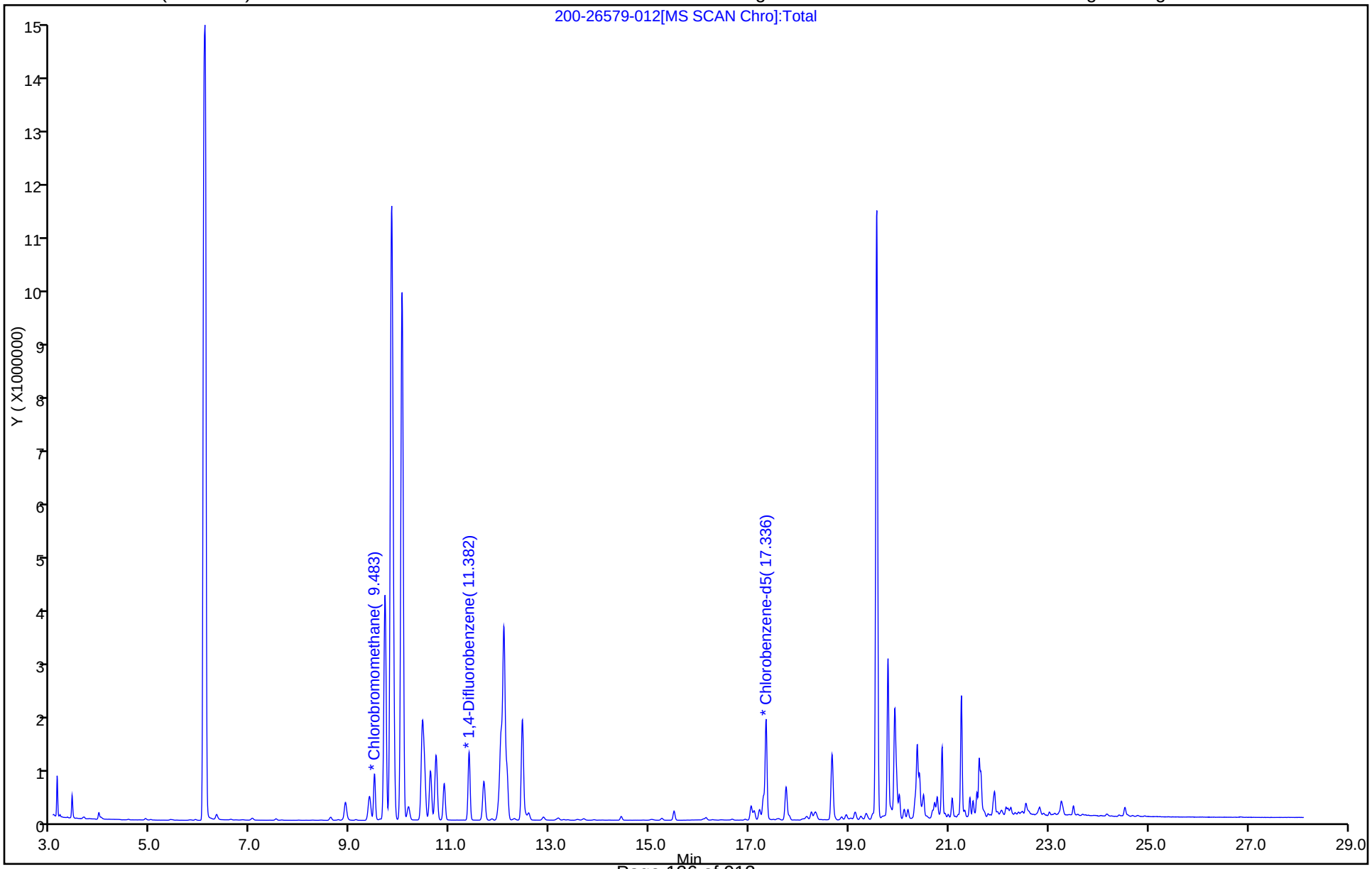
Report Date: 28-Aug-2017 11:30:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1	Worklist Smp#:	12
Client ID:	SV-8				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



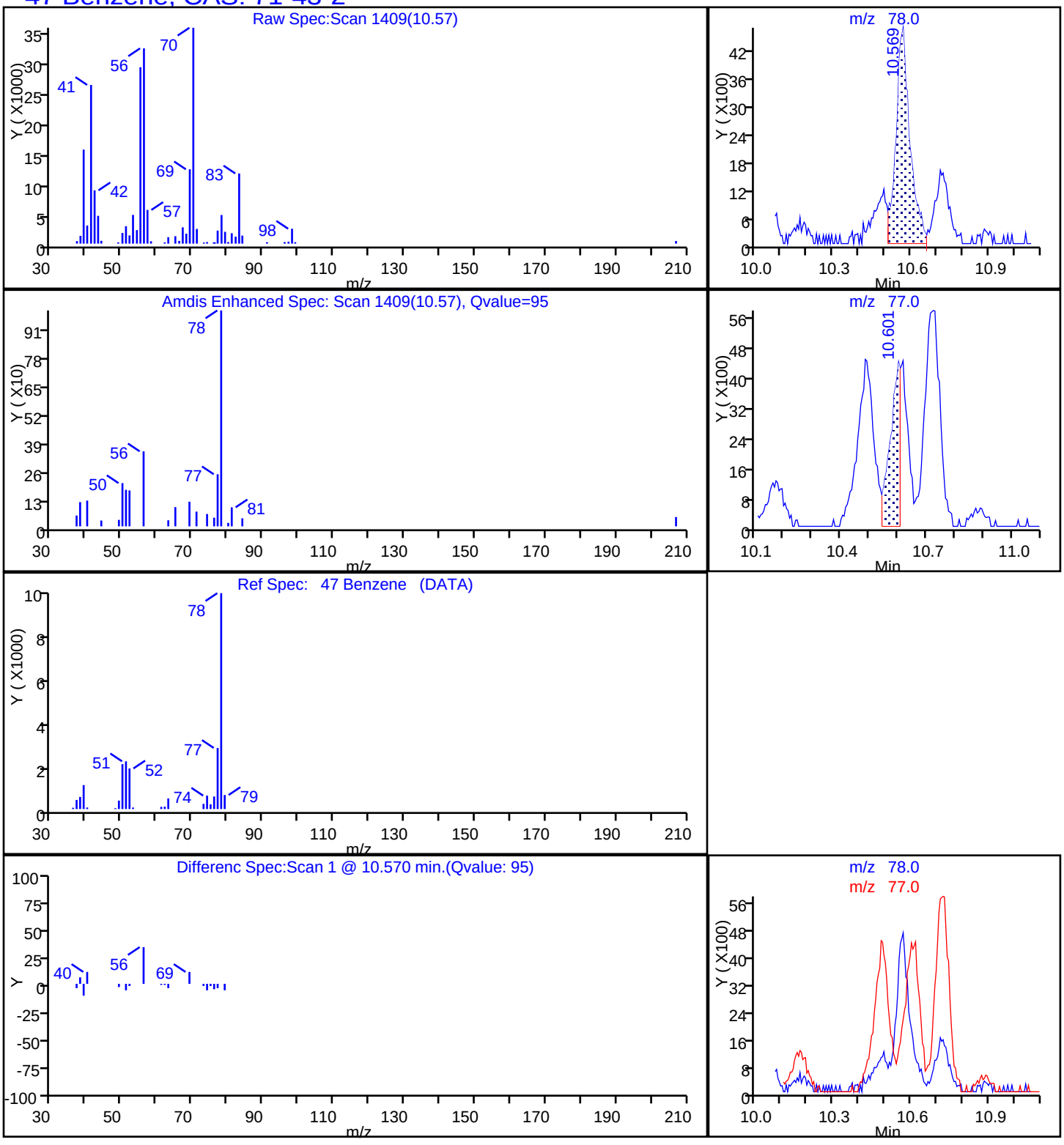
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



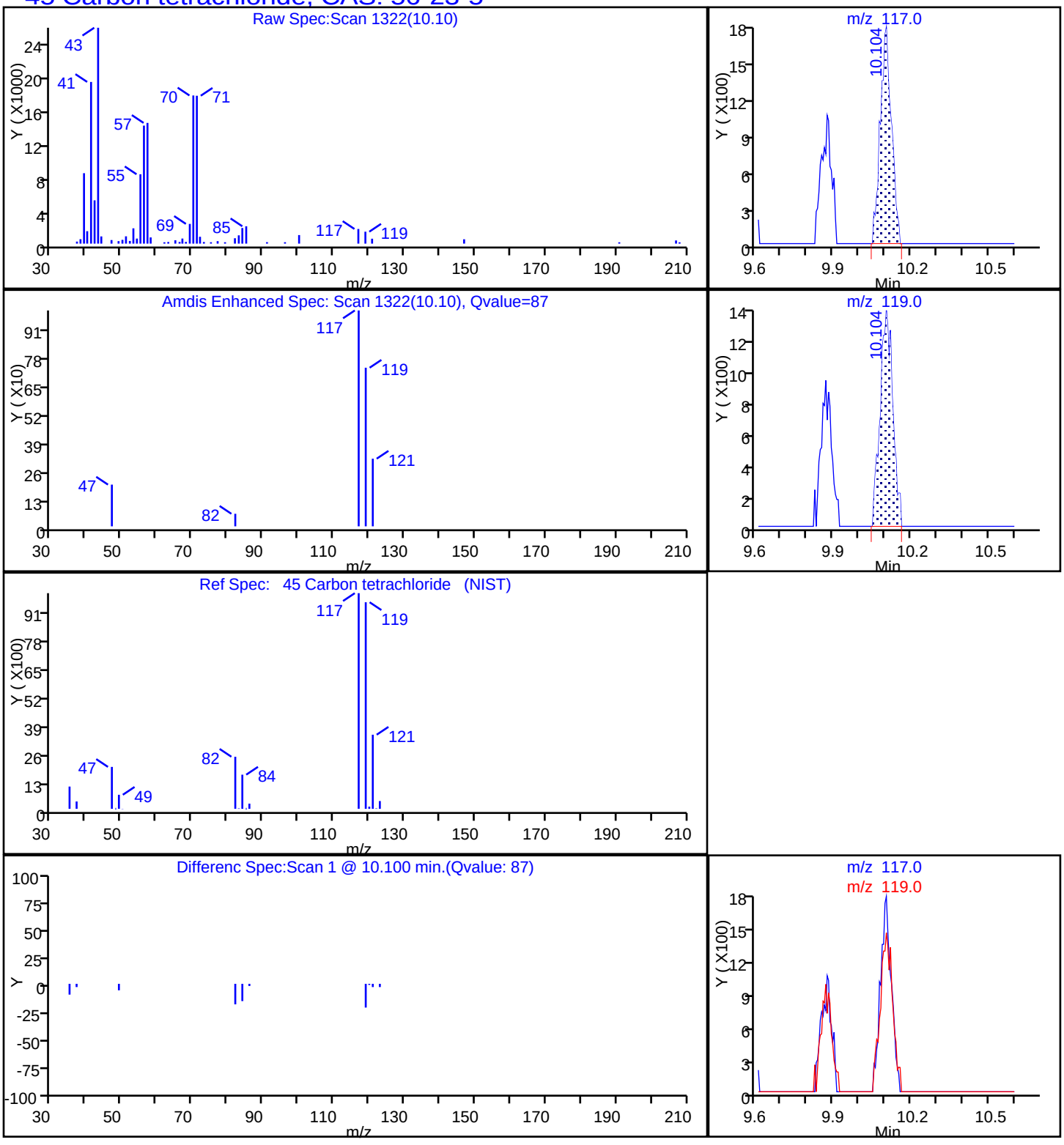
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



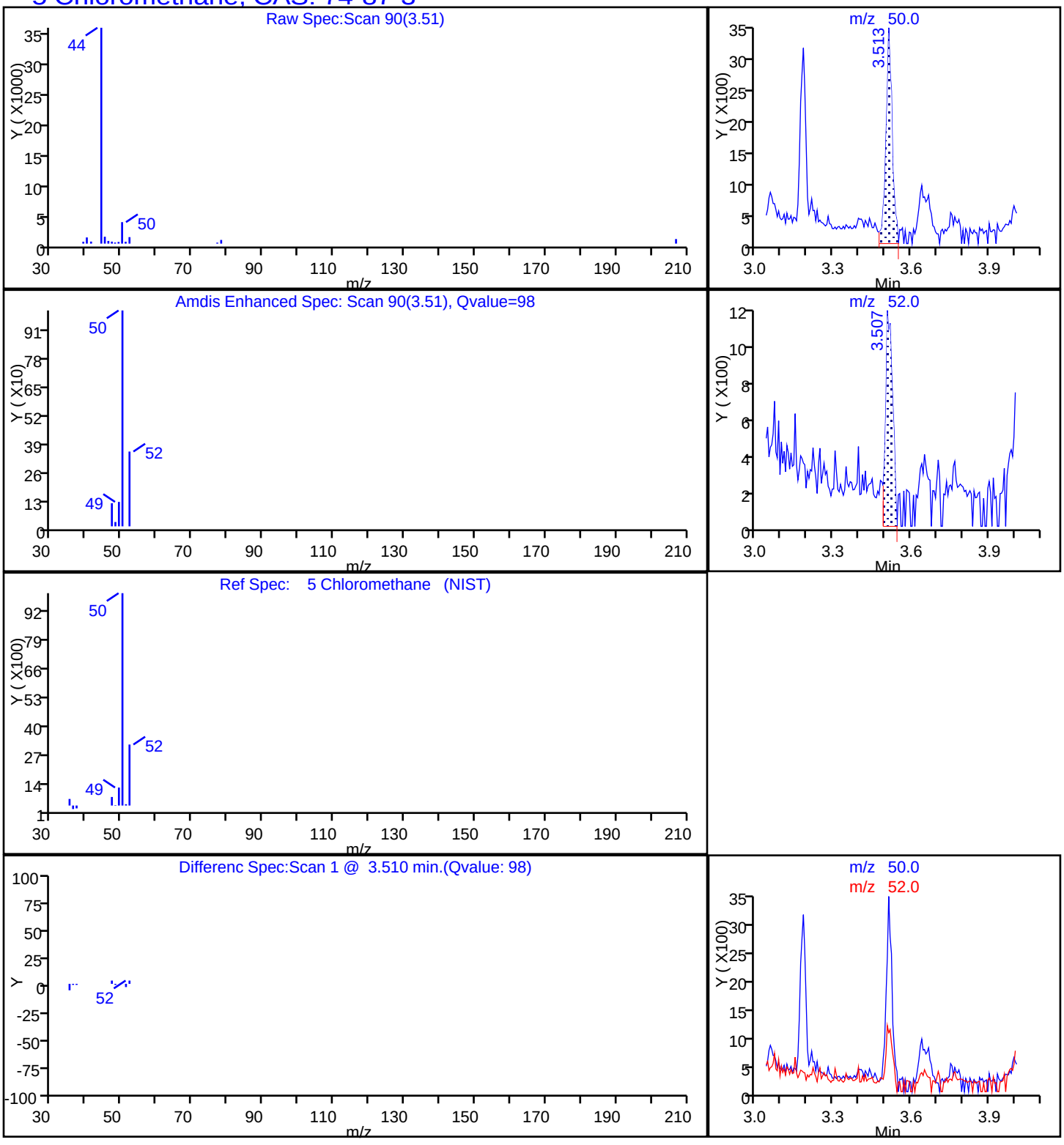
Report Date: 28-Aug-2017 11:30:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



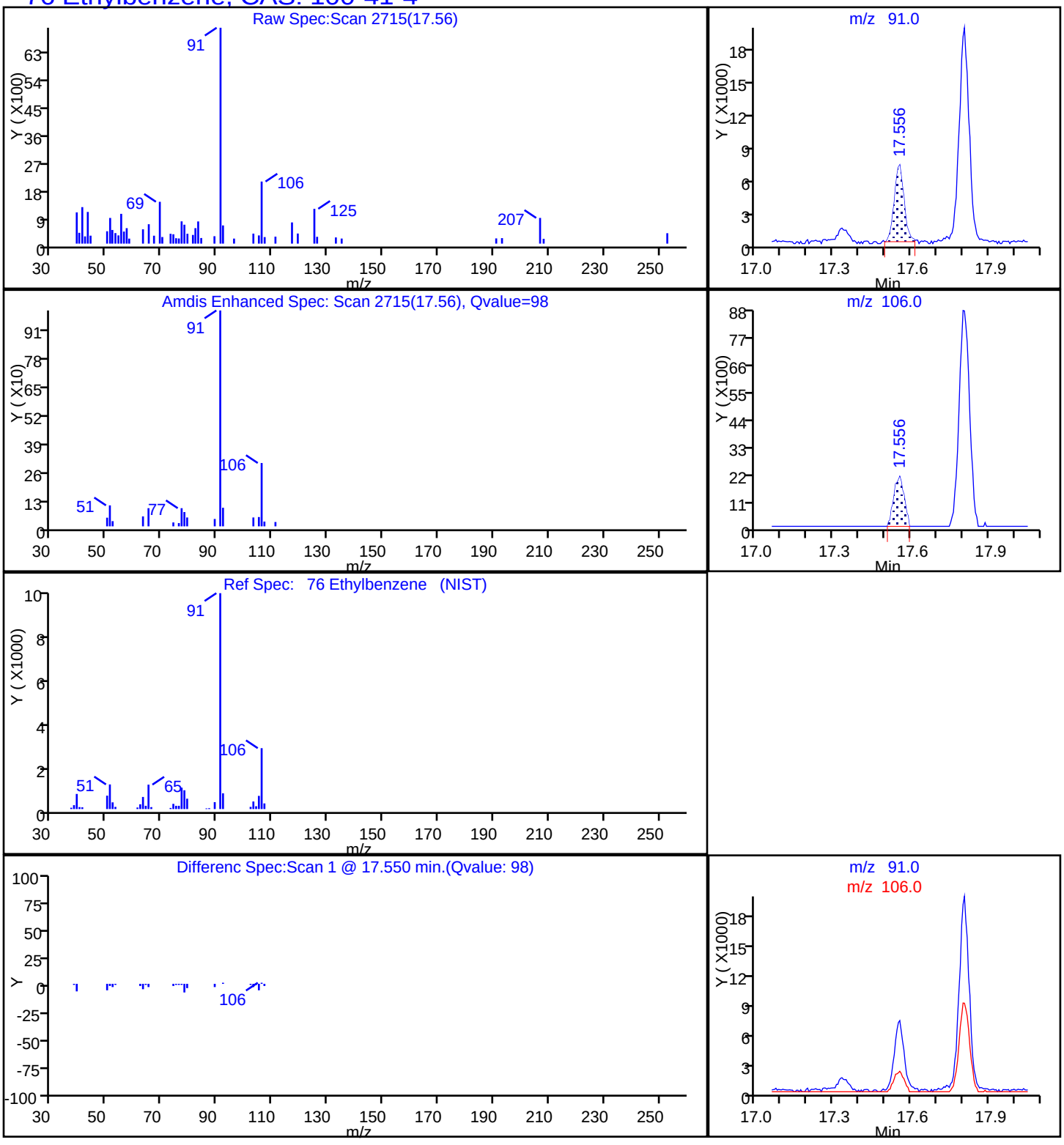
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4



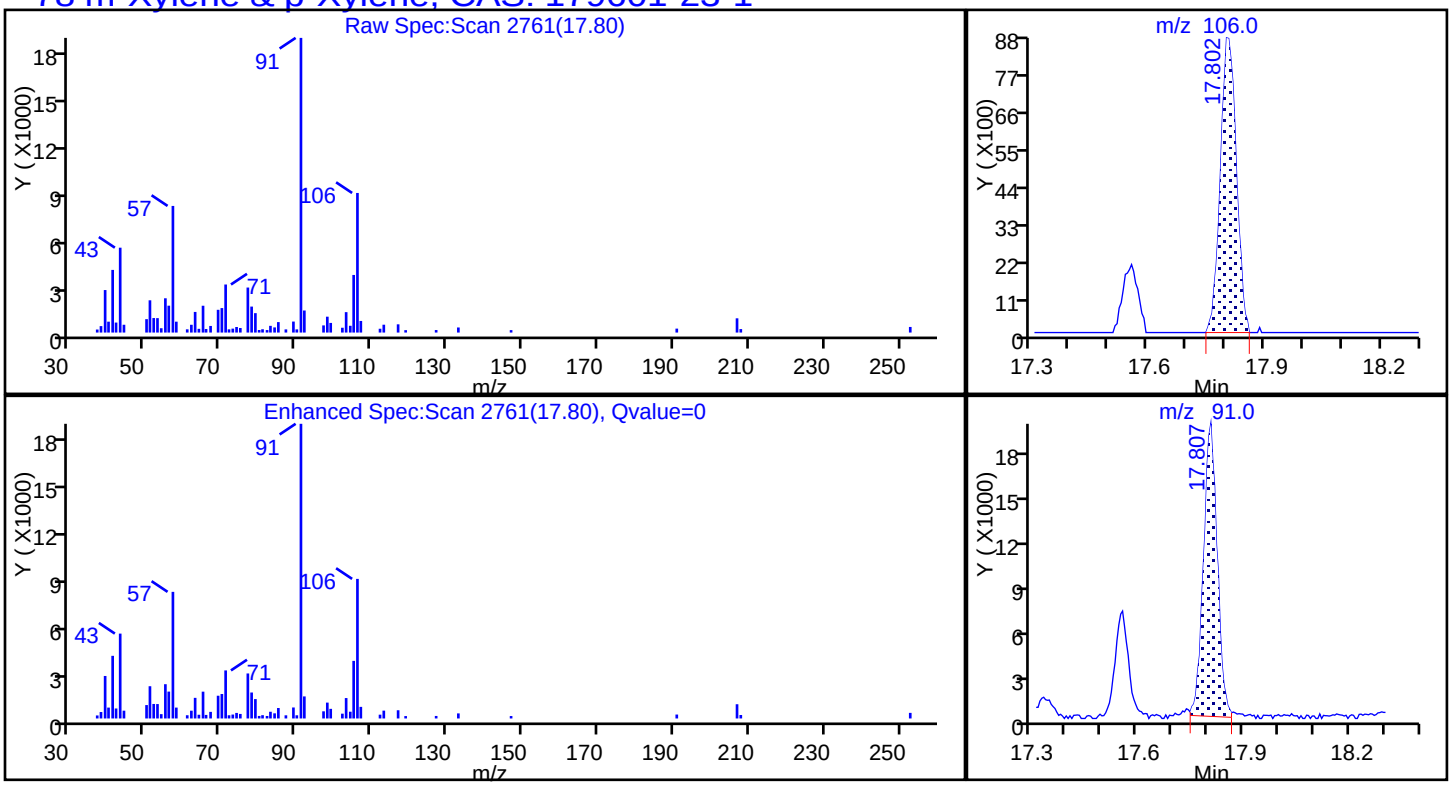
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

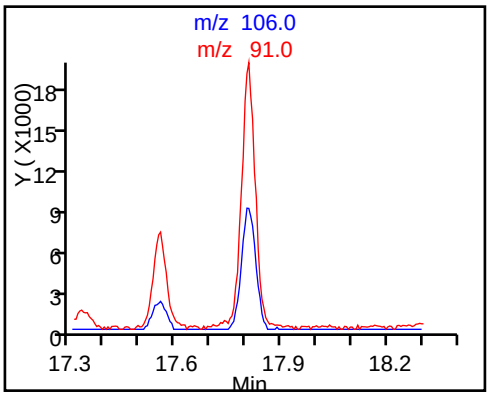
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





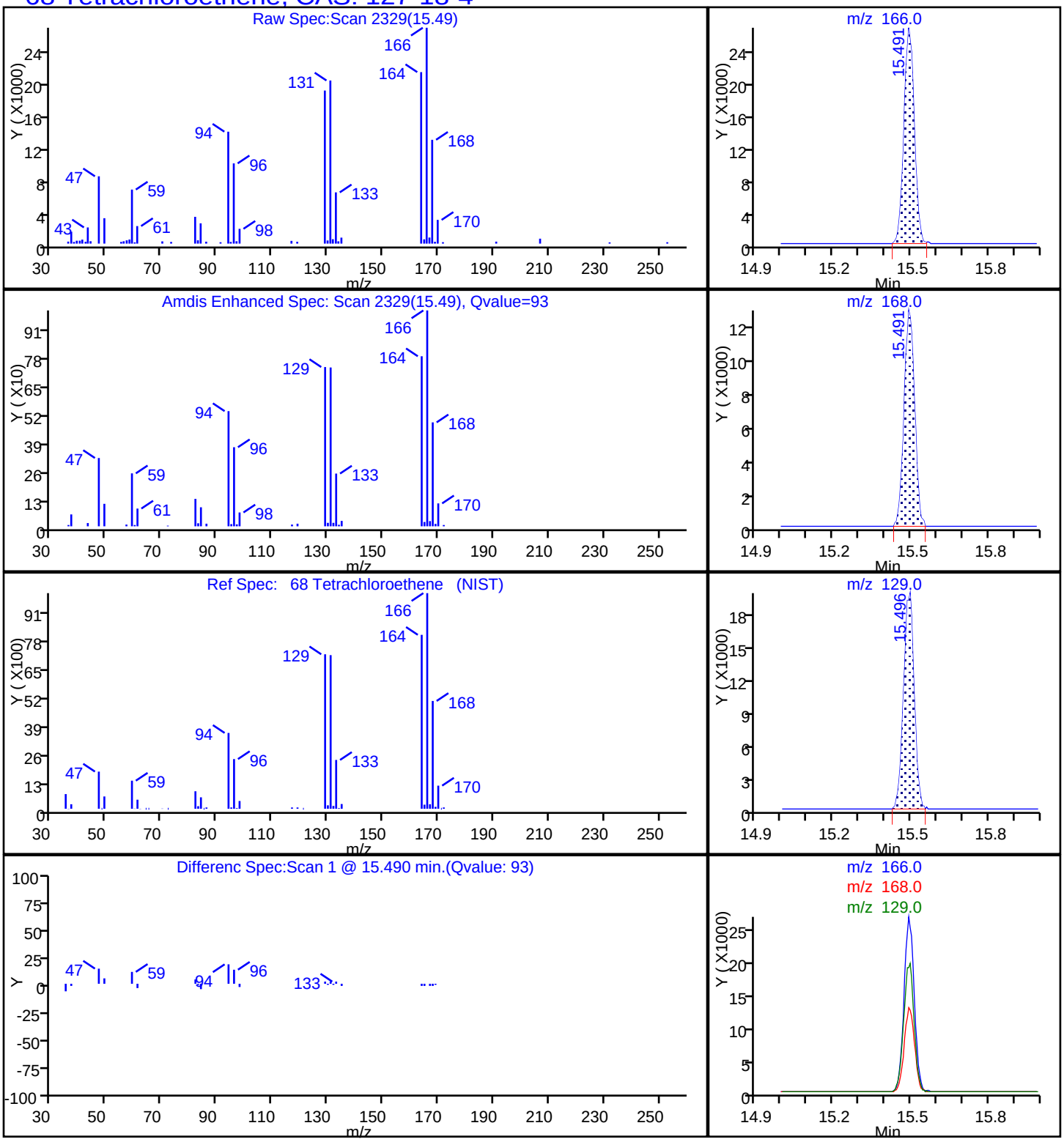
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



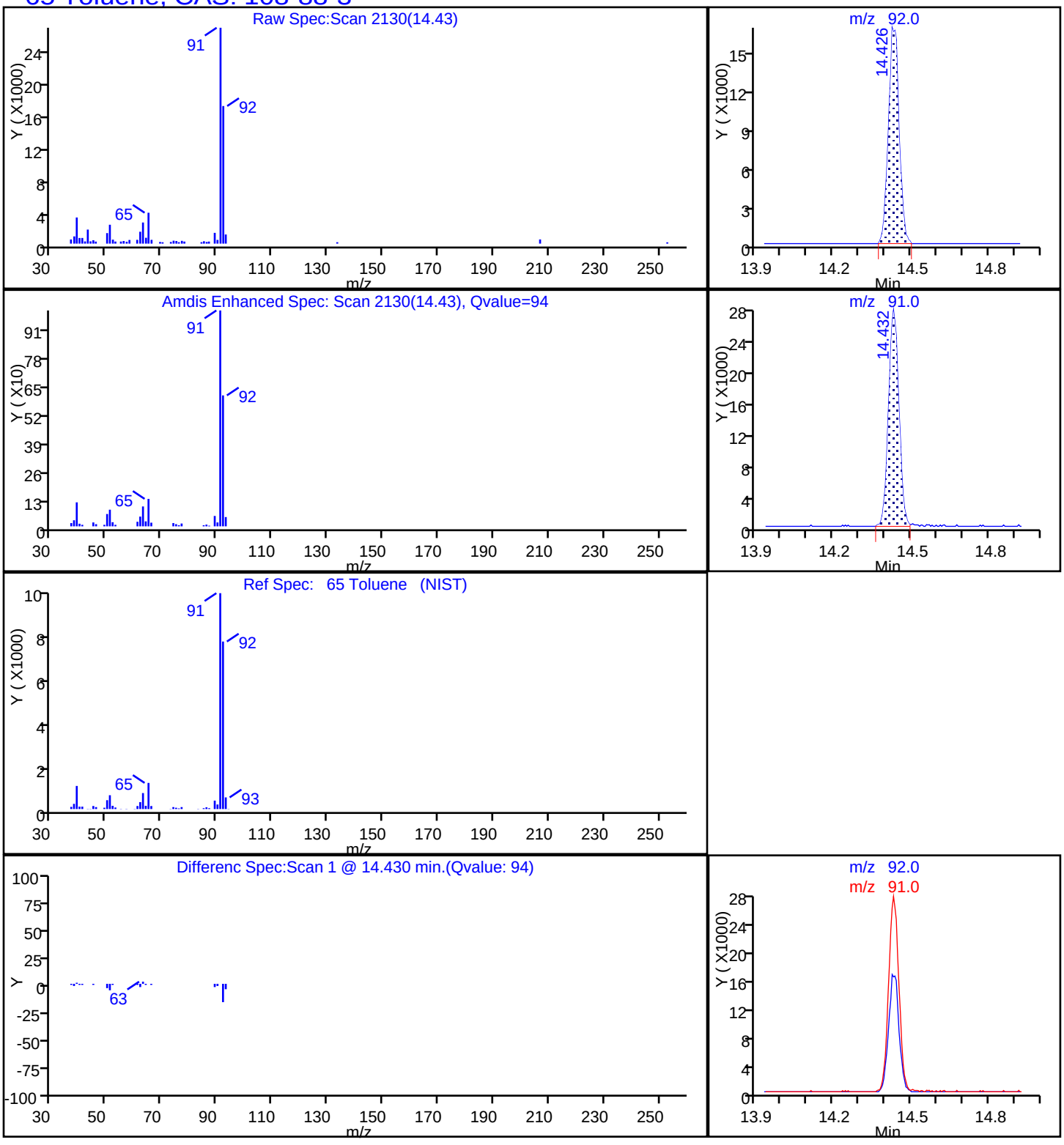
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



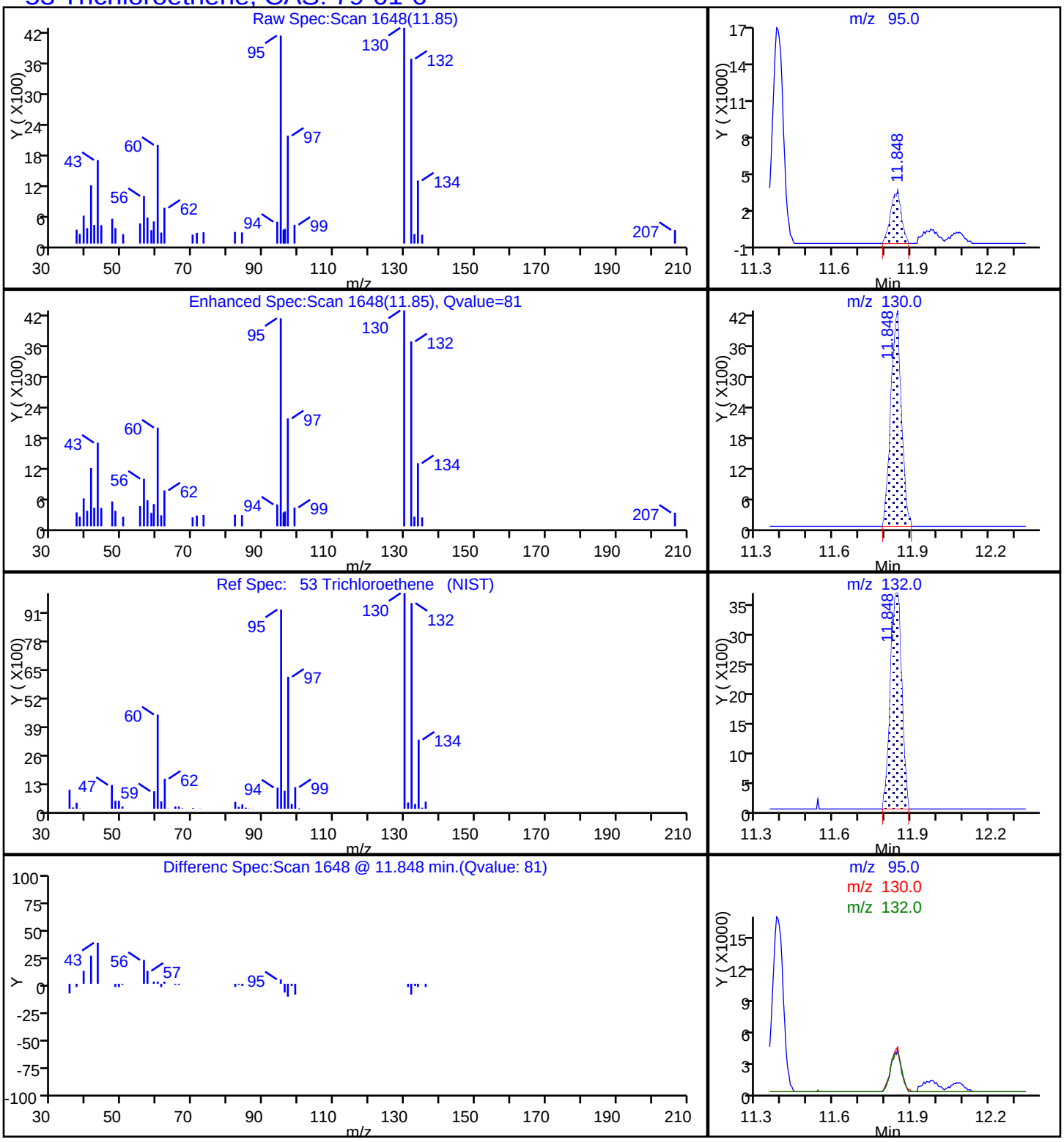
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



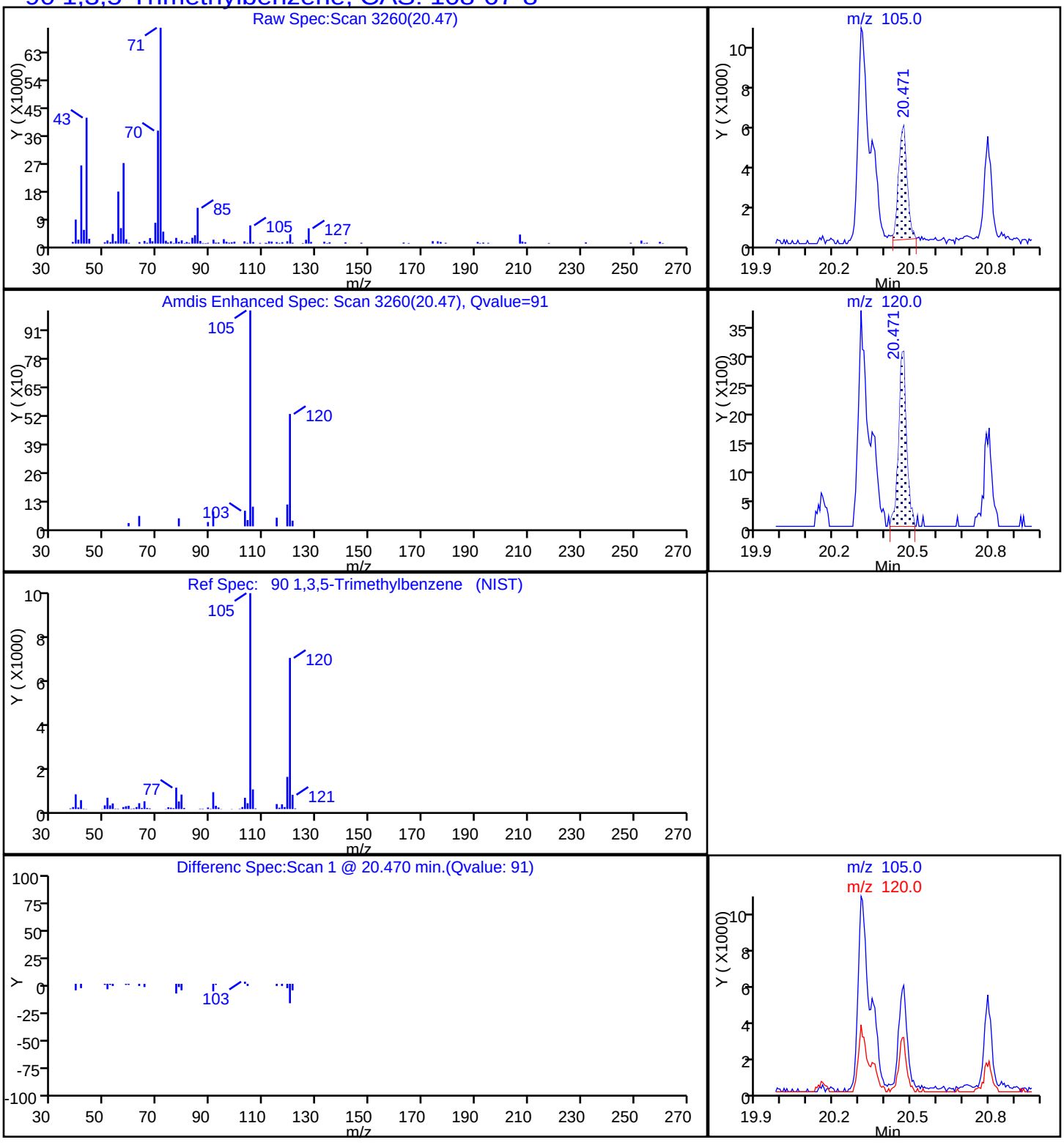
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8



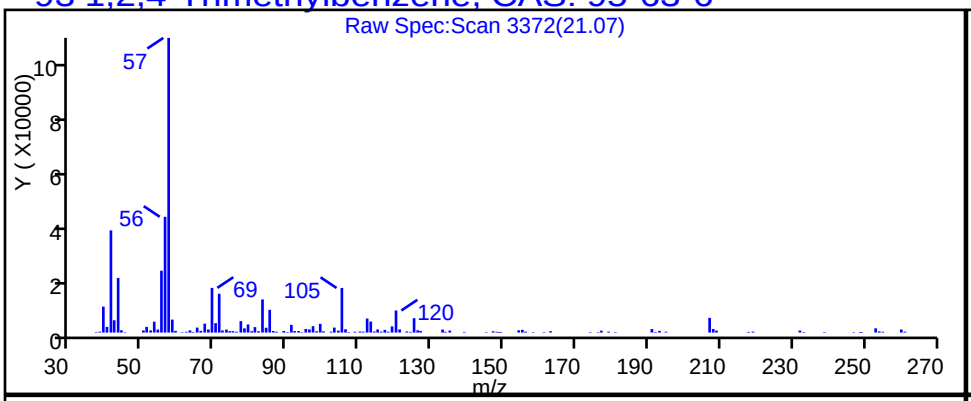
Report Date: 28-Aug-2017 11:30:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

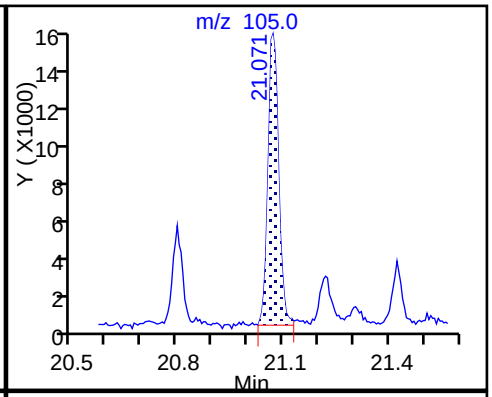
TestAmerica Burlington

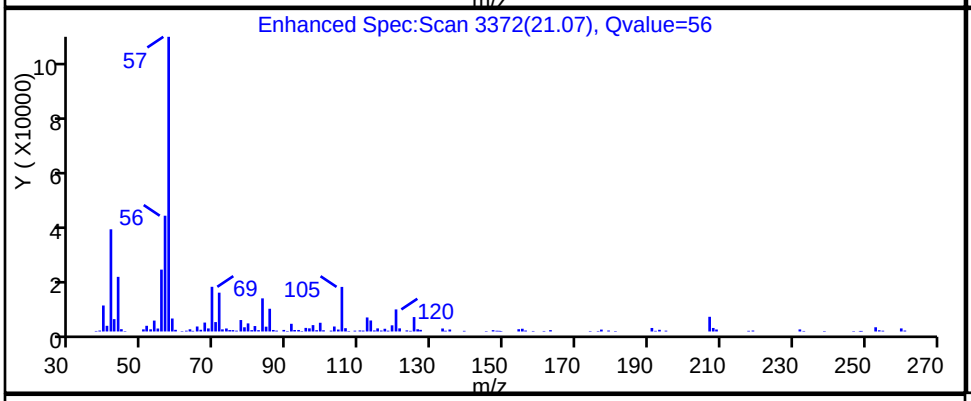
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D

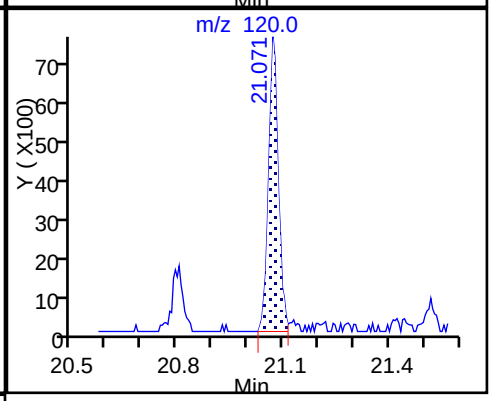
Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

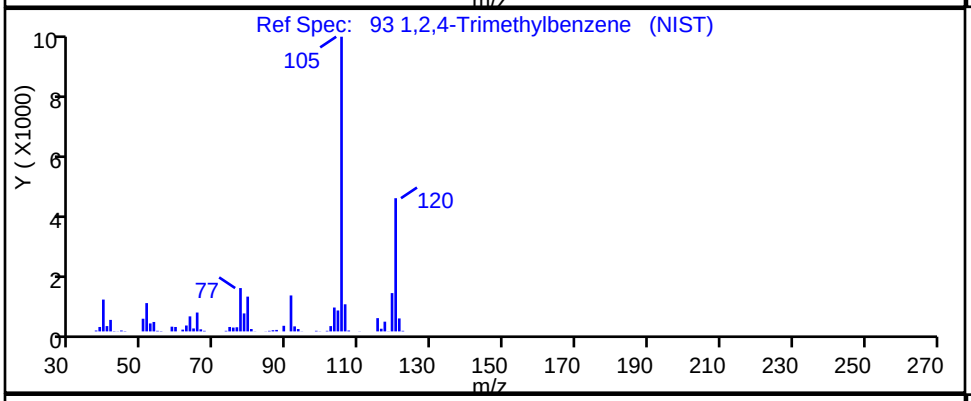
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

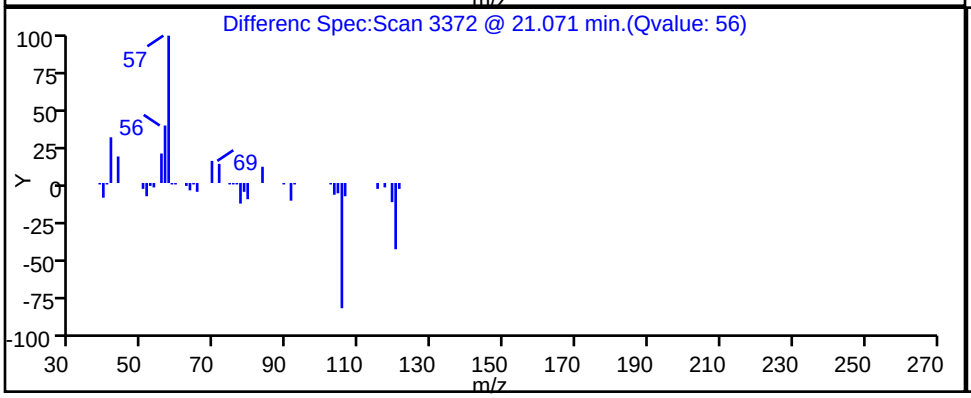


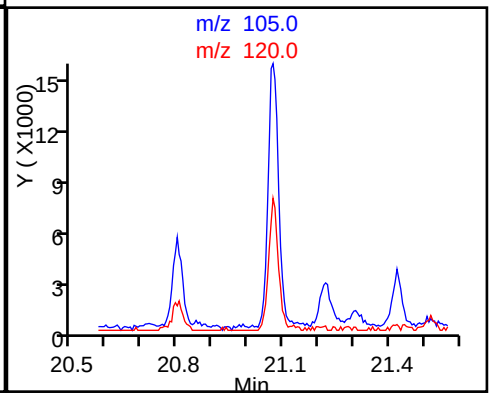












Manual Integration/User Assign Peak Report

TestAmerica Burlington

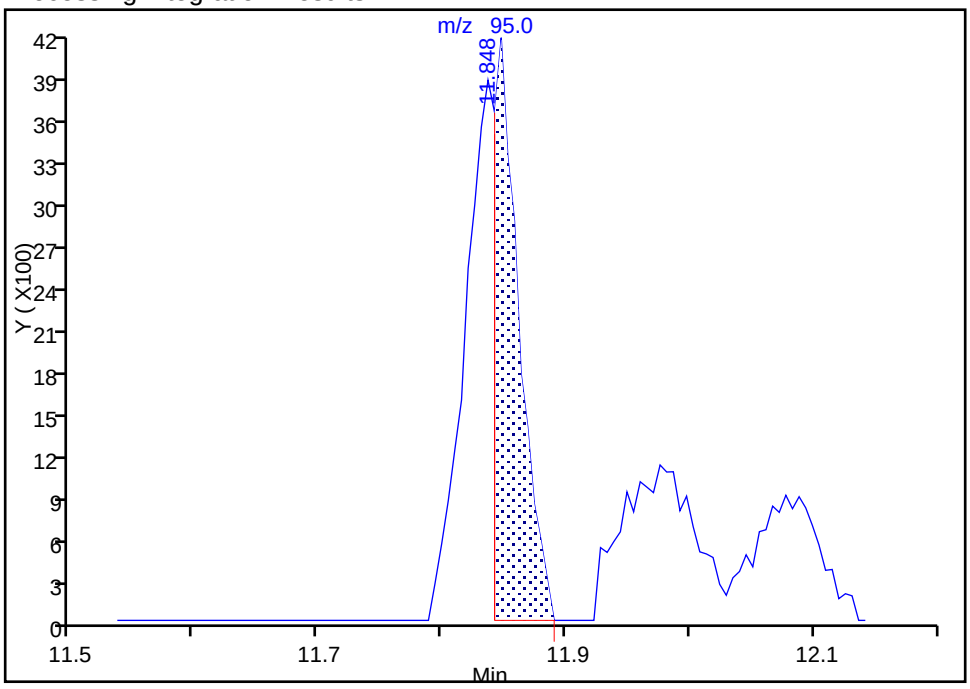
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-012.D				
Injection Date:	25-Aug-2017 19:04:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-1	Lab Sample ID:	200-39823-1		
Client ID:	SV-8				
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

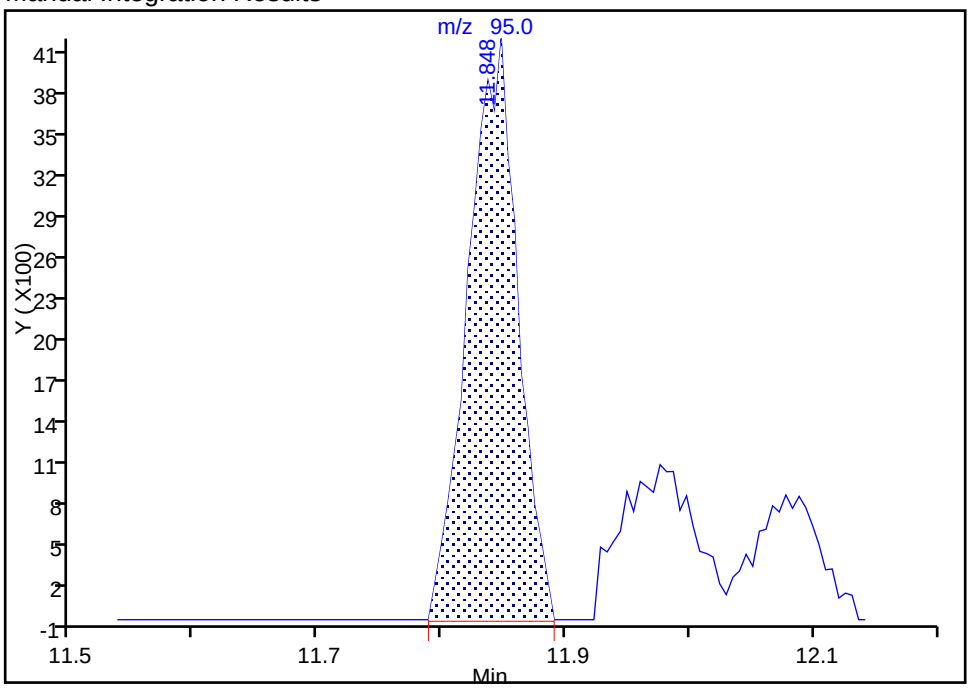
Processing Integration Results

RT: 11.85
Area: 5987
Amount: 0.117105
Amount Units: ppb v/v



Manual Integration Results

RT: 11.85
Area: 11581
Amount: 0.226522
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:29:35

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-7 Lab Sample ID: 200-39823-2

Matrix: Air Lab File ID: 200-26579-013.D

Analysis Method: TO-15 Date Collected: 08/22/2017 11:33

Sample wt/vol: 21(mL) Date Analyzed: 08/25/2017 19:55

Soil Aliquot Vol: Dilution Factor: 49.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.4	U	9.8	1.4
56-23-5	Carbon tetrachloride	153.81	0.54	U	9.8	0.54
108-90-7	Chlorobenzene	112.56	1.2	U	9.8	1.2
75-00-3	Chloroethane	64.52	6.4	U	25	6.4
74-87-3	Chloromethane	50.49	7.9	U	25	7.9
156-59-2	cis-1,2-Dichloroethene	96.94	1.4	U	9.8	1.4
541-73-1	1,3-Dichlorobenzene	147.00	2.5	U	9.8	2.5
95-50-1	1,2-Dichlorobenzene	147.00	2.2	U	9.8	2.2
75-34-3	1,1-Dichloroethane	98.96	0.84	U	9.8	0.84
107-06-2	1,2-Dichloroethane	98.96	1.7	U	9.8	1.7
75-35-4	1,1-Dichloroethene	96.94	1.7	U	9.8	1.7
78-87-5	1,2-Dichloropropane	112.99	1.7	U	9.8	1.7
100-41-4	Ethylbenzene	106.17	1.7	U	9.8	1.7
75-09-2	Methylene Chloride	84.93	3.3	U	25	3.3
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	9.8	2.0
179601-23-1	m,p-Xylene	106.17	3.8	U	25	3.8
91-20-3	Naphthalene	128.17	4.9	U	25	4.9
127-18-4	Tetrachloroethene	165.83	0.48	U	9.8	0.48
108-88-3	Toluene	92.14	3.7	J	9.8	1.7
156-60-5	trans-1,2-Dichloroethene	96.94	2.5	U	9.8	2.5
71-55-6	1,1,1-Trichloroethane	133.41	1.3	U	9.8	1.3
79-01-6	Trichloroethene	131.39	0.45	U	9.8	0.45
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	9.8	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.8	U	9.8	2.8
75-01-4	Vinyl chloride	62.50	0.89	U	9.8	0.89
95-47-6	Xylene, o-	106.17	2.0	U	9.8	2.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-7 Lab Sample ID: 200-39823-2

Matrix: Air Lab File ID: 200-26579-013.D

Analysis Method: TO-15 Date Collected: 08/22/2017 11:33

Sample wt/vol: 21(mL) Date Analyzed: 08/25/2017 19:55

Soil Aliquot Vol: Dilution Factor: 49.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	4.4	U	31	4.4
56-23-5	Carbon tetrachloride	153.81	3.4	U	62	3.4
108-90-7	Chlorobenzene	112.56	5.7	U	45	5.7
75-00-3	Chloroethane	64.52	17	U	65	17
74-87-3	Chloromethane	50.49	16	U	51	16
156-59-2	cis-1,2-Dichloroethene	96.94	5.7	U	39	5.7
541-73-1	1,3-Dichlorobenzene	147.00	15	U	59	15
95-50-1	1,2-Dichlorobenzene	147.00	13	U	59	13
75-34-3	1,1-Dichloroethane	98.96	3.4	U	40	3.4
107-06-2	1,2-Dichloroethane	98.96	6.8	U	40	6.8
75-35-4	1,1-Dichloroethene	96.94	6.8	U	39	6.8
78-87-5	1,2-Dichloropropane	112.99	8.0	U	45	8.0
100-41-4	Ethylbenzene	106.17	7.3	U	43	7.3
75-09-2	Methylene Chloride	84.93	12	U	85	12
1634-04-4	Methyl tert-butyl ether	88.15	7.3	U	35	7.3
179601-23-1	m,p-Xylene	106.17	16	U	110	16
91-20-3	Naphthalene	128.17	26	U	130	26
127-18-4	Tetrachloroethene	165.83	3.3	U	67	3.3
108-88-3	Toluene	92.14	14	J	37	6.5
156-60-5	trans-1,2-Dichloroethene	96.94	9.8	U	39	9.8
71-55-6	1,1,1-Trichloroethane	133.41	7.0	U	54	7.0
79-01-6	Trichloroethene	131.39	2.4	U	53	2.4
108-67-8	1,3,5-Trimethylbenzene	120.20	9.7	U	48	9.7
95-63-6	1,2,4-Trimethylbenzene	120.20	14	U	48	14
75-01-4	Vinyl chloride	62.50	2.3	U	25	2.3
95-47-6	Xylene, o-	106.17	8.5	U	43	8.5

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-013.D
Lims ID: 200-39823-A-2
Client ID: SV-7
Sample Type: Client
Inject. Date: 25-Aug-2017 19:55:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 49.2000
Sample Info: 200-0026579-013
Misc. Info.: 39823-02
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:32:16 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:32:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.510	9.467	0.043	82	346751	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.398	11.372	0.026	94	1736681	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.442	14.426	0.016	94	5593	0.0746	
68 Tetrachloroethene	166		15.486				ND	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1663522	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.556	17.551	0.006	95	5124	0.0314	
78 m-Xylene & p-Xylene	106	17.802	17.807	-0.005	0	4841	0.0759	
79 o-Xylene	106	18.663	18.663	0.000	52	1395	0.0218	
90 1,3,5-Trimethylbenzene	105		20.466				ND	
93 1,2,4-Trimethylbenzene	105		21.071				ND	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

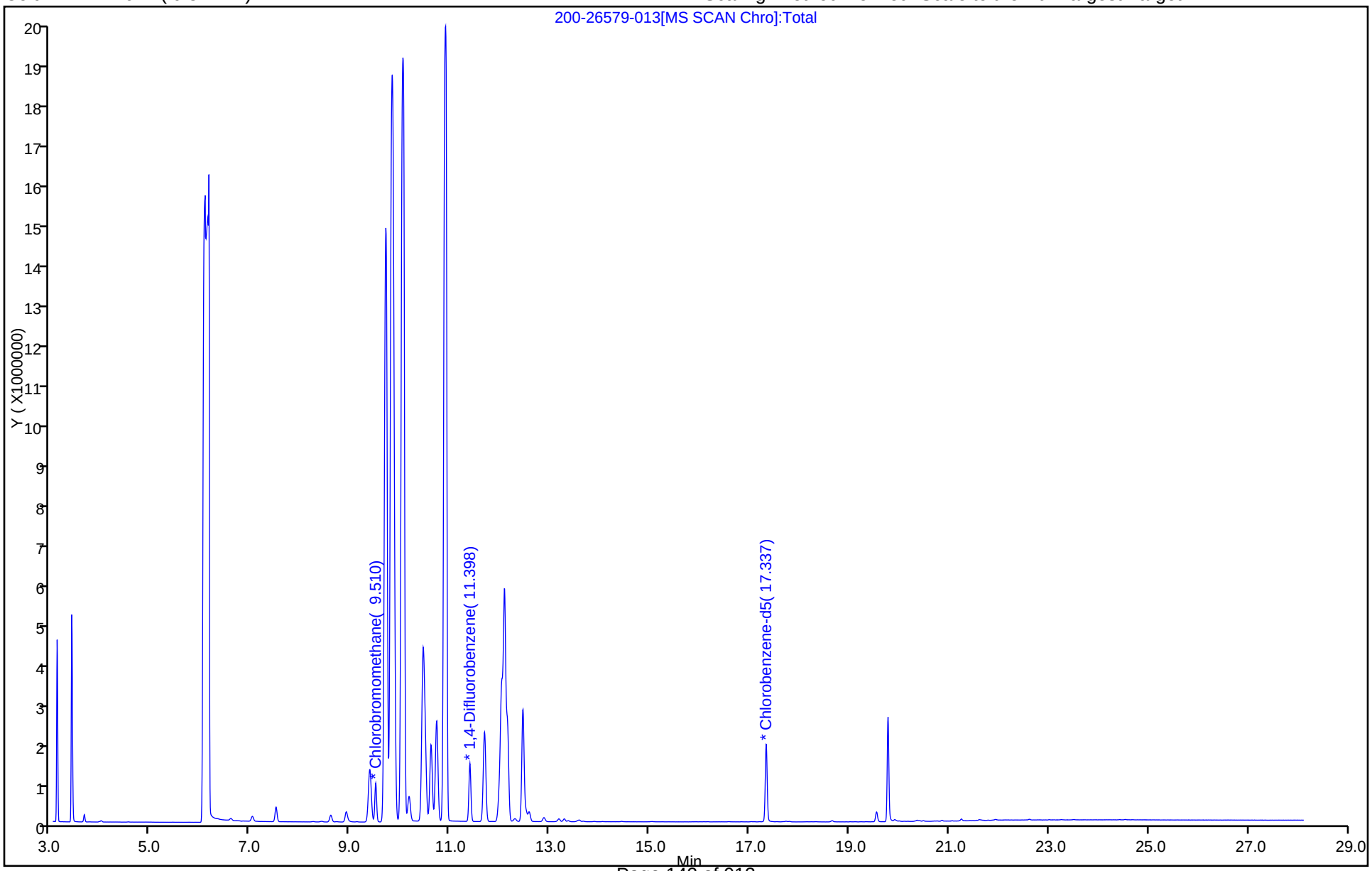
Report Date: 28-Aug-2017 11:32:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-013.D

Injection Date:	25-Aug-2017 19:55:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-2	Lab Sample ID:	200-39823-2	Worklist Smp#:	13
Client ID:	SV-7				
Purge Vol:	200.000 mL	Dil. Factor:	49.2000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



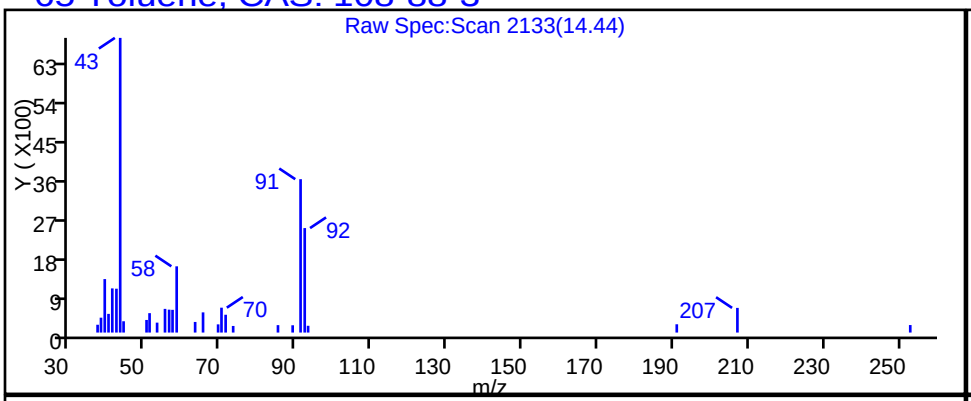
Report Date: 28-Aug-2017 11:32:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

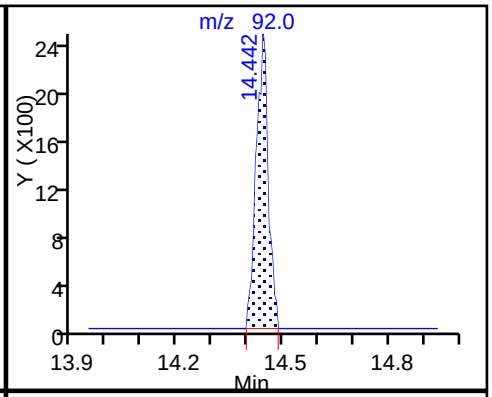
TestAmerica Burlington

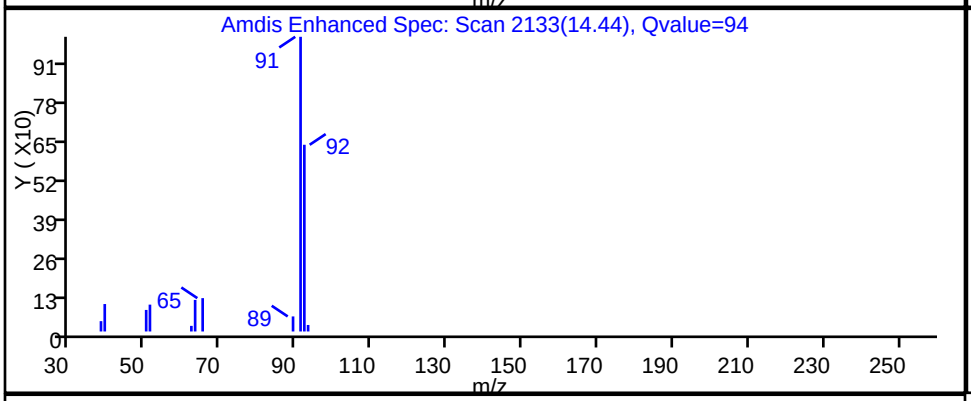
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-013.D

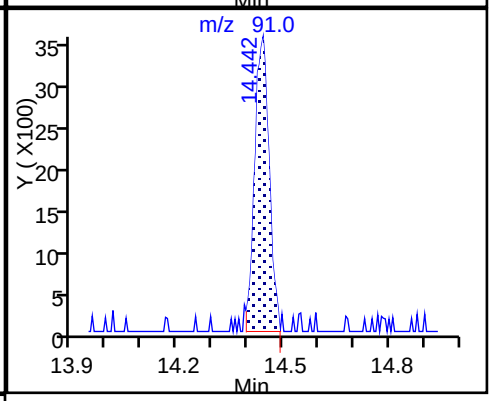
Injection Date:	25-Aug-2017 19:55:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-2	Lab Sample ID:	200-39823-2		
Client ID:	SV-7				
Operator ID:	pad	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	49.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

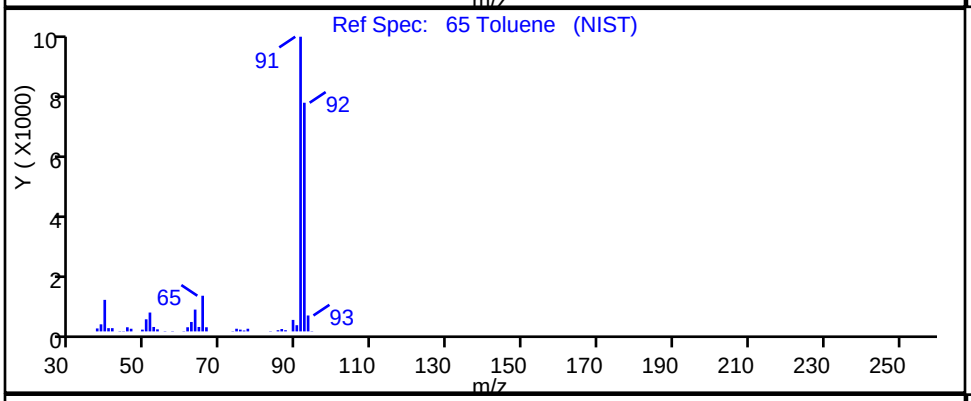
65 Toluene, CAS: 108-88-3

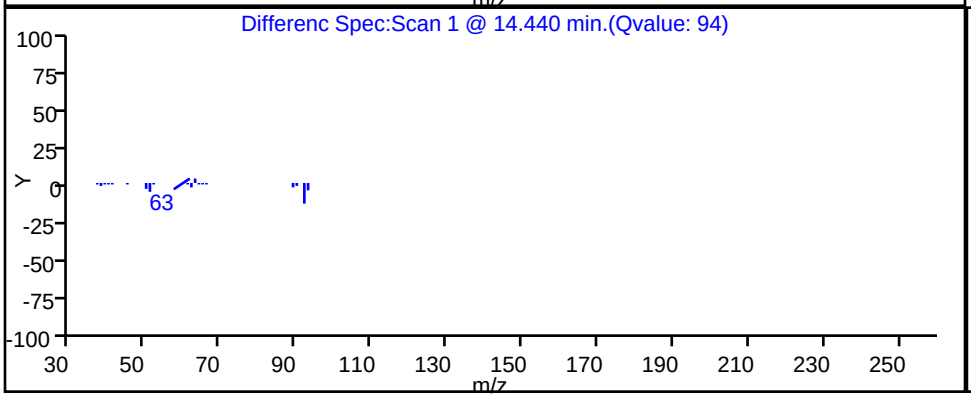


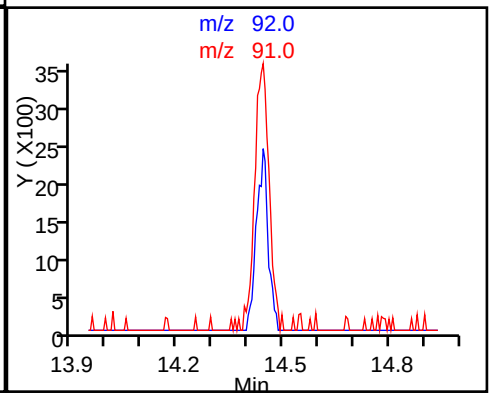












FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-6 Lab Sample ID: 200-39823-3

Matrix: Air Lab File ID: 200-26579-014.D

Analysis Method: TO-15 Date Collected: 08/22/2017 12:00

Sample wt/vol: 20(mL) Date Analyzed: 08/25/2017 20:45

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.28	U	2.0	0.28
56-23-5	Carbon tetrachloride	153.81	0.11	U	2.0	0.11
108-90-7	Chlorobenzene	112.56	0.25	U	2.0	0.25
75-00-3	Chloroethane	64.52	1.3	U	5.0	1.3
74-87-3	Chloromethane	50.49	1.6	U	5.0	1.6
156-59-2	cis-1,2-Dichloroethene	96.94	0.29	U	2.0	0.29
541-73-1	1,3-Dichlorobenzene	147.00	0.50	U	2.0	0.50
95-50-1	1,2-Dichlorobenzene	147.00	0.45	U	2.0	0.45
75-34-3	1,1-Dichloroethane	98.96	0.17	U	2.0	0.17
107-06-2	1,2-Dichloroethane	98.96	0.34	U	2.0	0.34
75-35-4	1,1-Dichloroethene	96.94	0.35	U	2.0	0.35
78-87-5	1,2-Dichloropropane	112.99	0.35	U	2.0	0.35
100-41-4	Ethylbenzene	106.17	0.34	U	2.0	0.34
75-09-2	Methylene Chloride	84.93	0.68	U	5.0	0.68
1634-04-4	Methyl tert-butyl ether	88.15	0.41	U	2.0	0.41
179601-23-1	m,p-Xylene	106.17	0.77	U	5.0	0.77
91-20-3	Naphthalene	128.17	1.0	U	5.0	1.0
127-18-4	Tetrachloroethene	165.83	0.83	J	2.0	0.098
108-88-3	Toluene	92.14	0.35	U	2.0	0.35
156-60-5	trans-1,2-Dichloroethene	96.94	0.50	U	2.0	0.50
71-55-6	1,1,1-Trichloroethane	133.41	0.26	U	2.0	0.26
79-01-6	Trichloroethene	131.39	0.091	U	2.0	0.091
108-67-8	1,3,5-Trimethylbenzene	120.20	0.40	U	2.0	0.40
95-63-6	1,2,4-Trimethylbenzene	120.20	0.57	U	2.0	0.57
75-01-4	Vinyl chloride	62.50	0.18	U	2.0	0.18
95-47-6	Xylene, o-	106.17	0.40	U	2.0	0.40

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-6 Lab Sample ID: 200-39823-3

Matrix: Air Lab File ID: 200-26579-014.D

Analysis Method: TO-15 Date Collected: 08/22/2017 12:00

Sample wt/vol: 20(mL) Date Analyzed: 08/25/2017 20:45

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.89	U	6.4	0.89
56-23-5	Carbon tetrachloride	153.81	0.69	U	13	0.69
108-90-7	Chlorobenzene	112.56	1.2	U	9.2	1.2
75-00-3	Chloroethane	64.52	3.4	U	13	3.4
74-87-3	Chloromethane	50.49	3.3	U	10	3.3
156-59-2	cis-1,2-Dichloroethene	96.94	1.1	U	7.9	1.1
541-73-1	1,3-Dichlorobenzene	147.00	3.0	U	12	3.0
95-50-1	1,2-Dichlorobenzene	147.00	2.7	U	12	2.7
75-34-3	1,1-Dichloroethane	98.96	0.69	U	8.1	0.69
107-06-2	1,2-Dichloroethane	98.96	1.4	U	8.1	1.4
75-35-4	1,1-Dichloroethene	96.94	1.4	U	7.9	1.4
78-87-5	1,2-Dichloropropane	112.99	1.6	U	9.2	1.6
100-41-4	Ethylbenzene	106.17	1.5	U	8.7	1.5
75-09-2	Methylene Chloride	84.93	2.4	U	17	2.4
1634-04-4	Methyl tert-butyl ether	88.15	1.5	U	7.2	1.5
179601-23-1	m,p-Xylene	106.17	3.3	U	22	3.3
91-20-3	Naphthalene	128.17	5.2	U	26	5.2
127-18-4	Tetrachloroethene	165.83	5.6	J	14	0.66
108-88-3	Toluene	92.14	1.3	U	7.5	1.3
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	U	7.9	2.0
71-55-6	1,1,1-Trichloroethane	133.41	1.4	U	11	1.4
79-01-6	Trichloroethene	131.39	0.49	U	11	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	9.8	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.8	U	9.8	2.8
75-01-4	Vinyl chloride	62.50	0.46	U	5.1	0.46
95-47-6	Xylene, o-	106.17	1.7	U	8.7	1.7

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-014.D
Lims ID: 200-39823-A-3
Client ID: SV-6
Sample Type: Client
Inject. Date: 25-Aug-2017 20:45:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 10.0000
Sample Info: 200-0026579-014
Misc. Info.: 39823-03
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:34:16 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:34:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.473	9.467	0.005	88	358768	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1833878	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.437	14.437	0.011	68	2482	0.0333	M
68 Tetrachloroethene	166	15.486	15.486	0.000	88	5889	0.0833	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1654043	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.551	17.551	0.001	1	2581	0.0159	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	2870	0.0452	M
79 o-Xylene	106		18.663				ND	
90 1,3,5-Trimethylbenzene	105		20.466				ND	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	52	2388	0.0165	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

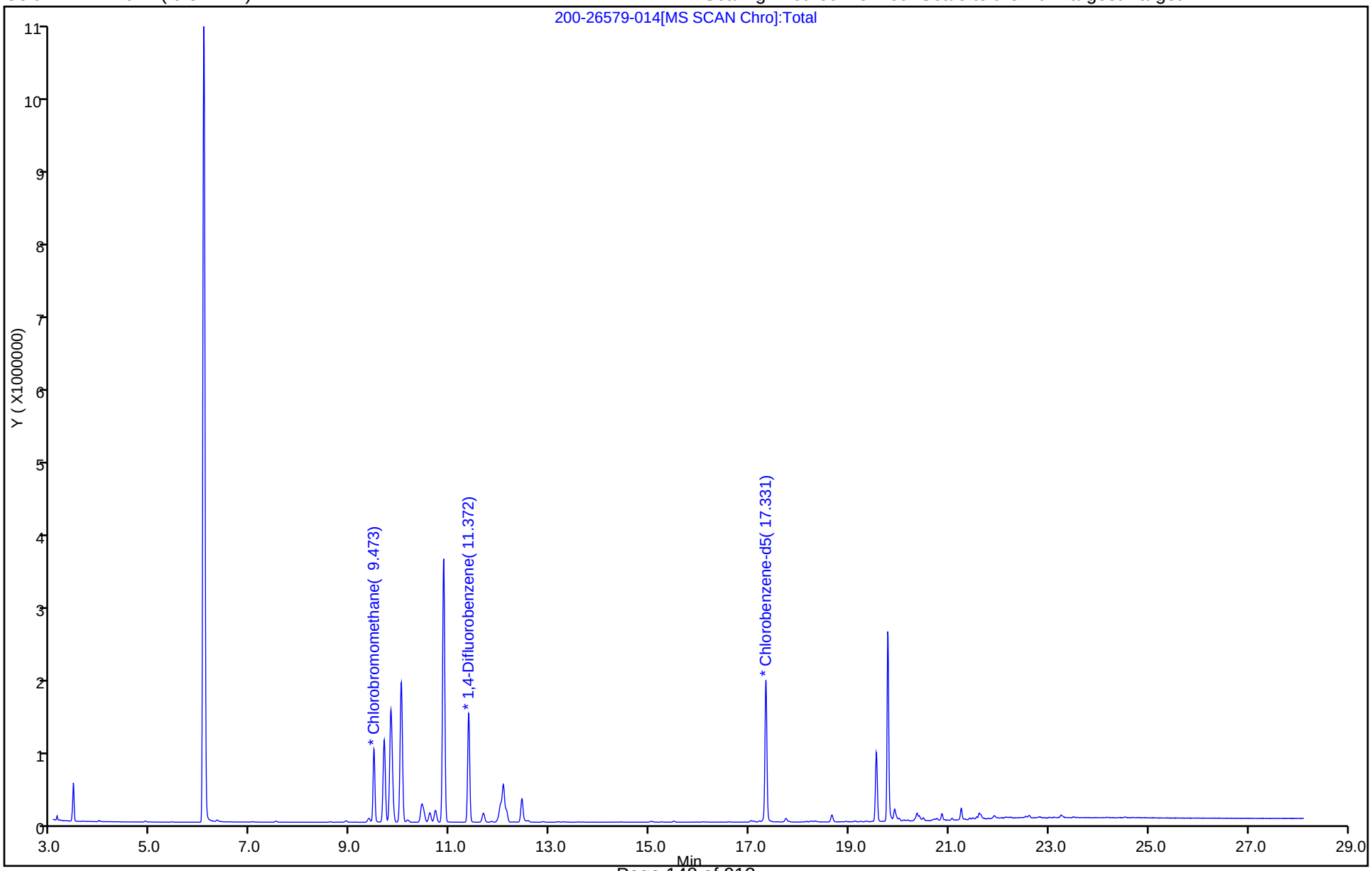
Report Date: 28-Aug-2017 11:34:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-014.D

Injection Date:	25-Aug-2017 20:45:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-3	Lab Sample ID:	200-39823-3	Worklist Smp#:	14
Client ID:	SV-6				
Purge Vol:	200.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



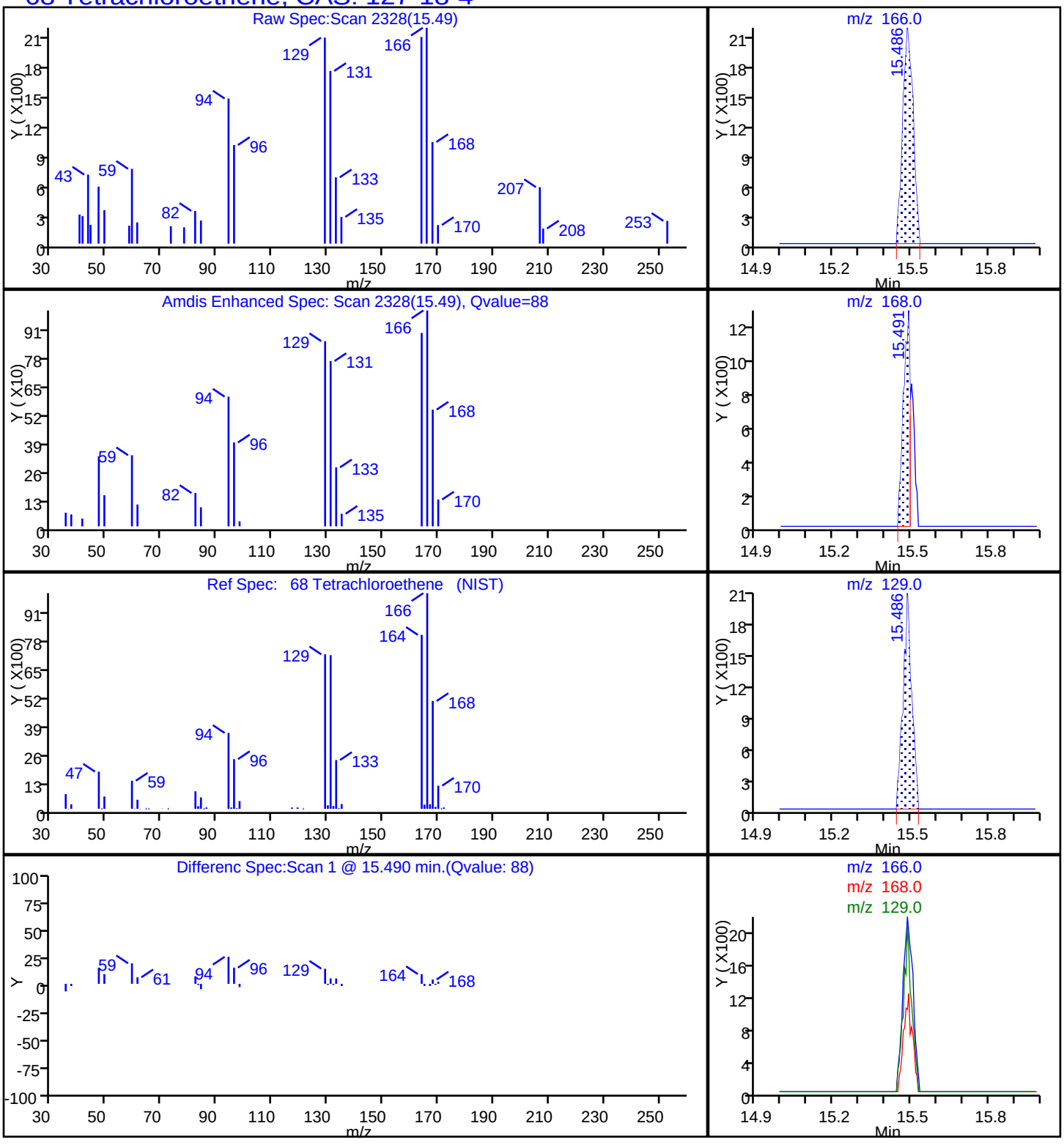
Report Date: 28-Aug-2017 11:34:17 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-014.D

Injection Date:	25-Aug-2017 20:45:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-3	Lab Sample ID:	200-39823-3		
Client ID:	SV-6				
Operator ID:	pad	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	10.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

TestAmerica Burlington

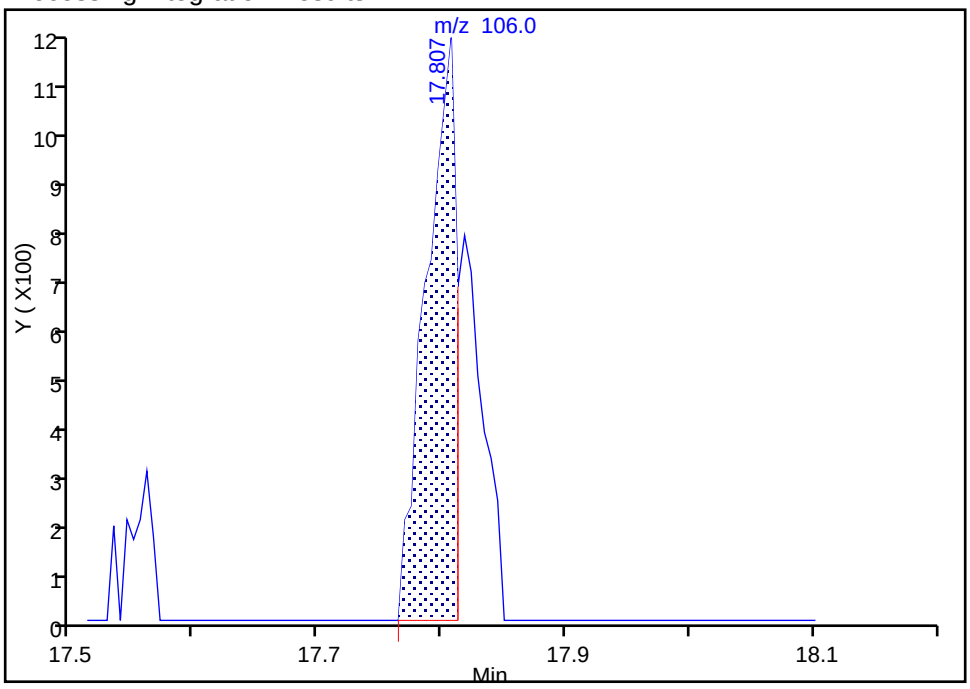
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-014.D				
Injection Date:	25-Aug-2017 20:45:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-3	Lab Sample ID:	200-39823-3		
Client ID:	SV-6				
Operator ID:	pad	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	10.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

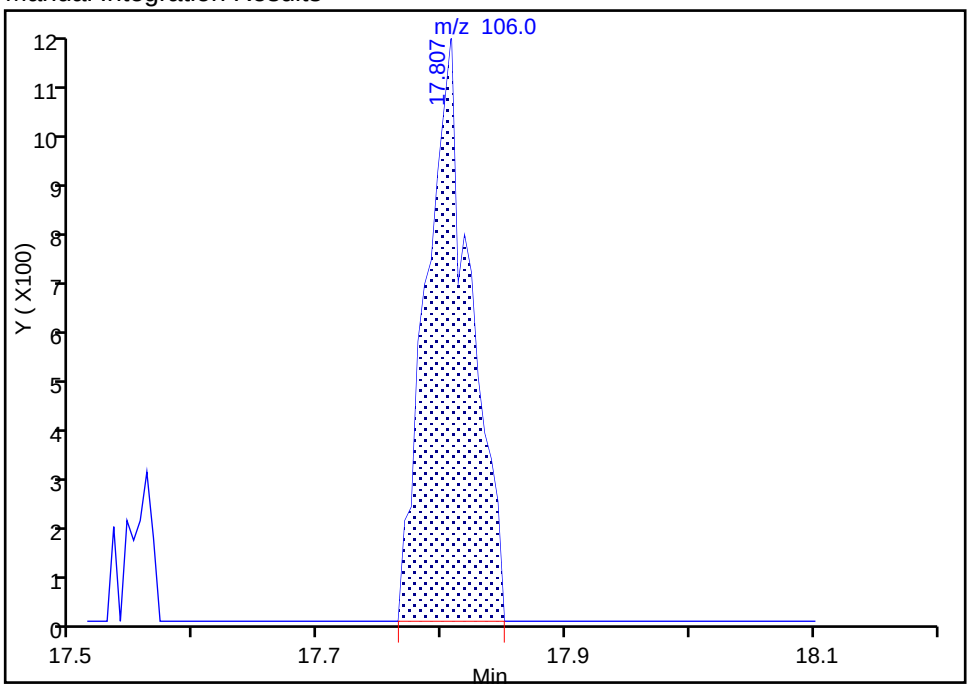
Processing Integration Results

RT: 17.81
Area: 1950
Amount: 0.030736
Amount Units: ppb v/v



Manual Integration Results

RT: 17.81
Area: 2870
Amount: 0.045237
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:33:35

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

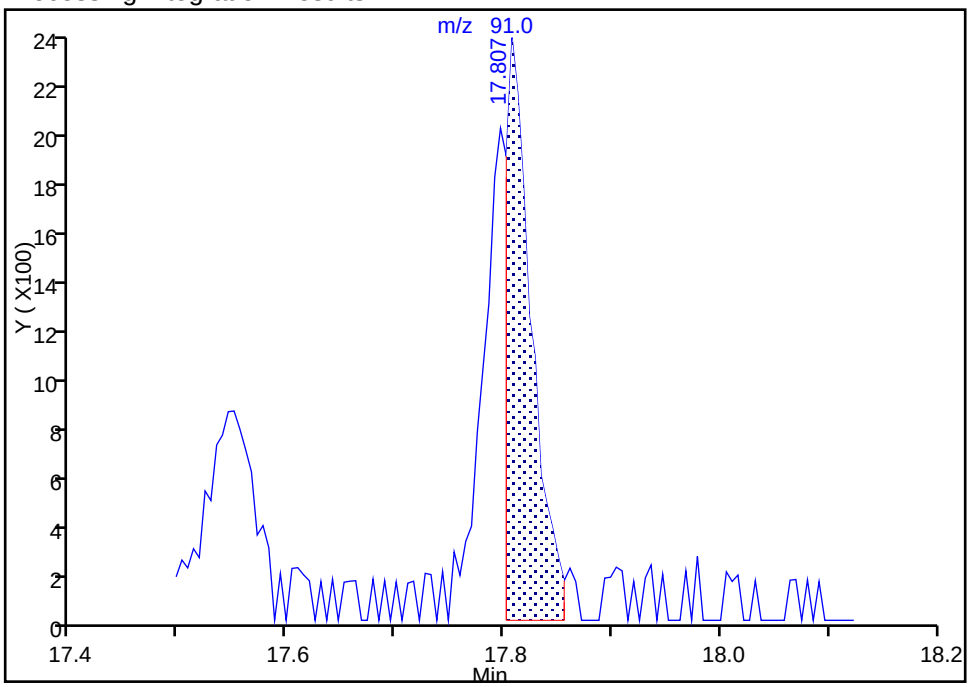
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-014.D				
Injection Date:	25-Aug-2017 20:45:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-3	Lab Sample ID:	200-39823-3		
Client ID:	SV-6				
Operator ID:	pad	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	10.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 2

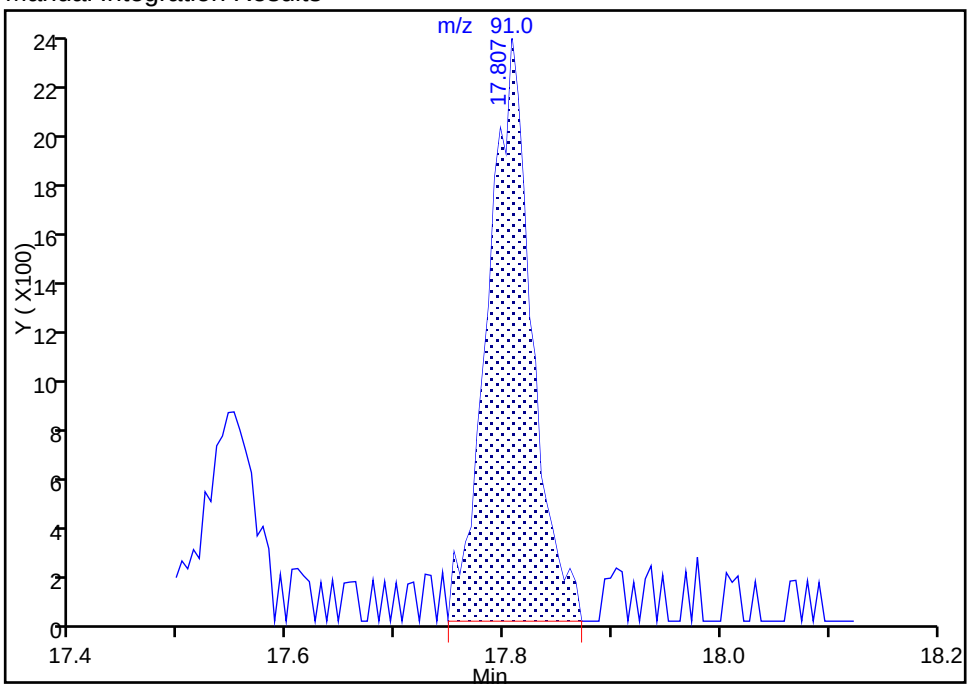
Processing Integration Results

RT: 17.81
Area: 3953
Amount: 0.030736
Amount Units: ppb v/v



Manual Integration Results

RT: 17.81
Area: 6657
Amount: 0.045237
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:33:46

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

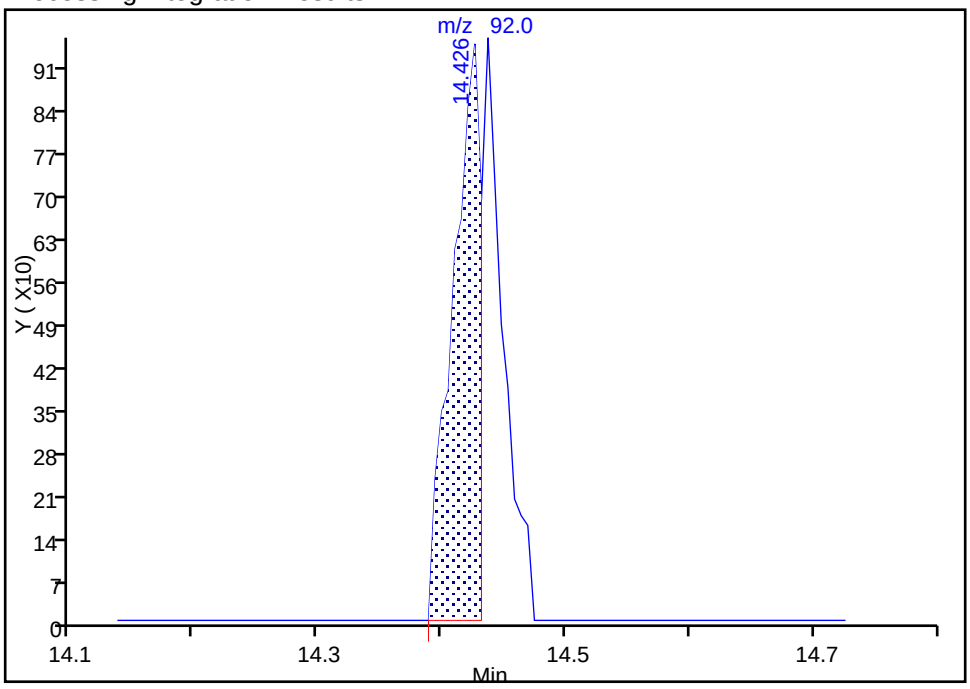
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-014.D				
Injection Date:	25-Aug-2017 20:45:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-3	Lab Sample ID:	200-39823-3		
Client ID:	SV-6				
Operator ID:	pad	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	10.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

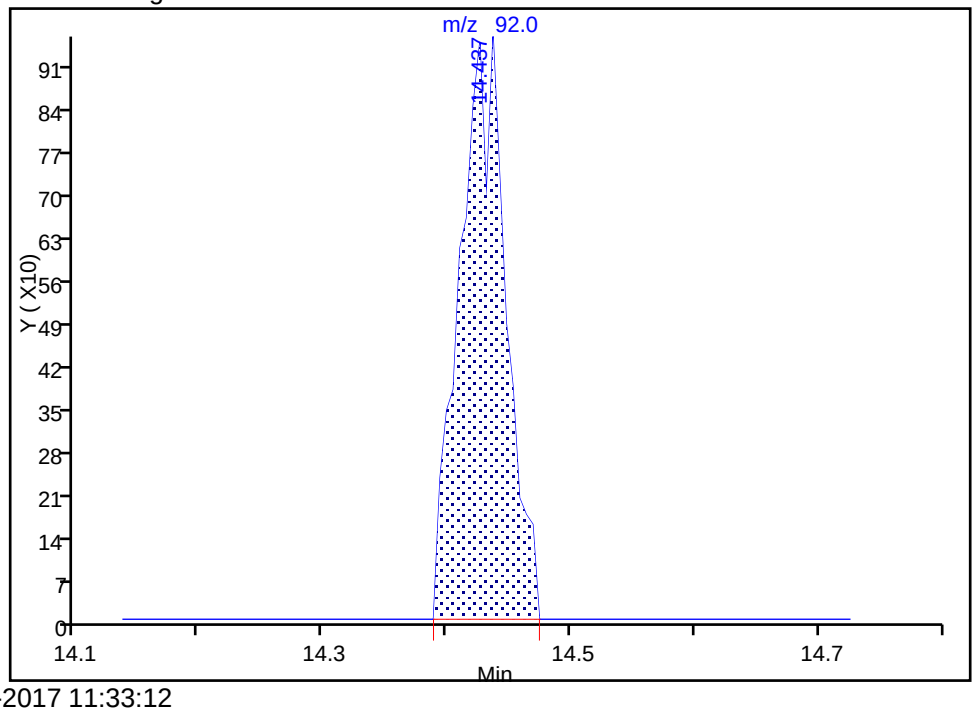
Processing Integration Results

RT: 14.43
Area: 1500
Amount: 0.020112
Amount Units: ppb v/v



Manual Integration Results

RT: 14.44
Area: 2482
Amount: 0.033279
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:33:12

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-9 Lab Sample ID: 200-39823-4

Matrix: Air Lab File ID: 200-26579-015.D

Analysis Method: TO-15 Date Collected: 08/22/2017 14:41

Sample wt/vol: 32(mL) Date Analyzed: 08/25/2017 21:35

Soil Aliquot Vol: Dilution Factor: 30.3

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.85	U	6.1	0.85
56-23-5	Carbon tetrachloride	153.81	0.33	U	6.1	0.33
108-90-7	Chlorobenzene	112.56	0.76	U	6.1	0.76
75-00-3	Chloroethane	64.52	3.9	U	15	3.9
74-87-3	Chloromethane	50.49	4.8	U	15	4.8
156-59-2	cis-1,2-Dichloroethene	96.94	0.88	U	6.1	0.88
541-73-1	1,3-Dichlorobenzene	147.00	1.5	U	6.1	1.5
95-50-1	1,2-Dichlorobenzene	147.00	1.4	U	6.1	1.4
75-34-3	1,1-Dichloroethane	98.96	0.52	U	6.1	0.52
107-06-2	1,2-Dichloroethane	98.96	1.0	U	6.1	1.0
75-35-4	1,1-Dichloroethene	96.94	1.1	U	6.1	1.1
78-87-5	1,2-Dichloropropane	112.99	1.1	U	6.1	1.1
100-41-4	Ethylbenzene	106.17	1.0	U	6.1	1.0
75-09-2	Methylene Chloride	84.93	2.1	U	15	2.1
1634-04-4	Methyl tert-butyl ether	88.15	1.2	U	6.1	1.2
179601-23-1	m,p-Xylene	106.17	2.5	J	15	2.3
91-20-3	Naphthalene	128.17	3.0	U	15	3.0
127-18-4	Tetrachloroethene	165.83	0.30	U	6.1	0.30
108-88-3	Toluene	92.14	1.1	U	6.1	1.1
156-60-5	trans-1,2-Dichloroethene	96.94	1.5	U	6.1	1.5
71-55-6	1,1,1-Trichloroethane	133.41	0.79	U	6.1	0.79
79-01-6	Trichloroethene	131.39	0.28	U	6.1	0.28
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	U	6.1	1.2
95-63-6	1,2,4-Trimethylbenzene	120.20	1.7	U	6.1	1.7
75-01-4	Vinyl chloride	62.50	0.55	U	6.1	0.55
95-47-6	Xylene, o-	106.17	2.1	J	6.1	1.2

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-9 Lab Sample ID: 200-39823-4

Matrix: Air Lab File ID: 200-26579-015.D

Analysis Method: TO-15 Date Collected: 08/22/2017 14:41

Sample wt/vol: 32(mL) Date Analyzed: 08/25/2017 21:35

Soil Aliquot Vol: Dilution Factor: 30.3

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.7	U	19	2.7
56-23-5	Carbon tetrachloride	153.81	2.1	U	38	2.1
108-90-7	Chlorobenzene	112.56	3.5	U	28	3.5
75-00-3	Chloroethane	64.52	10	U	40	10
74-87-3	Chloromethane	50.49	10	U	31	10
156-59-2	cis-1,2-Dichloroethene	96.94	3.5	U	24	3.5
541-73-1	1,3-Dichlorobenzene	147.00	9.1	U	36	9.1
95-50-1	1,2-Dichlorobenzene	147.00	8.2	U	36	8.2
75-34-3	1,1-Dichloroethane	98.96	2.1	U	25	2.1
107-06-2	1,2-Dichloroethane	98.96	4.2	U	25	4.2
75-35-4	1,1-Dichloroethene	96.94	4.2	U	24	4.2
78-87-5	1,2-Dichloropropane	112.99	4.9	U	28	4.9
100-41-4	Ethylbenzene	106.17	4.5	U	26	4.5
75-09-2	Methylene Chloride	84.93	7.2	U	53	7.2
1634-04-4	Methyl tert-butyl ether	88.15	4.5	U	22	4.5
179601-23-1	m,p-Xylene	106.17	11	J	66	10
91-20-3	Naphthalene	128.17	16	U	79	16
127-18-4	Tetrachloroethene	165.83	2.0	U	41	2.0
108-88-3	Toluene	92.14	4.0	U	23	4.0
156-60-5	trans-1,2-Dichloroethene	96.94	6.0	U	24	6.0
71-55-6	1,1,1-Trichloroethane	133.41	4.3	U	33	4.3
79-01-6	Trichloroethene	131.39	1.5	U	33	1.5
108-67-8	1,3,5-Trimethylbenzene	120.20	6.0	U	30	6.0
95-63-6	1,2,4-Trimethylbenzene	120.20	8.5	U	30	8.5
75-01-4	Vinyl chloride	62.50	1.4	U	15	1.4
95-47-6	Xylene, o-	106.17	9.0	J	26	5.3

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-015.D
Lims ID: 200-39823-A-4
Client ID: SV-9
Sample Type: Client
Inject. Date: 25-Aug-2017 21:35:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 30.3000
Sample Info: 200-0026579-015
Misc. Info.: 39823-04
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:36:22 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:36:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.478	9.467	0.011	91	346097	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1647474	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.432	14.426	0.006	91	1721	0.0249	
68 Tetrachloroethene	166		15.486				ND	
* 74 Chlorobenzene-d5	117	17.337	17.337	-0.001	89	1531241	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.556	17.551	0.006	52	3133	0.0209	
78 m-Xylene & p-Xylene	106	17.802	17.807	-0.005	0	4782	0.0814	
79 o-Xylene	106	18.653	18.663	-0.010	71	4026	0.0683	
90 1,3,5-Trimethylbenzene	105		20.466				ND	
93 1,2,4-Trimethylbenzene	105	21.076	21.081	0.005	8	2108	0.0157	M
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

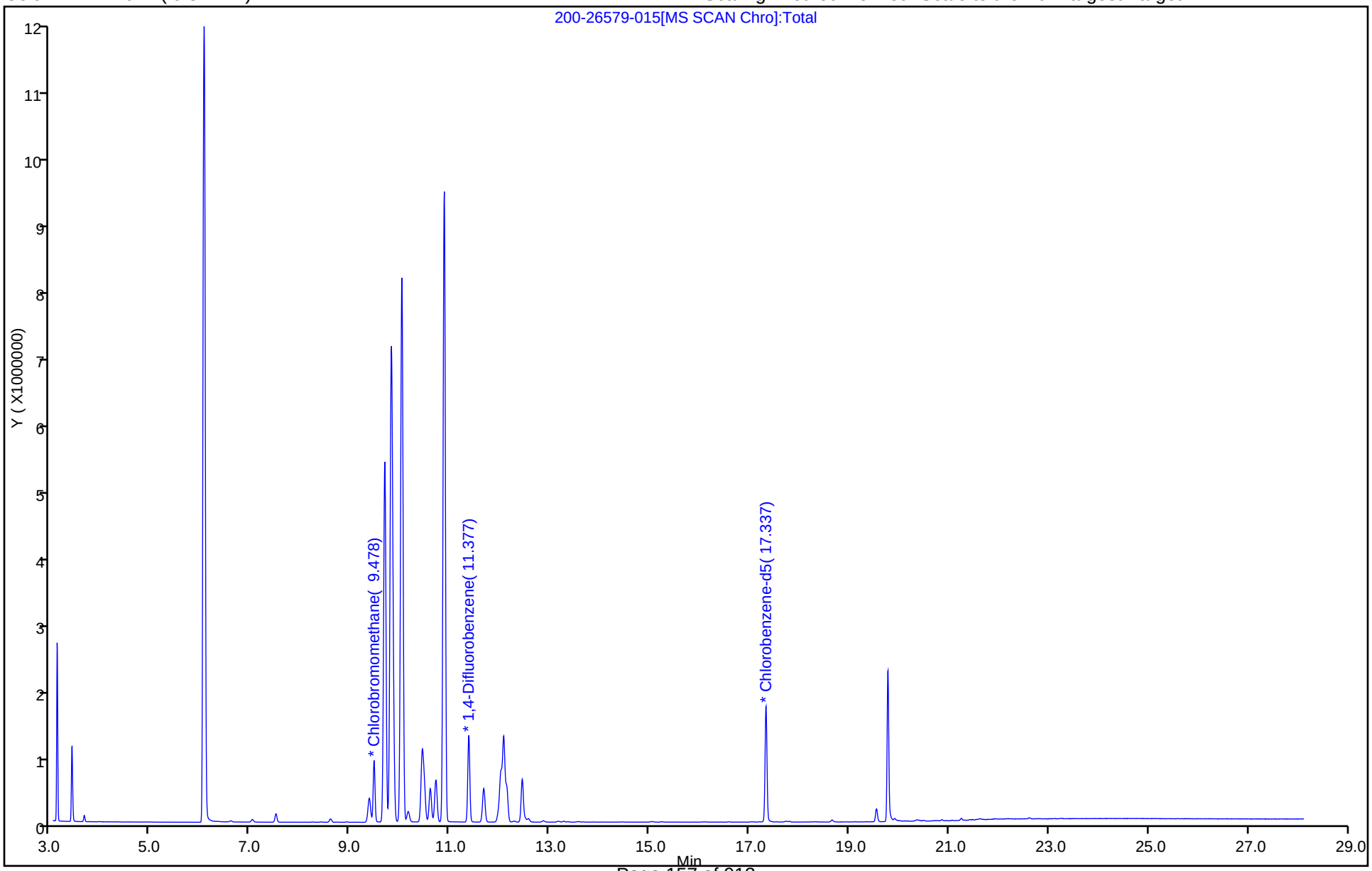
Report Date: 28-Aug-2017 11:36:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-015.D

Injection Date:	25-Aug-2017 21:35:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-4	Lab Sample ID:	200-39823-4	Worklist Smp#:	15
Client ID:	SV-9				
Purge Vol:	200.000 mL	Dil. Factor:	30.3000	ALS Bottle#:	14
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

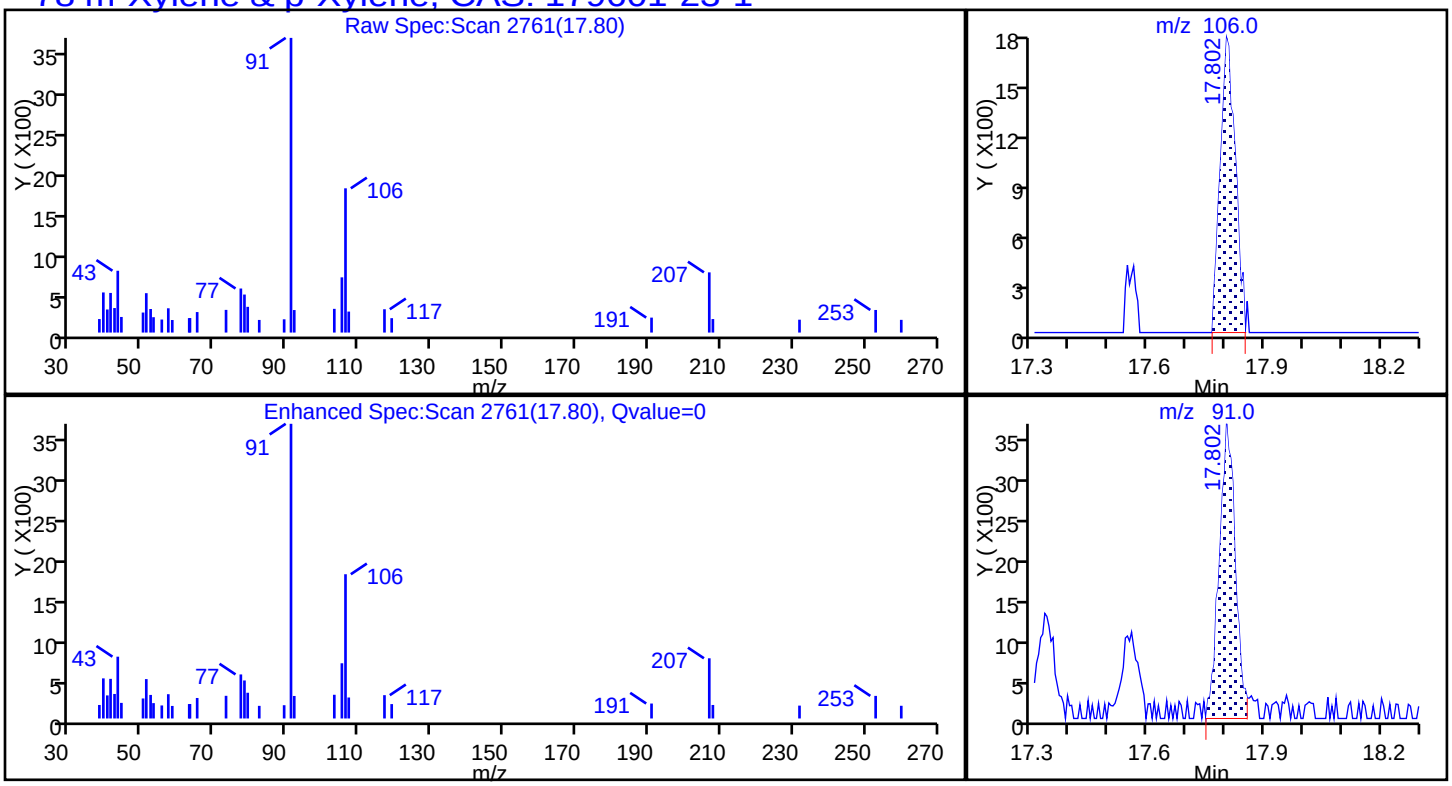


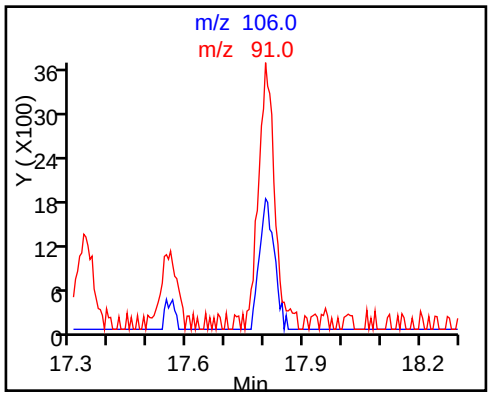
Report Date: 28-Aug-2017 11:36:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-015.D				
Injection Date:	25-Aug-2017 21:35:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-4	Lab Sample ID:	200-39823-4		
Client ID:	SV-9				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





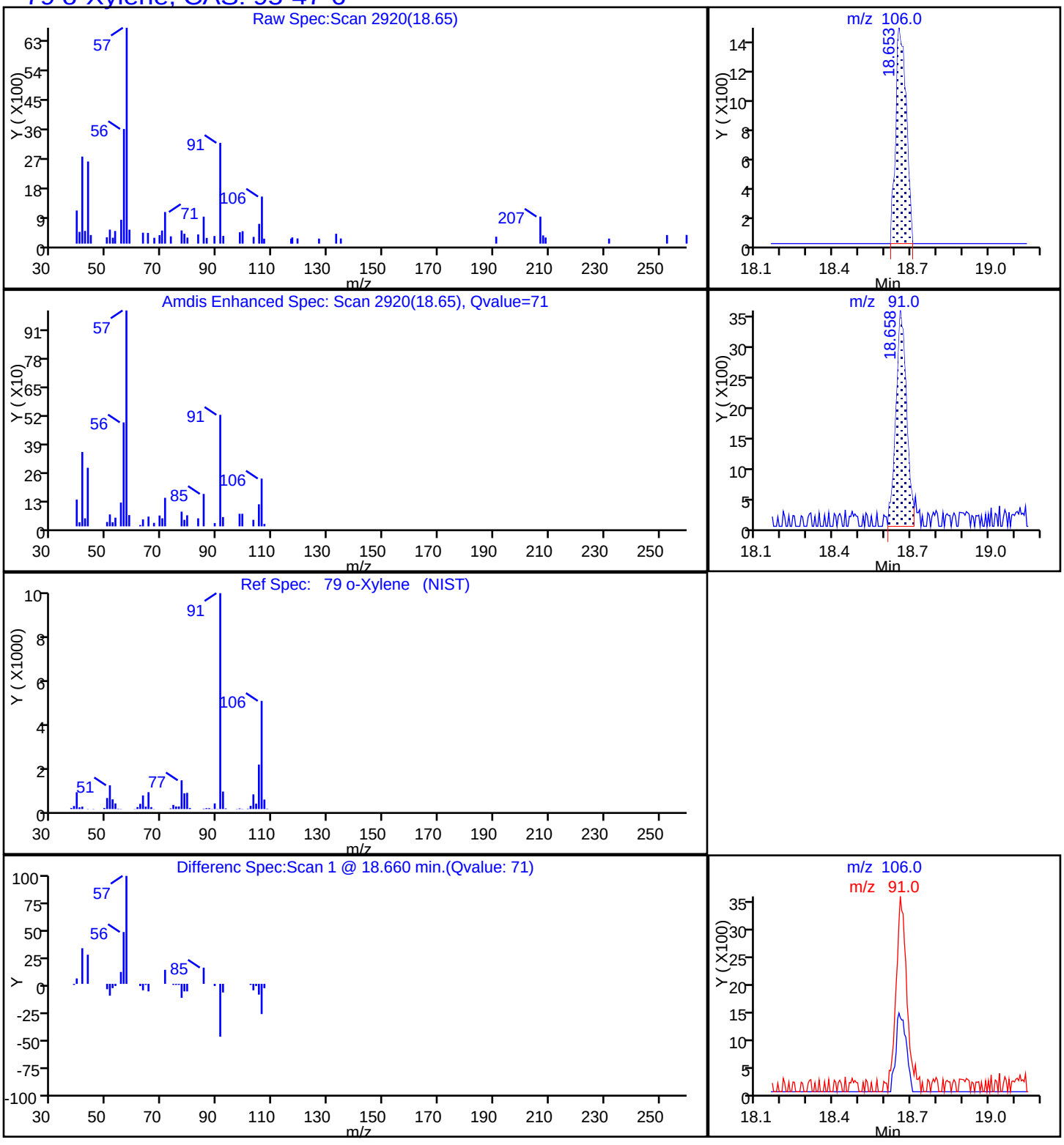
Report Date: 28-Aug-2017 11:36:22 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-015.D

Injection Date:	25-Aug-2017 21:35:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-4	Lab Sample ID:	200-39823-4		
Client ID:	SV-9				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

TestAmerica Burlington

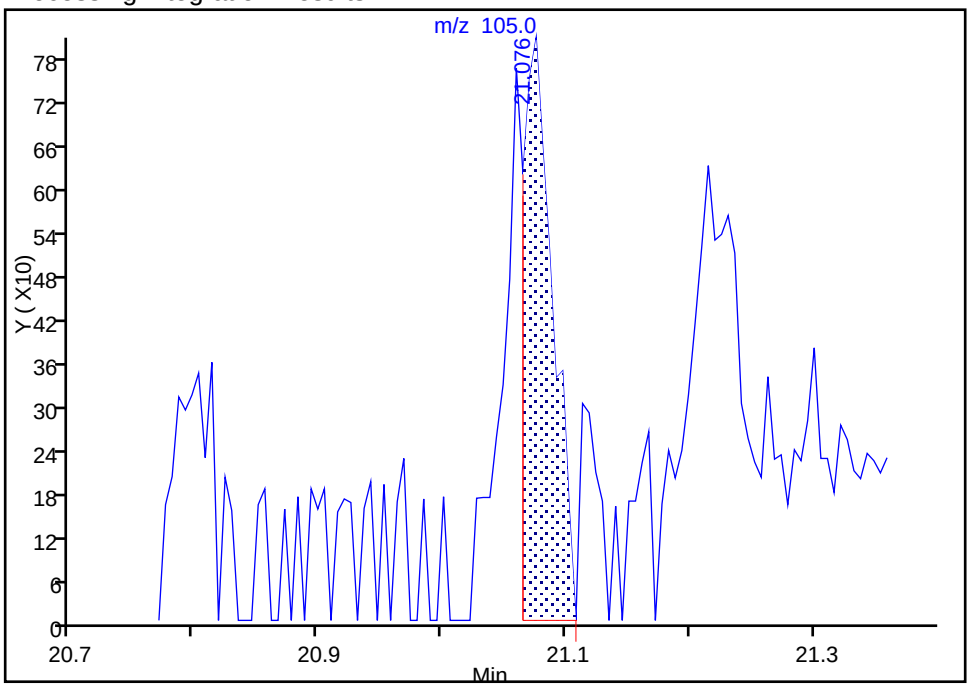
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-015.D				
Injection Date:	25-Aug-2017 21:35:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-4	Lab Sample ID:	200-39823-4		
Client ID:	SV-9				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

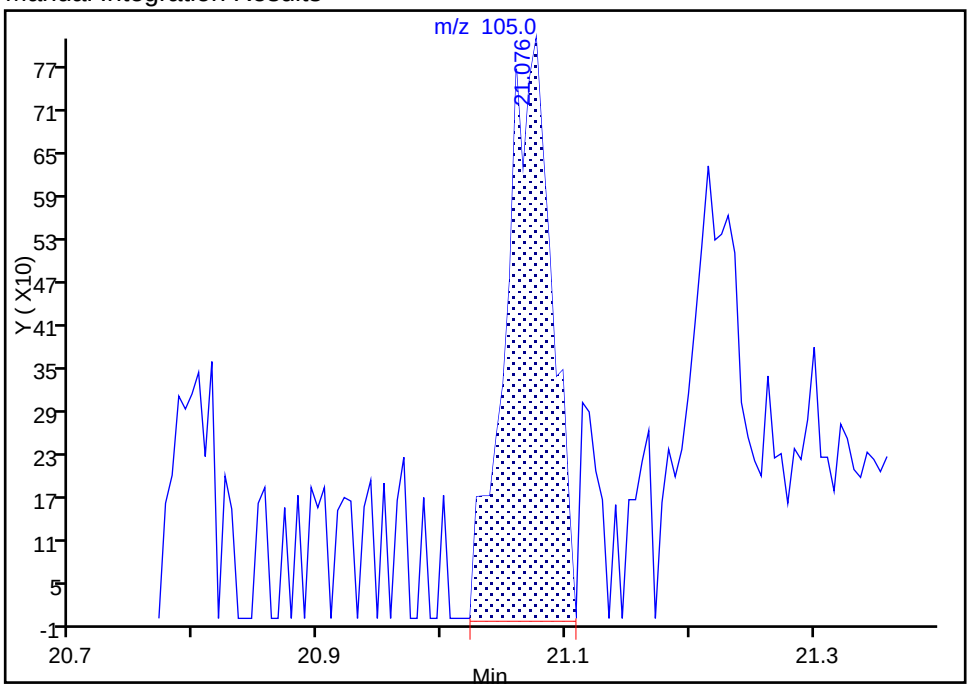
Processing Integration Results

RT: 21.08
Area: 1340
Amount: 0.010006
Amount Units: ppb v/v



Manual Integration Results

RT: 21.08
Area: 2108
Amount: 0.015741
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:35:57

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

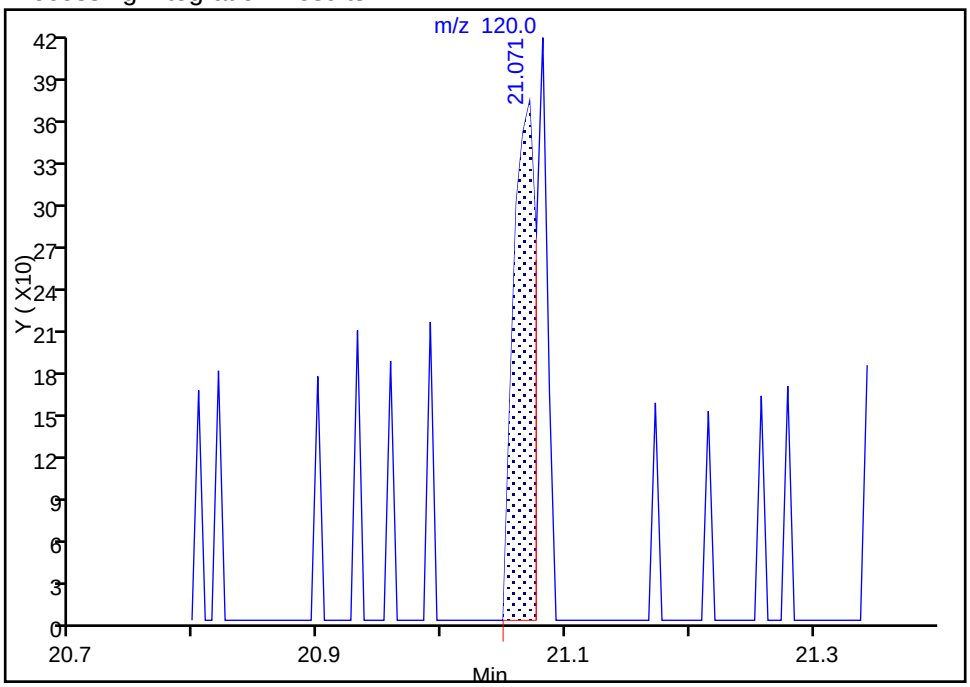
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-015.D				
Injection Date:	25-Aug-2017 21:35:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-4	Lab Sample ID:	200-39823-4		
Client ID:	SV-9				
Operator ID:	pad	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	30.3000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 2

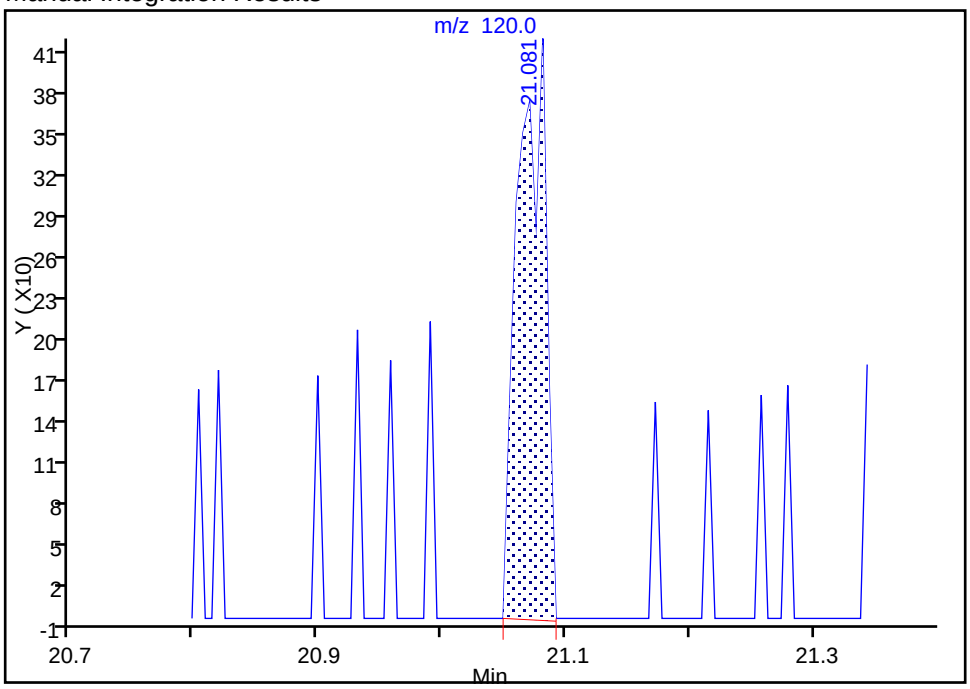
Processing Integration Results

RT: 21.07
Area: 466
Amount: 0.010006
Amount Units: ppb v/v



Manual Integration Results

RT: 21.08
Area: 655
Amount: 0.015741
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:36:06

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-10 Lab Sample ID: 200-39823-5

Matrix: Air Lab File ID: 200-26579-016.D

Analysis Method: TO-15 Date Collected: 08/22/2017 15:06

Sample wt/vol: 32(mL) Date Analyzed: 08/25/2017 22:25

Soil Aliquot Vol: Dilution Factor: 30.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.85	U	6.1	0.85
56-23-5	Carbon tetrachloride	153.81	0.34	U	6.1	0.34
108-90-7	Chlorobenzene	112.56	0.76	U	6.1	0.76
75-00-3	Chloroethane	64.52	4.0	U	15	4.0
74-87-3	Chloromethane	50.49	4.9	U	15	4.9
156-59-2	cis-1,2-Dichloroethene	96.94	0.88	U	6.1	0.88
541-73-1	1,3-Dichlorobenzene	147.00	1.5	U	6.1	1.5
95-50-1	1,2-Dichlorobenzene	147.00	1.4	U	6.1	1.4
75-34-3	1,1-Dichloroethane	98.96	0.52	U	6.1	0.52
107-06-2	1,2-Dichloroethane	98.96	1.0	U	6.1	1.0
75-35-4	1,1-Dichloroethene	96.94	1.1	U	6.1	1.1
78-87-5	1,2-Dichloropropane	112.99	1.1	U	6.1	1.1
100-41-4	Ethylbenzene	106.17	1.0	U	6.1	1.0
75-09-2	Methylene Chloride	84.93	2.1	U	15	2.1
1634-04-4	Methyl tert-butyl ether	88.15	1.3	U	6.1	1.3
179601-23-1	m,p-Xylene	106.17	2.3	U	15	2.3
91-20-3	Naphthalene	128.17	3.1	U	15	3.1
127-18-4	Tetrachloroethene	165.83	0.30	U	6.1	0.30
108-88-3	Toluene	92.14	1.7	J	6.1	1.1
156-60-5	trans-1,2-Dichloroethene	96.94	1.5	U	6.1	1.5
71-55-6	1,1,1-Trichloroethane	133.41	0.79	U	6.1	0.79
79-01-6	Trichloroethene	131.39	0.28	U	6.1	0.28
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	U	6.1	1.2
95-63-6	1,2,4-Trimethylbenzene	120.20	1.7	U	6.1	1.7
75-01-4	Vinyl chloride	62.50	0.55	U	6.1	0.55
95-47-6	Xylene, o-	106.17	1.2	U	6.1	1.2

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-10 Lab Sample ID: 200-39823-5

Matrix: Air Lab File ID: 200-26579-016.D

Analysis Method: TO-15 Date Collected: 08/22/2017 15:06

Sample wt/vol: 32(mL) Date Analyzed: 08/25/2017 22:25

Soil Aliquot Vol: Dilution Factor: 30.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.7	U	19	2.7
56-23-5	Carbon tetrachloride	153.81	2.1	U	38	2.1
108-90-7	Chlorobenzene	112.56	3.5	U	28	3.5
75-00-3	Chloroethane	64.52	10	U	40	10
74-87-3	Chloromethane	50.49	10	U	31	10
156-59-2	cis-1,2-Dichloroethene	96.94	3.5	U	24	3.5
541-73-1	1,3-Dichlorobenzene	147.00	9.2	U	37	9.2
95-50-1	1,2-Dichlorobenzene	147.00	8.3	U	37	8.3
75-34-3	1,1-Dichloroethane	98.96	2.1	U	25	2.1
107-06-2	1,2-Dichloroethane	98.96	4.2	U	25	4.2
75-35-4	1,1-Dichloroethene	96.94	4.2	U	24	4.2
78-87-5	1,2-Dichloropropane	112.99	4.9	U	28	4.9
100-41-4	Ethylbenzene	106.17	4.5	U	26	4.5
75-09-2	Methylene Chloride	84.93	7.2	U	53	7.2
1634-04-4	Methyl tert-butyl ether	88.15	4.5	U	22	4.5
179601-23-1	m,p-Xylene	106.17	10	U	66	10
91-20-3	Naphthalene	128.17	16	U	80	16
127-18-4	Tetrachloroethene	165.83	2.0	U	41	2.0
108-88-3	Toluene	92.14	6.5	J	23	4.0
156-60-5	trans-1,2-Dichloroethene	96.94	6.0	U	24	6.0
71-55-6	1,1,1-Trichloroethane	133.41	4.3	U	33	4.3
79-01-6	Trichloroethene	131.39	1.5	U	33	1.5
108-67-8	1,3,5-Trimethylbenzene	120.20	6.0	U	30	6.0
95-63-6	1,2,4-Trimethylbenzene	120.20	8.5	U	30	8.5
75-01-4	Vinyl chloride	62.50	1.4	U	16	1.4
95-47-6	Xylene, o-	106.17	5.3	U	26	5.3

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D
Lims ID: 200-39823-A-5
Client ID: SV-10
Sample Type: Client
Inject. Date: 25-Aug-2017 22:25:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 30.5000
Sample Info: 200-0026579-016
Misc. Info.: 39823-05
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:38:35 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:38:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64	4.497	4.503	-0.006	90	784	0.0582	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.472	9.467	0.005	81	354951	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1793694	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.437	14.437	0.011	61	4100	0.0563	M
68 Tetrachloroethene	166		15.486				ND	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	90	1616318	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91		17.551				ND	
78 m-Xylene & p-Xylene	106	17.797	17.807	-0.011	0	1531	0.0247	
79 o-Xylene	106		18.663				ND	
90 1,3,5-Trimethylbenzene	105	20.455	20.466	-0.011	80	1412	0.009787	M
93 1,2,4-Trimethylbenzene	105	21.060	21.071	-0.011	77	1964	0.0139	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

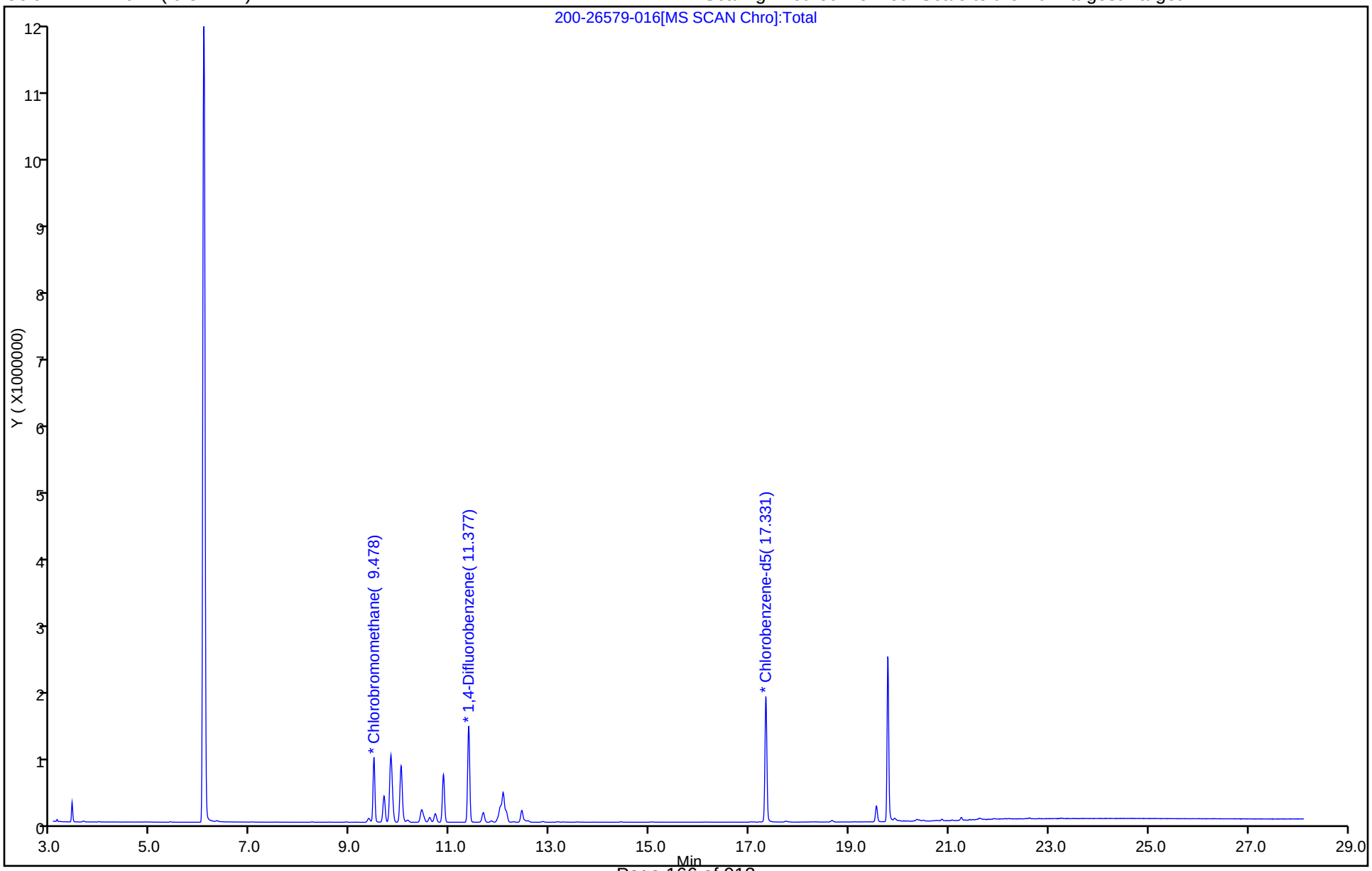
Report Date: 28-Aug-2017 11:38:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D

Injection Date:	25-Aug-2017 22:25:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-5	Lab Sample ID:	200-39823-5	Worklist Smp#:	16
Client ID:	SV-10				
Purge Vol:	200.000 mL	Dil. Factor:	30.5000	ALS Bottle#:	15
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



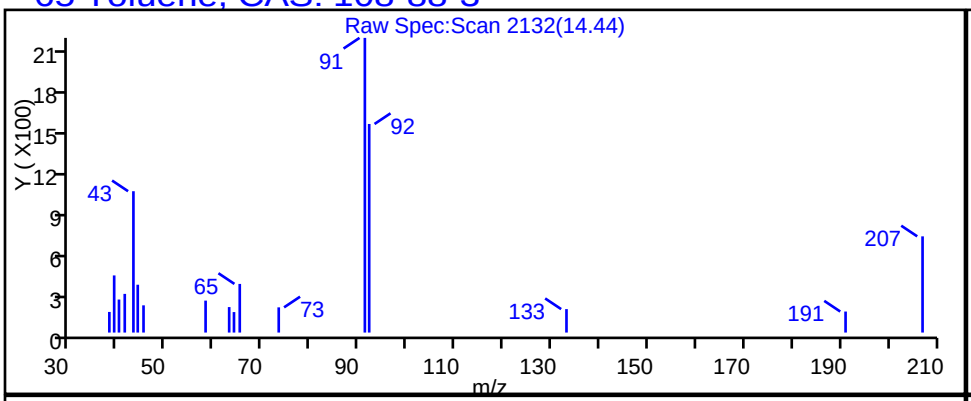
Report Date: 28-Aug-2017 11:38:35 Chrom Revision: 2.2 16-Aug-2017 16:24:46

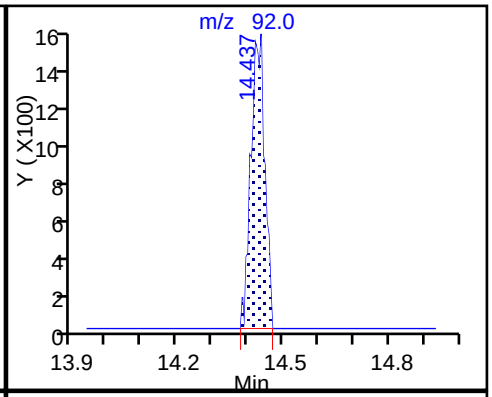
TestAmerica Burlington

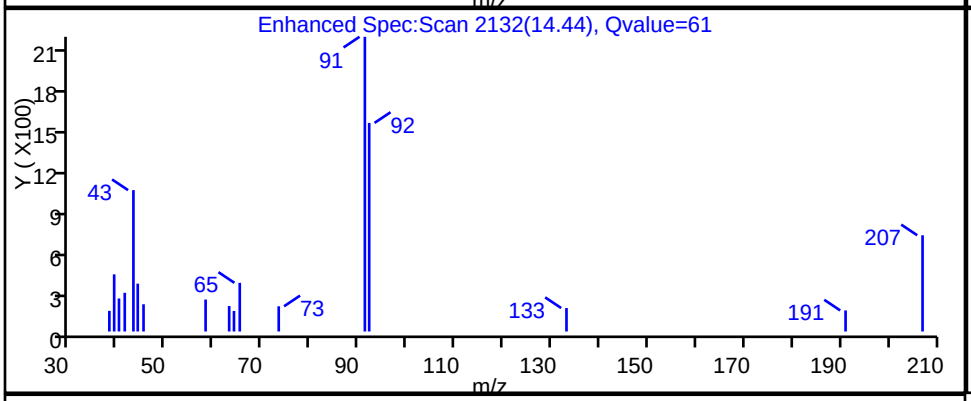
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D

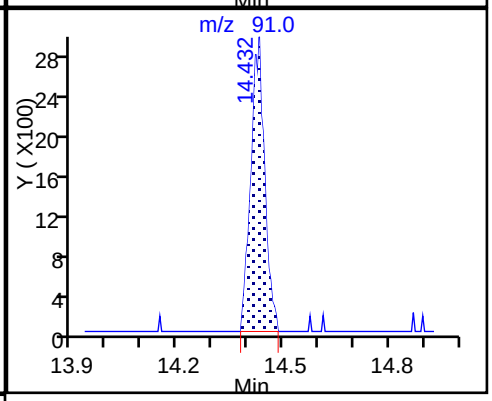
Injection Date:	25-Aug-2017 22:25:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-5	Lab Sample ID:	200-39823-5		
Client ID:	SV-10				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	30.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

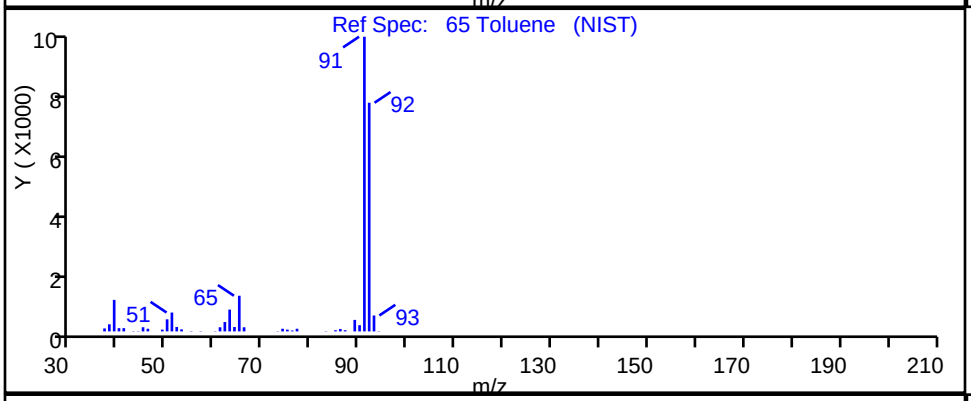
65 Toluene, CAS: 108-88-3

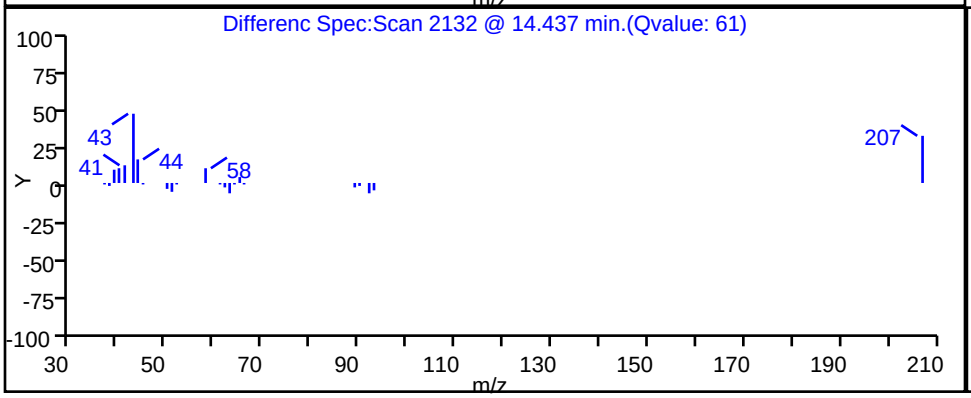


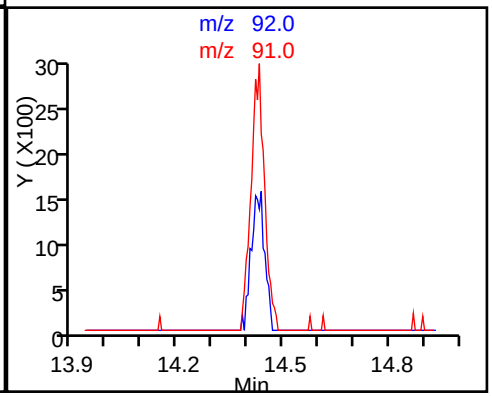












Manual Integration/User Assign Peak Report

TestAmerica Burlington

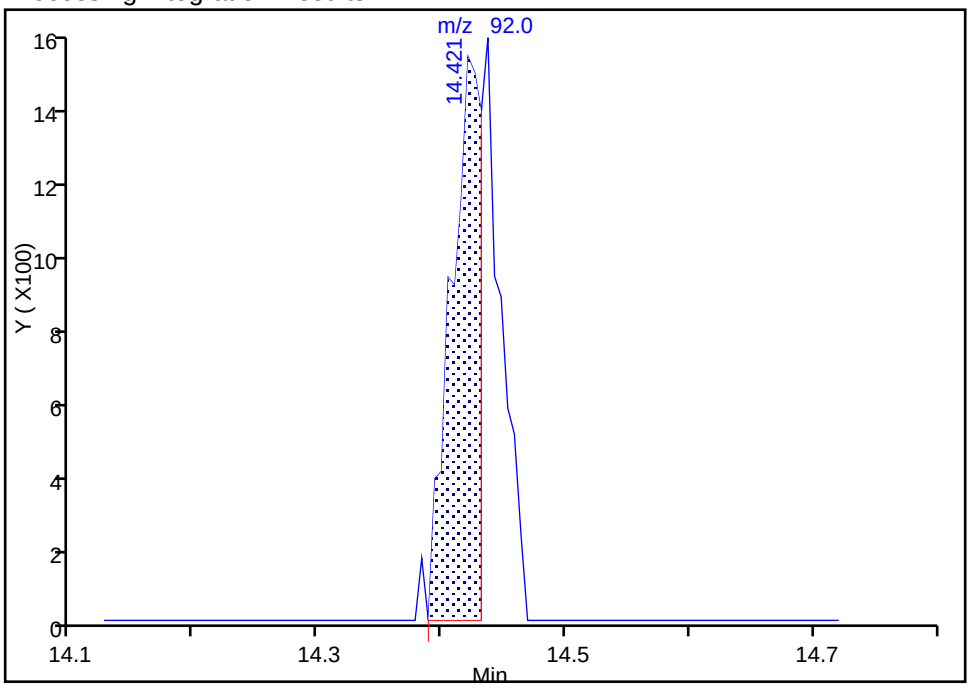
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D				
Injection Date:	25-Aug-2017 22:25:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-5	Lab Sample ID:	200-39823-5		
Client ID:	SV-10				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	30.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

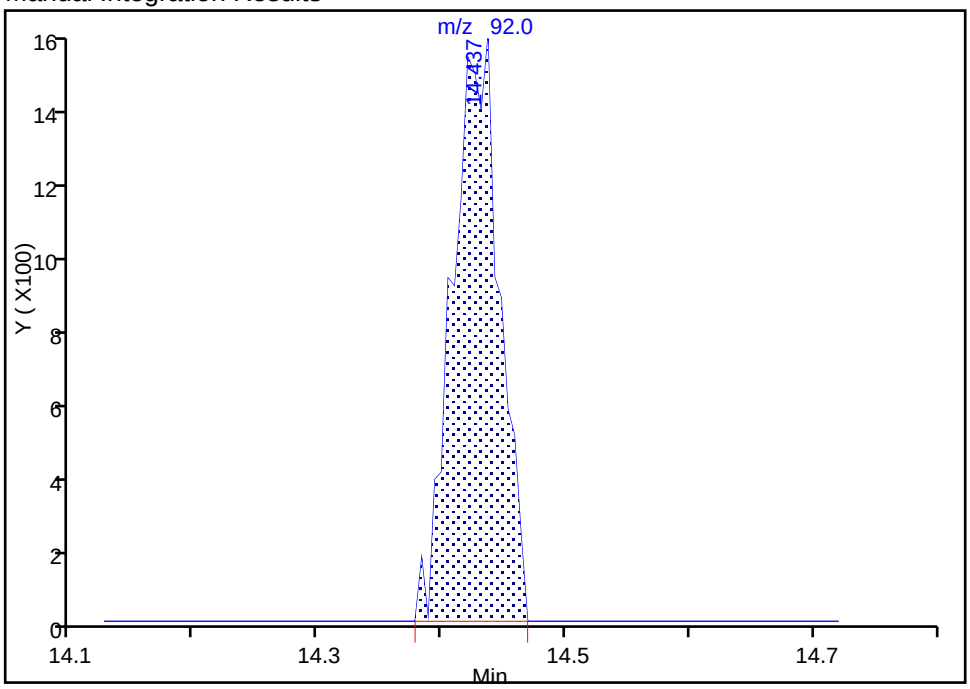
Processing Integration Results

RT: 14.42
Area: 2568
Amount: 0.035235
Amount Units: ppb v/v



Manual Integration Results

RT: 14.44
Area: 4100
Amount: 0.056256
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:37:28

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

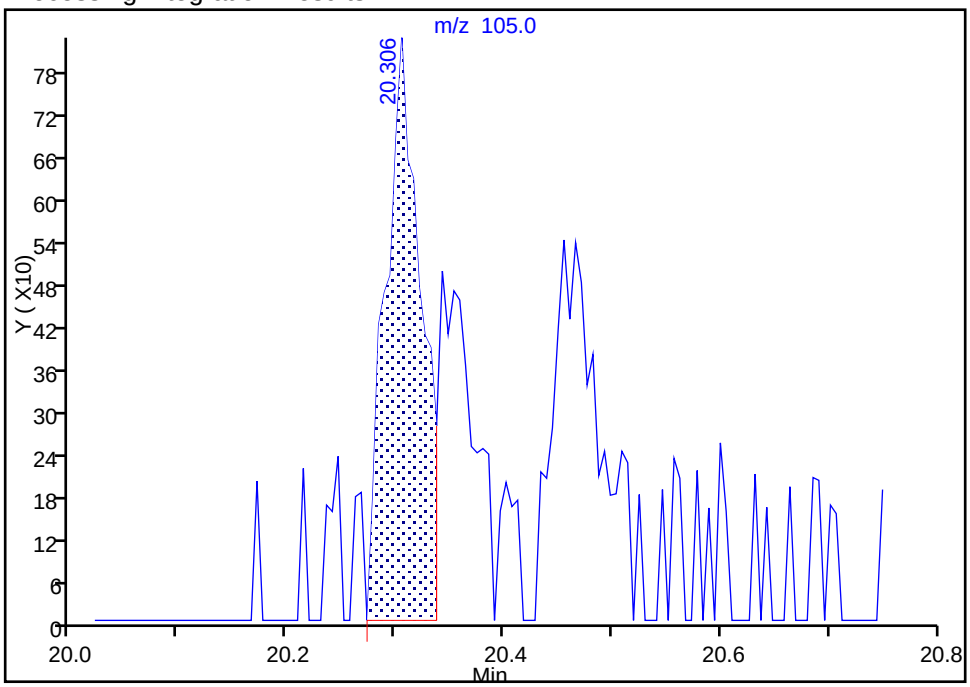
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D				
Injection Date:	25-Aug-2017 22:25:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-5	Lab Sample ID:	200-39823-5		
Client ID:	SV-10				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	30.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

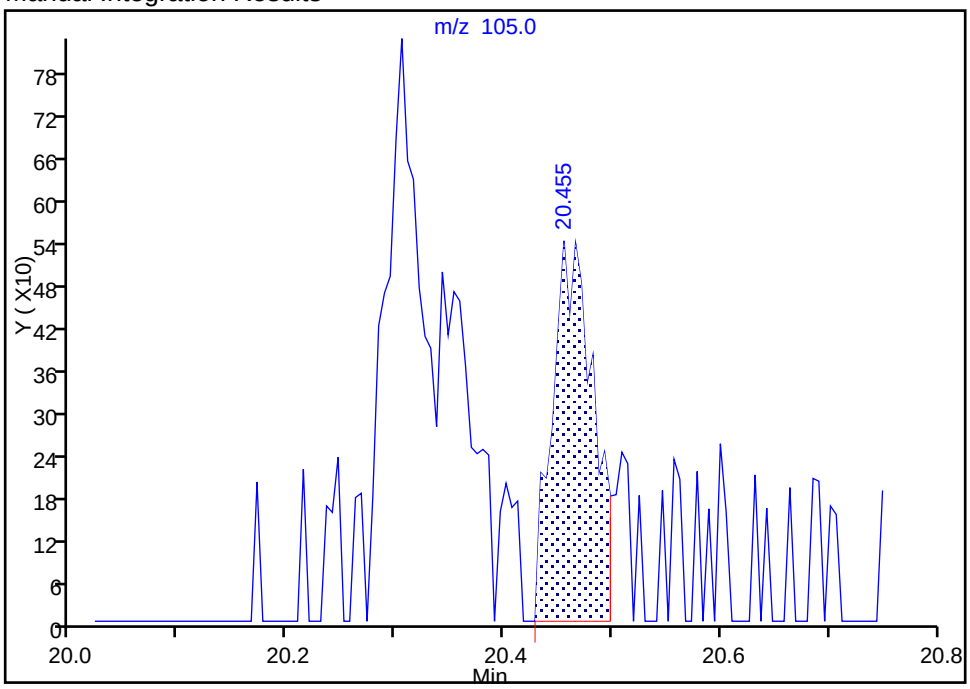
Processing Integration Results

RT: 20.31
Area: 1883
Amount: 0.013052
Amount Units: ppb v/v



Manual Integration Results

RT: 20.46
Area: 1412
Amount: 0.009787
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:37:53

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

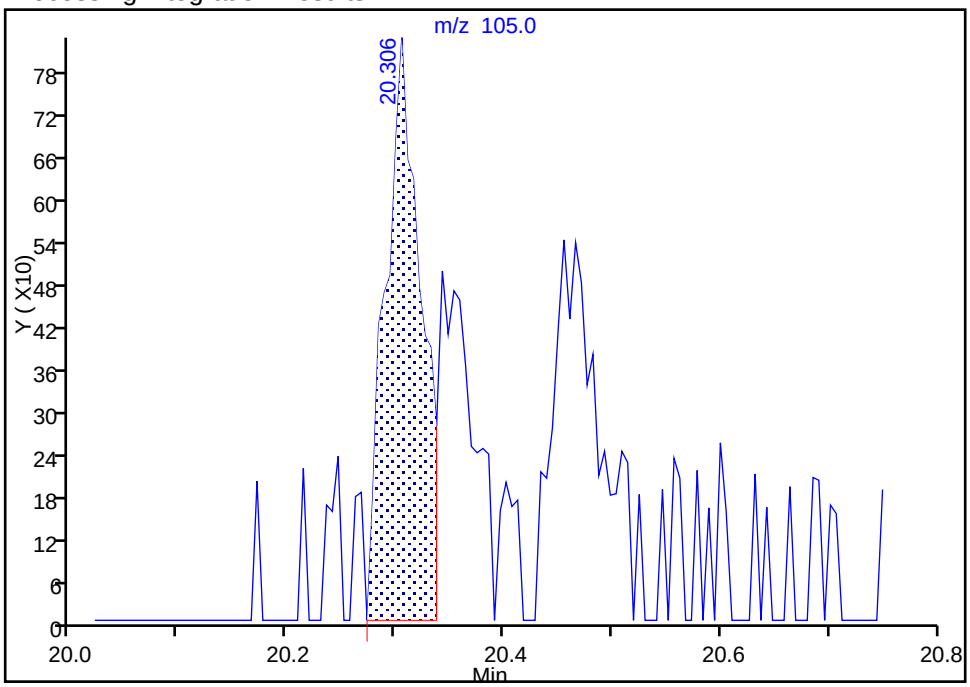
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D				
Injection Date:	25-Aug-2017 22:25:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-5	Lab Sample ID:	200-39823-5		
Client ID:	SV-10				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	30.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

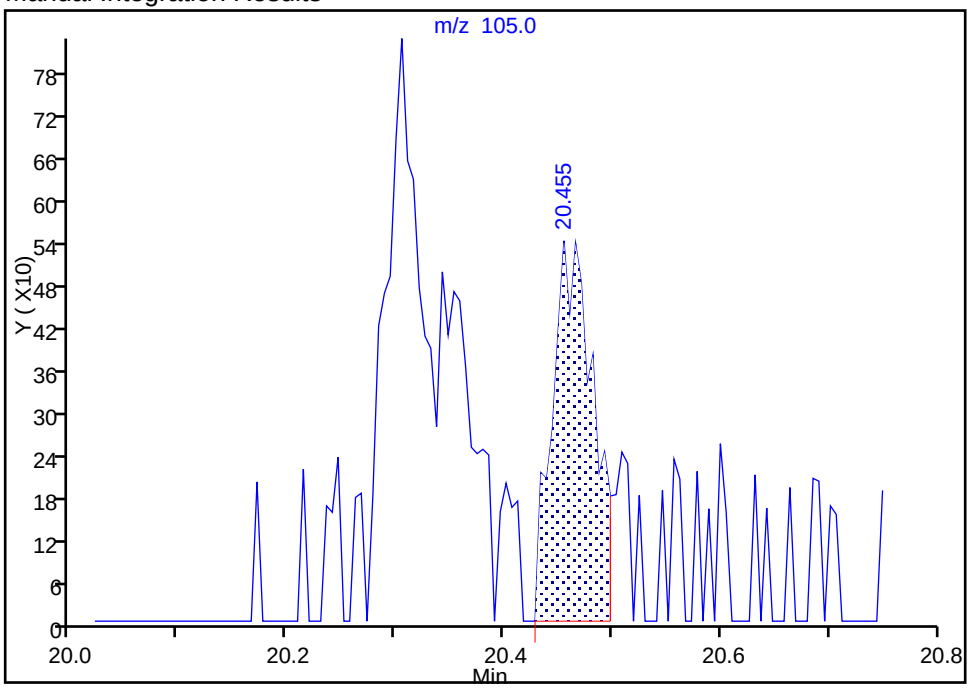
Processing Integration Results

RT: 20.31
Area: 1883
Amount: 0.013052
Amount Units: ppb v/v



Manual Integration Results

RT: 20.46
Area: 1412
Amount: 0.009787
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:38:03

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

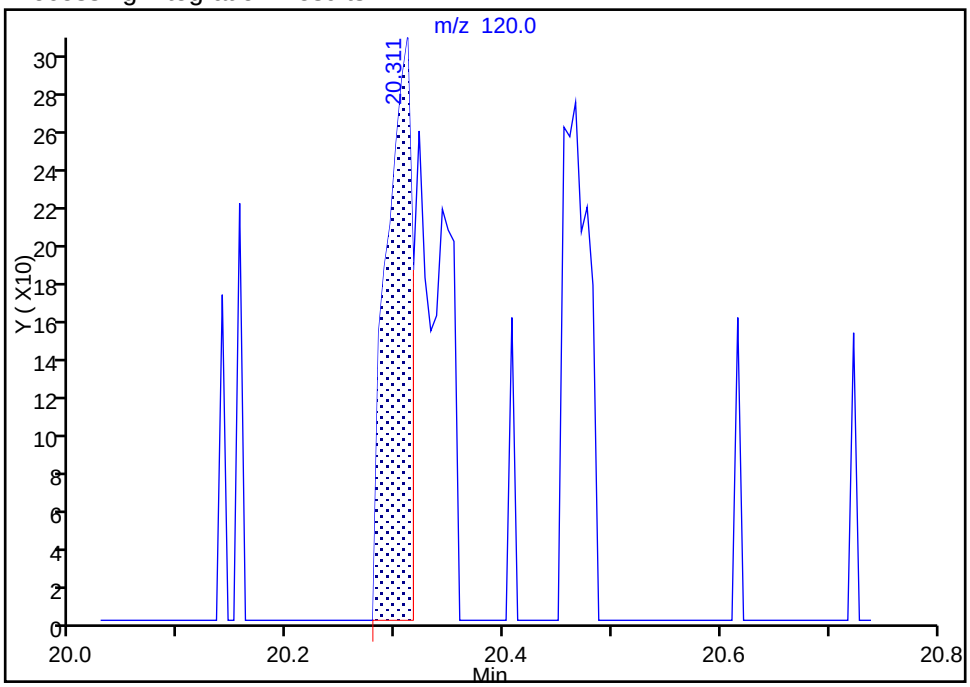
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-016.D				
Injection Date:	25-Aug-2017 22:25:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-5	Lab Sample ID:	200-39823-5		
Client ID:	SV-10				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	30.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 2

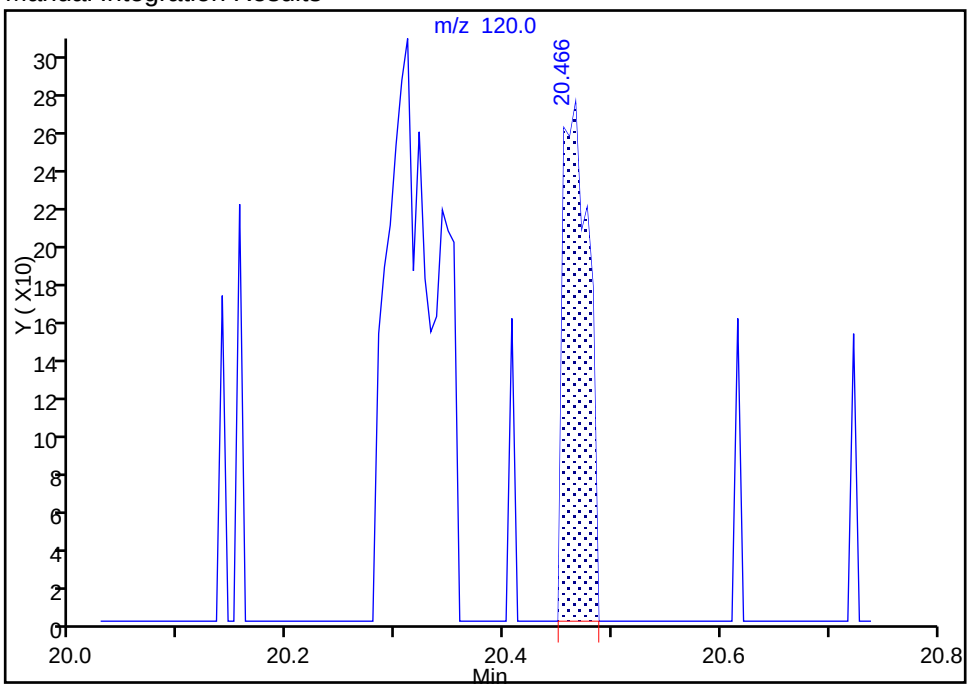
Processing Integration Results

RT: 20.31
Area: 504
Amount: 0.013052
Amount Units: ppb v/v



Manual Integration Results

RT: 20.47
Area: 444
Amount: 0.009787
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:38:18

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-12 Lab Sample ID: 200-39823-6

Matrix: Air Lab File ID: 200-26579-017.D

Analysis Method: TO-15 Date Collected: 08/22/2017 15:51

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 23:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	0.20	0.028
56-23-5	Carbon tetrachloride	153.81	0.098	J	0.20	0.011
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
74-87-3	Chloromethane	50.49	0.19	J	0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	0.065	J	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	0.040	J	0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
100-41-4	Ethylbenzene	106.17	0.49		0.20	0.034
75-09-2	Methylene Chloride	84.93	0.068	U	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
179601-23-1	m,p-Xylene	106.17	1.3		0.50	0.077
91-20-3	Naphthalene	128.17	0.22	J	0.50	0.10
127-18-4	Tetrachloroethene	165.83	2.2		0.20	0.0098
108-88-3	Toluene	92.14	0.94		0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	0.090	J	0.20	0.026
79-01-6	Trichloroethene	131.39	0.054	J	0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	0.12	J	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.44		0.20	0.057
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
95-47-6	Xylene, o-	106.17	0.38		0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-12 Lab Sample ID: 200-39823-6

Matrix: Air Lab File ID: 200-26579-017.D

Analysis Method: TO-15 Date Collected: 08/22/2017 15:51

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 23:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.49	J	0.64	0.089
56-23-5	Carbon tetrachloride	153.81	0.62	J	1.3	0.069
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
74-87-3	Chloromethane	50.49	0.39	J	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
541-73-1	1,3-Dichlorobenzene	147.00	0.39	J	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
75-34-3	1,1-Dichloroethane	98.96	0.16	J	0.81	0.069
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
100-41-4	Ethylbenzene	106.17	2.1		0.87	0.15
75-09-2	Methylene Chloride	84.93	0.24	U	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
179601-23-1	m,p-Xylene	106.17	5.8		2.2	0.33
91-20-3	Naphthalene	128.17	1.1	J	2.6	0.52
127-18-4	Tetrachloroethene	165.83	15		1.4	0.066
108-88-3	Toluene	92.14	3.6		0.75	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.49	J	1.1	0.14
79-01-6	Trichloroethene	131.39	0.29	J	1.1	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.60	J	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	2.2		0.98	0.28
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
95-47-6	Xylene, o-	106.17	1.7		0.87	0.17

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D
Lims ID: 200-39823-A-6
Client ID: SV-12
Sample Type: Client
Inject. Date: 25-Aug-2017 23:16:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-017
Misc. Info.: 39823-06
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:40:57 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:40:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.518	3.513	0.005	98	4842	0.1868	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64	4.497	4.503	-0.006	90	1065	0.0835	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49	6.776	6.776	-0.011	37	1078	0.0349	7M
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63	7.991	7.991	0.000	4	2174	0.0405	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.462	9.467	-0.005	80	336349	10.0	
44 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	79	8219	0.0902	
45 Carbon tetrachloride	117	10.082	10.088	-0.006	96	9294	0.0982	
47 Benzene	78	10.543	10.553	-0.010	95	14577	0.1520	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.366	11.372	-0.006	94	1729011	10.0	
53 Trichloroethene	95	11.832	11.832	0.000	76	2967	0.0539	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.426	14.426	0.000	94	63965	0.9436	
68 Tetrachloroethene	166	15.486	15.486	0.000	92	142358	2.21	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1503291	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.551	17.551	0.001	98	72546	0.4924	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	77552	1.34	
79 o-Xylene	106	18.658	18.663	-0.005	44	22039	0.3809	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	91	16337	0.1218	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	86	57786	0.4395	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	92	5863	0.0647	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128	25.147	25.147	0.000	99	23000	0.2179	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015	Amount Added:	20.00	Units: mL	Run Reagent

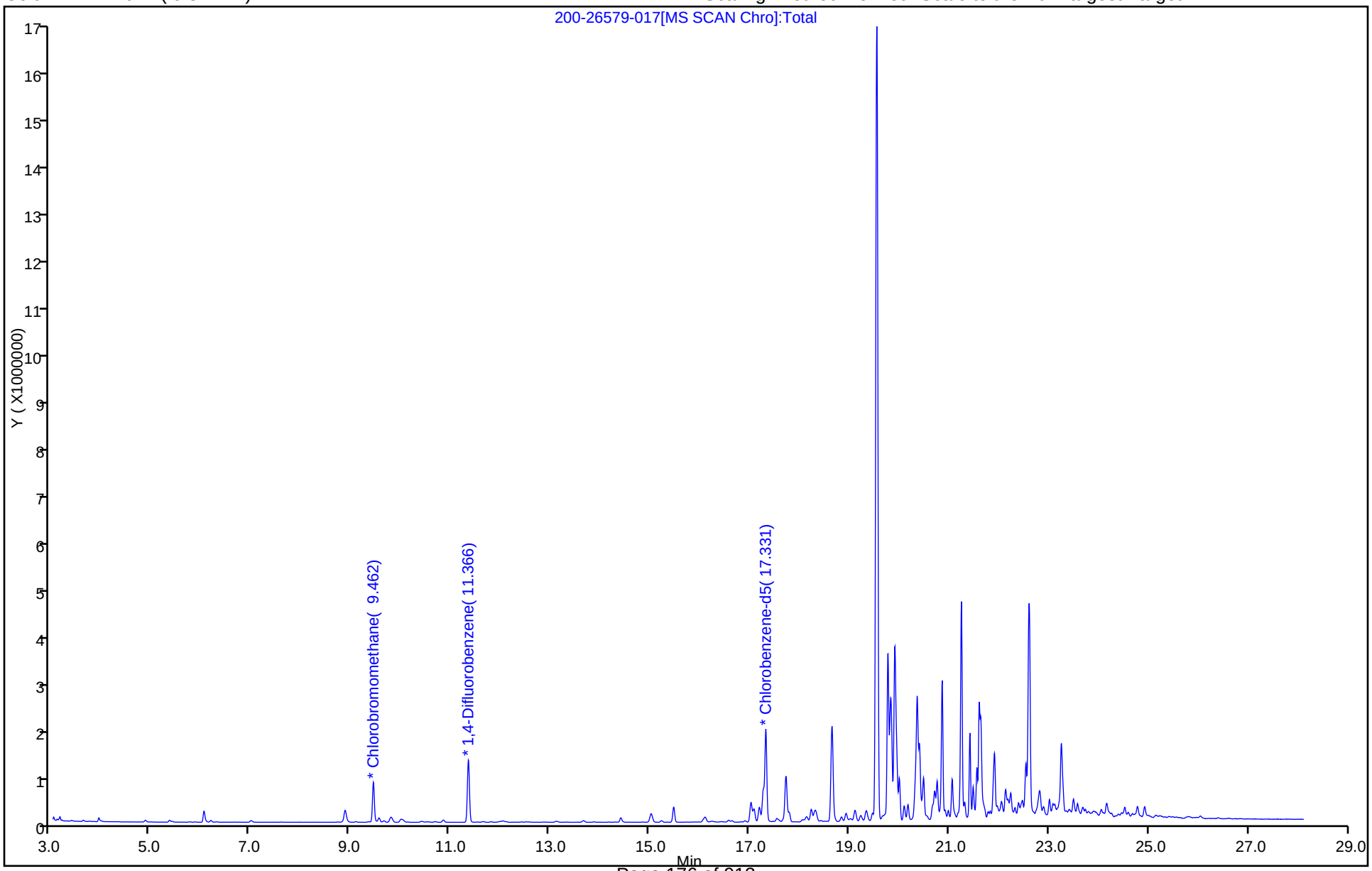
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6	Worklist Smp#:	17
Client ID:	SV-12				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



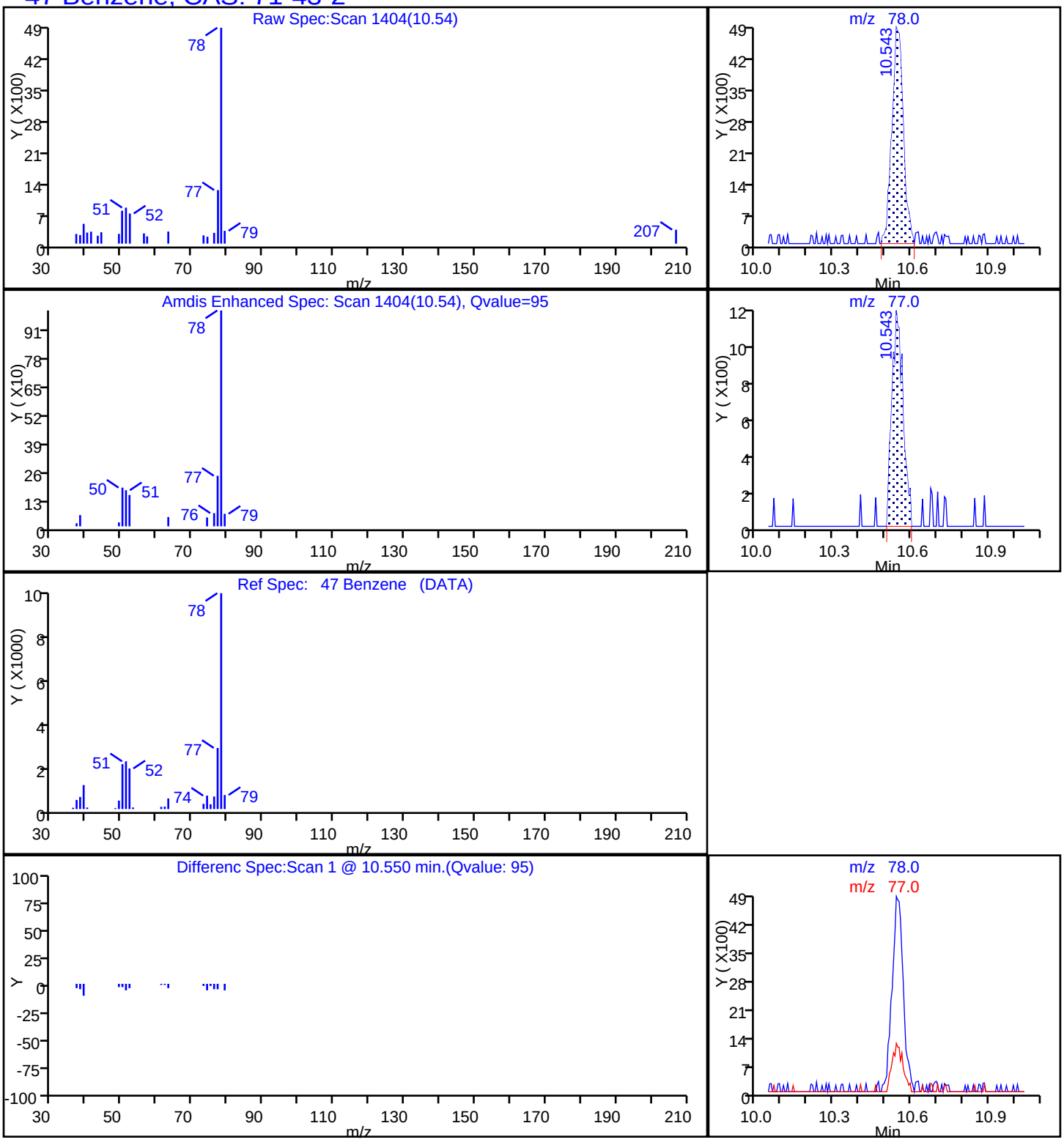
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

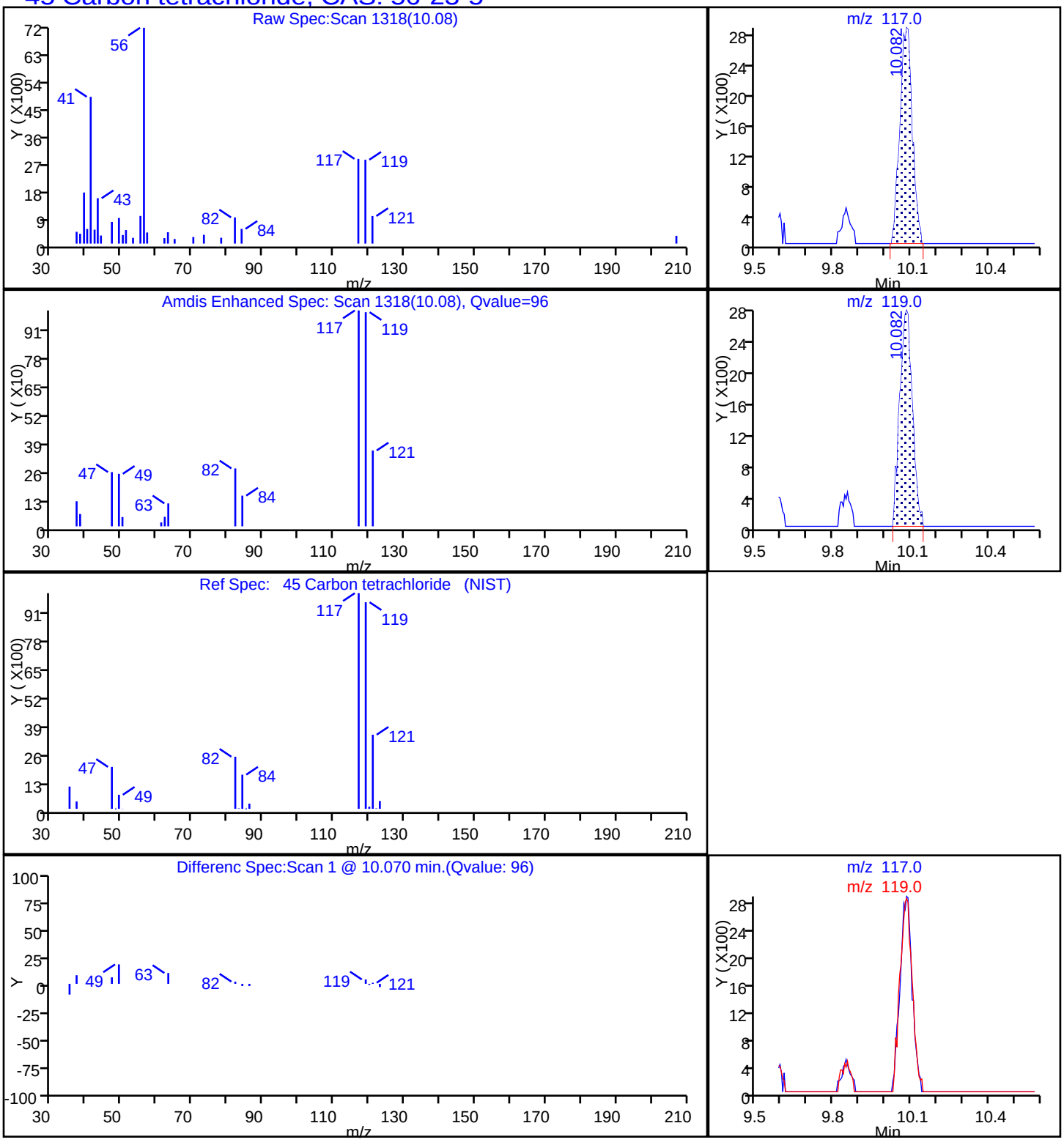


Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D				
Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



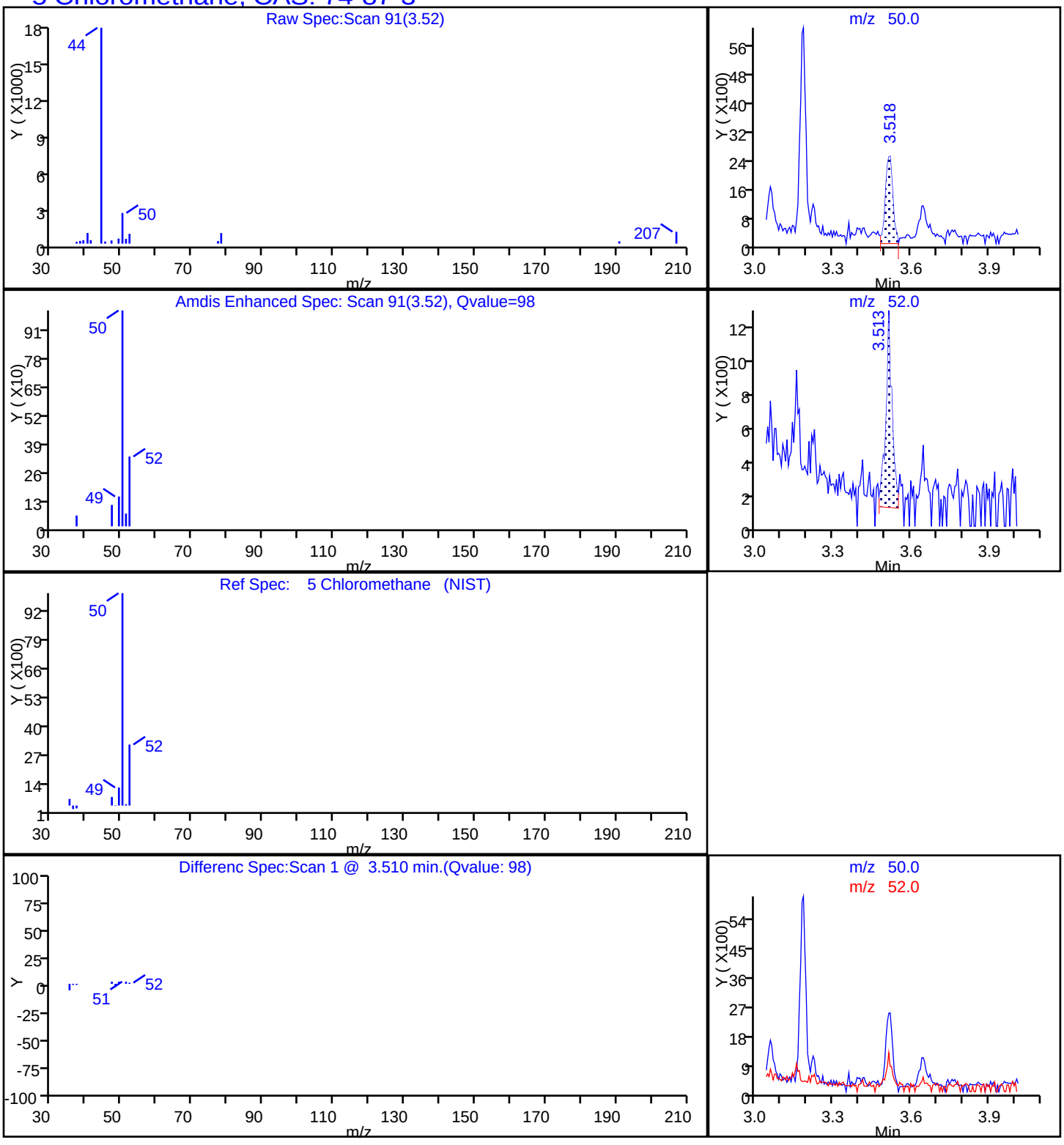
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



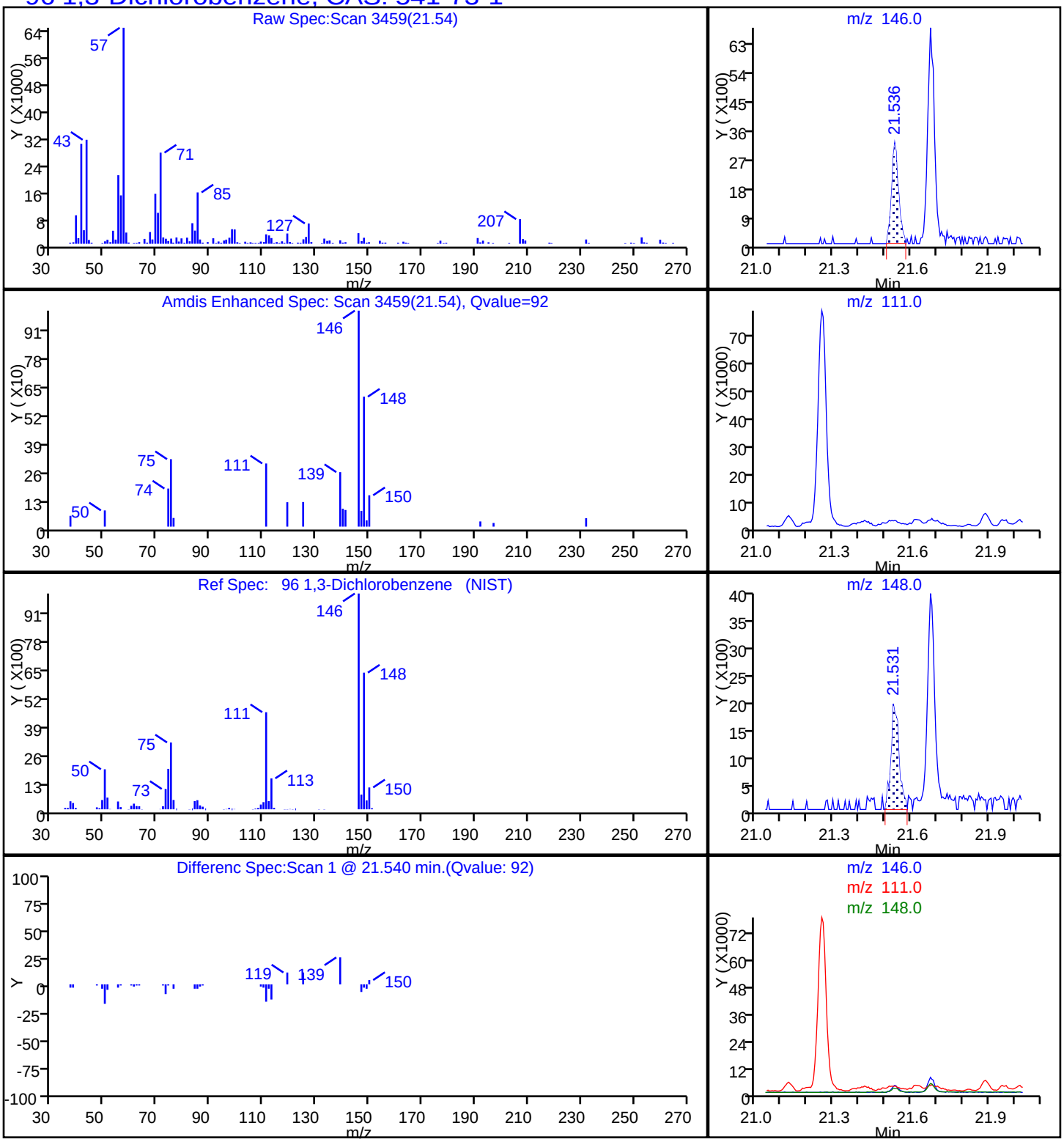
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1



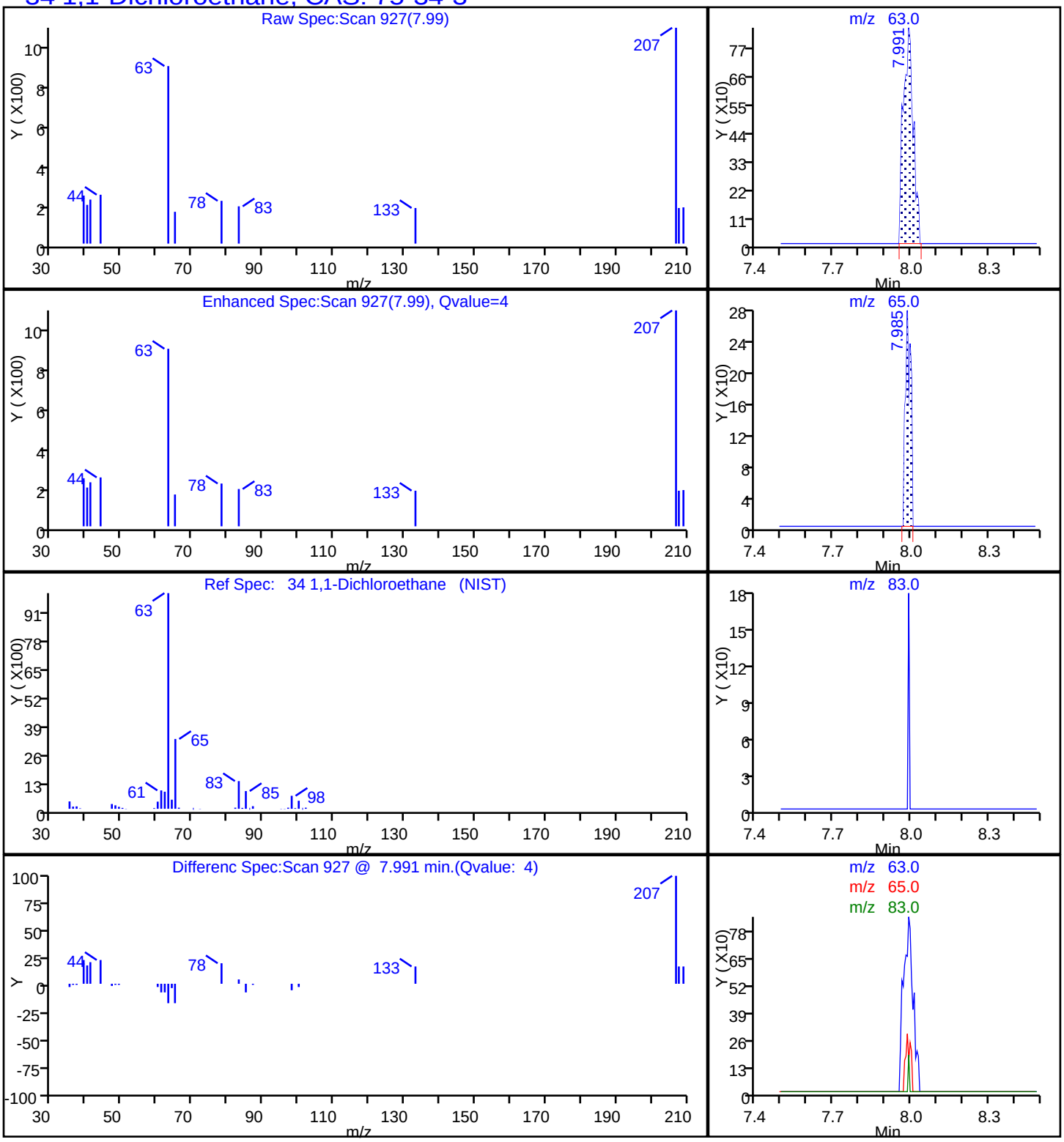
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

34 1,1-Dichloroethane, CAS: 75-34-3



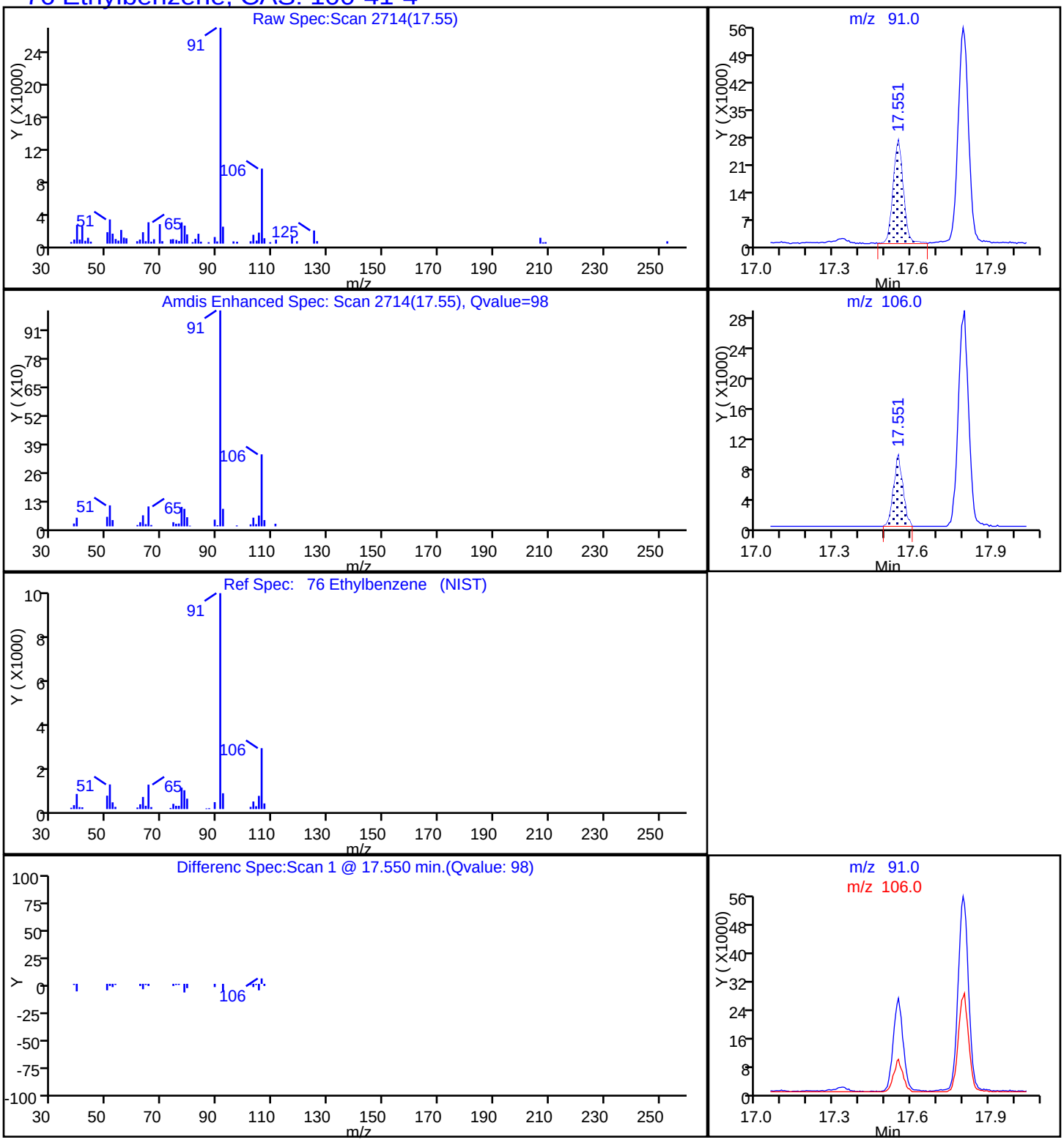
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4



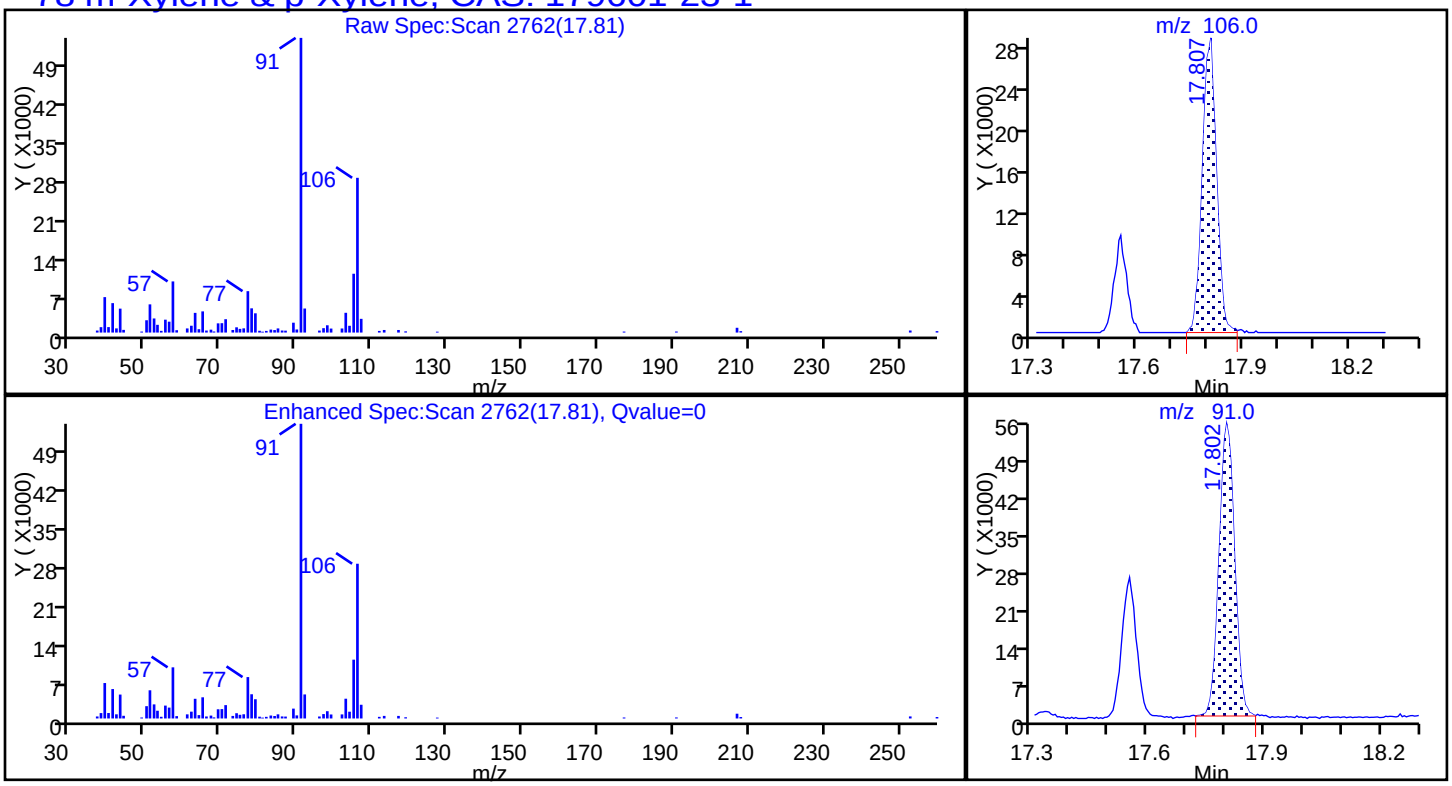
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

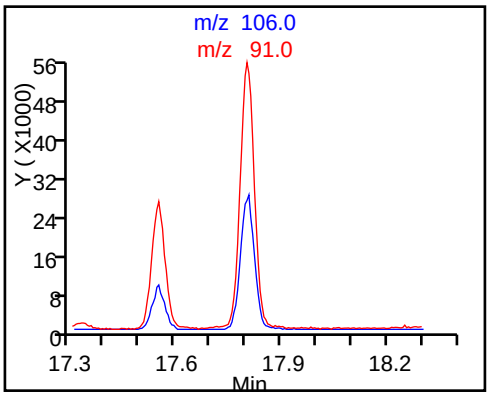
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





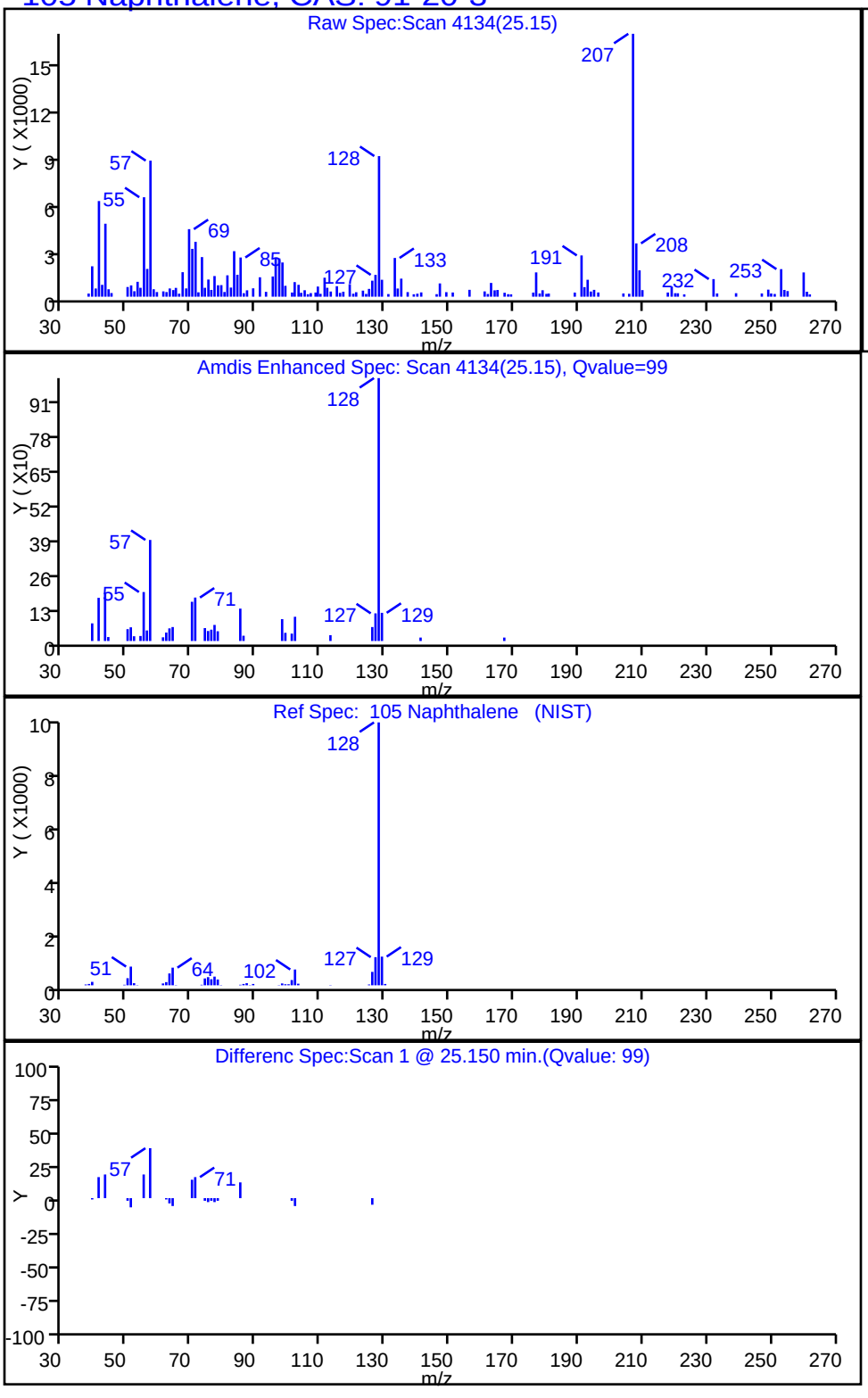
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

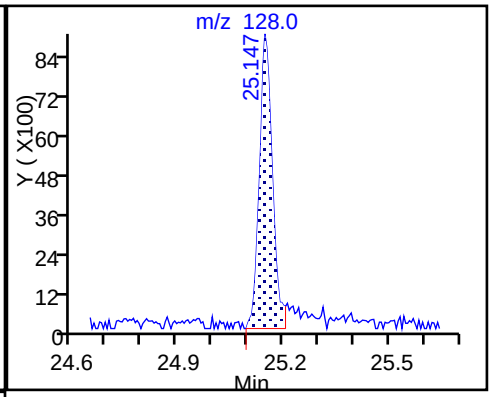
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3





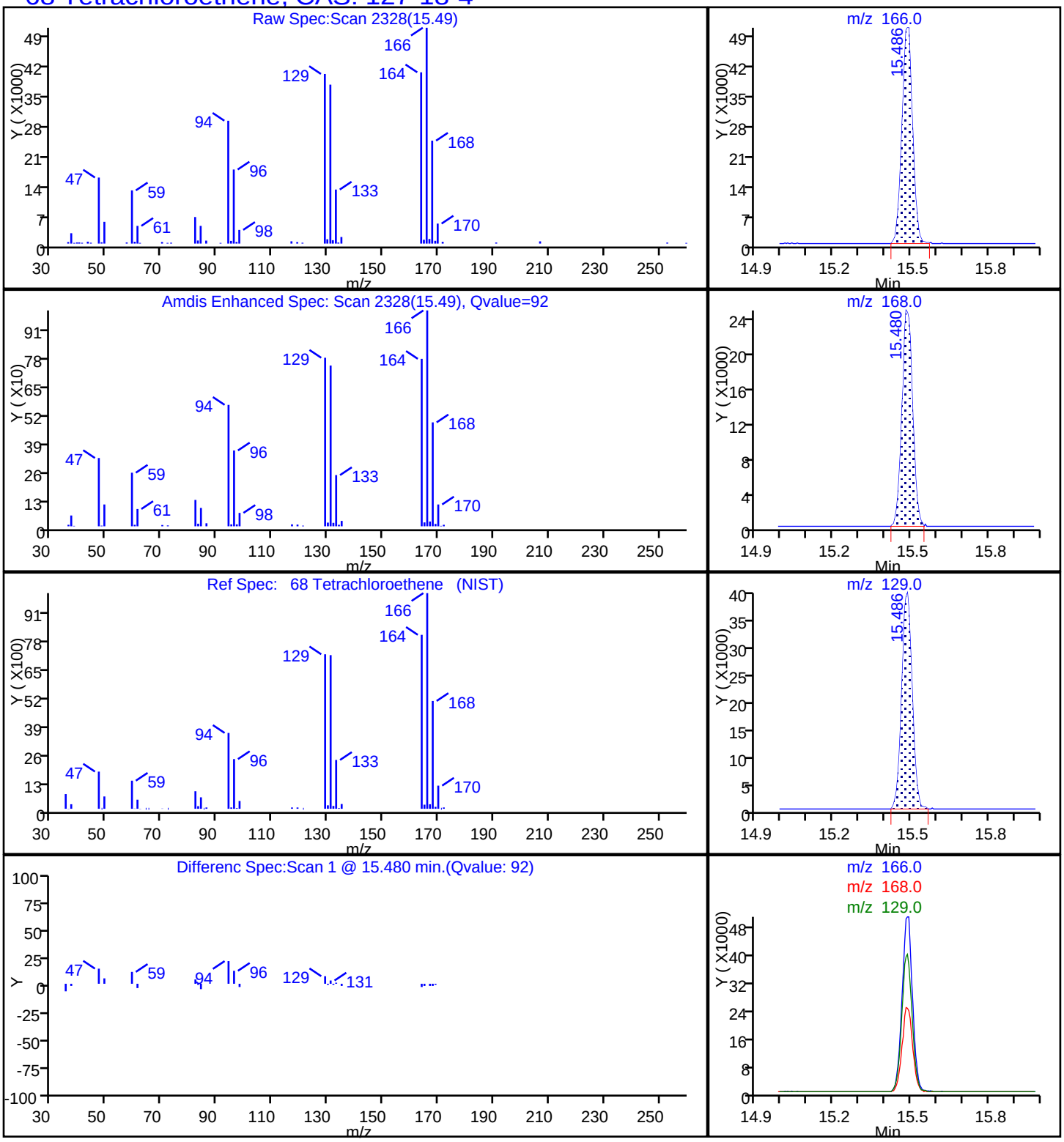
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



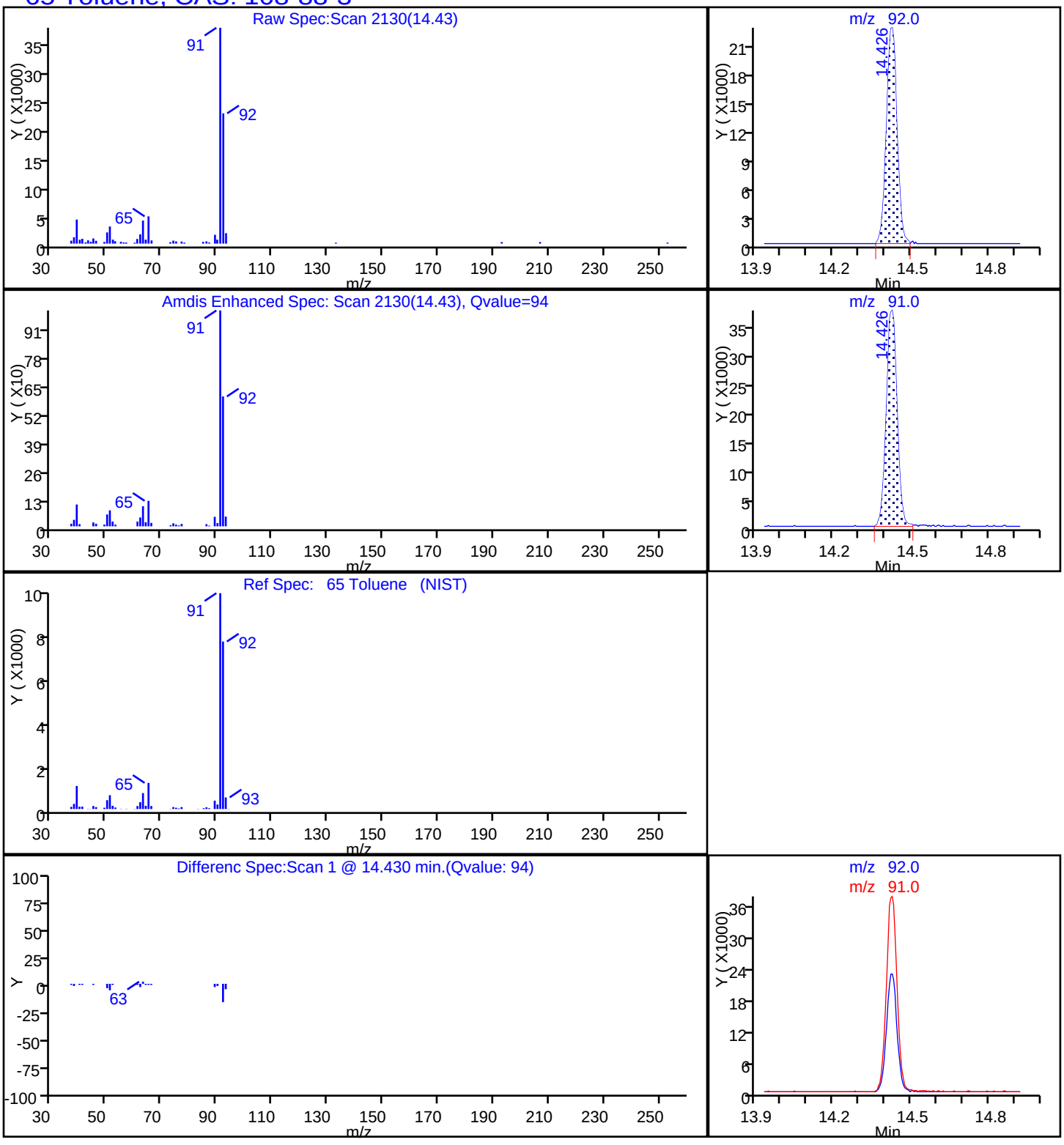
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



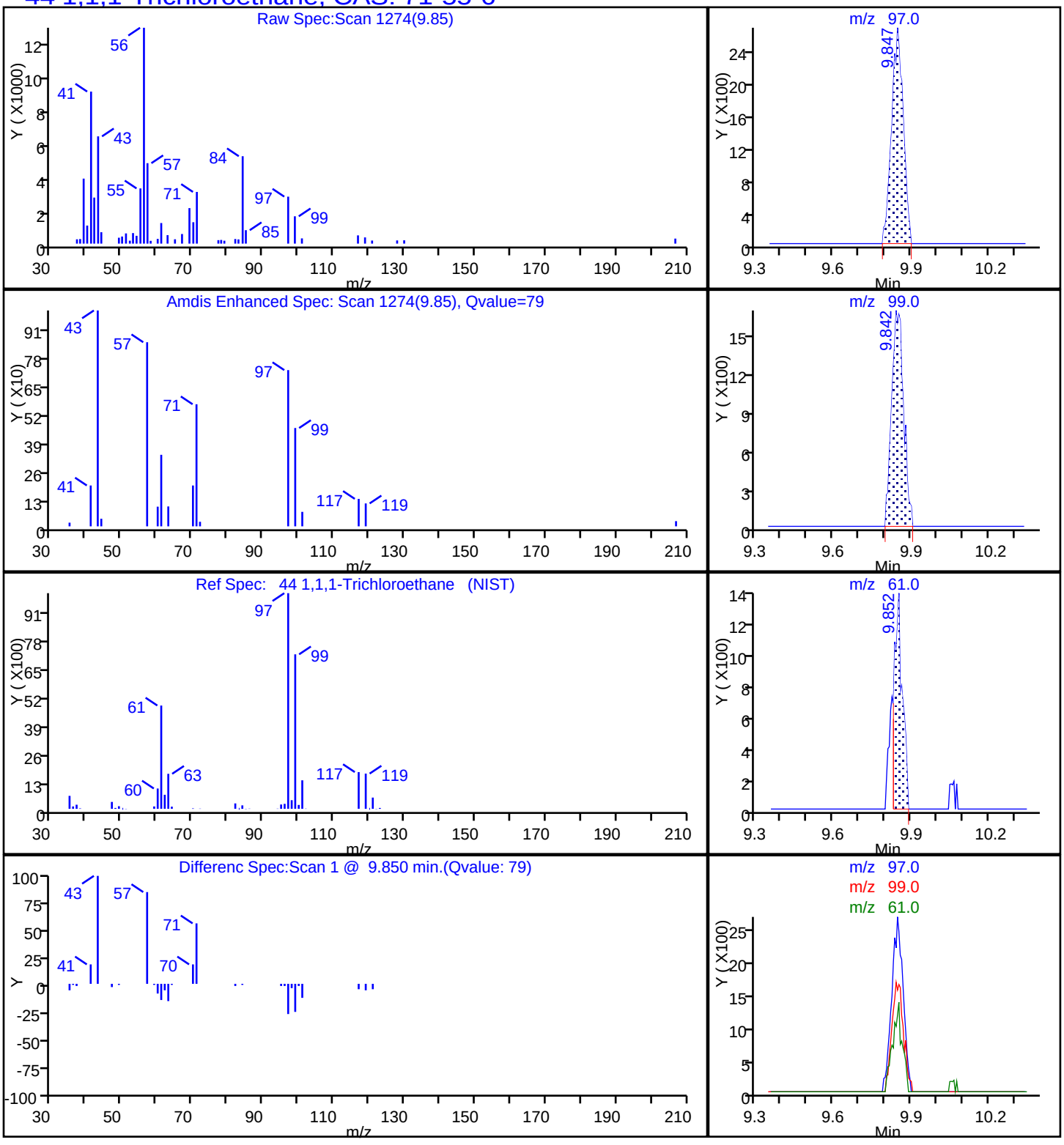
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6



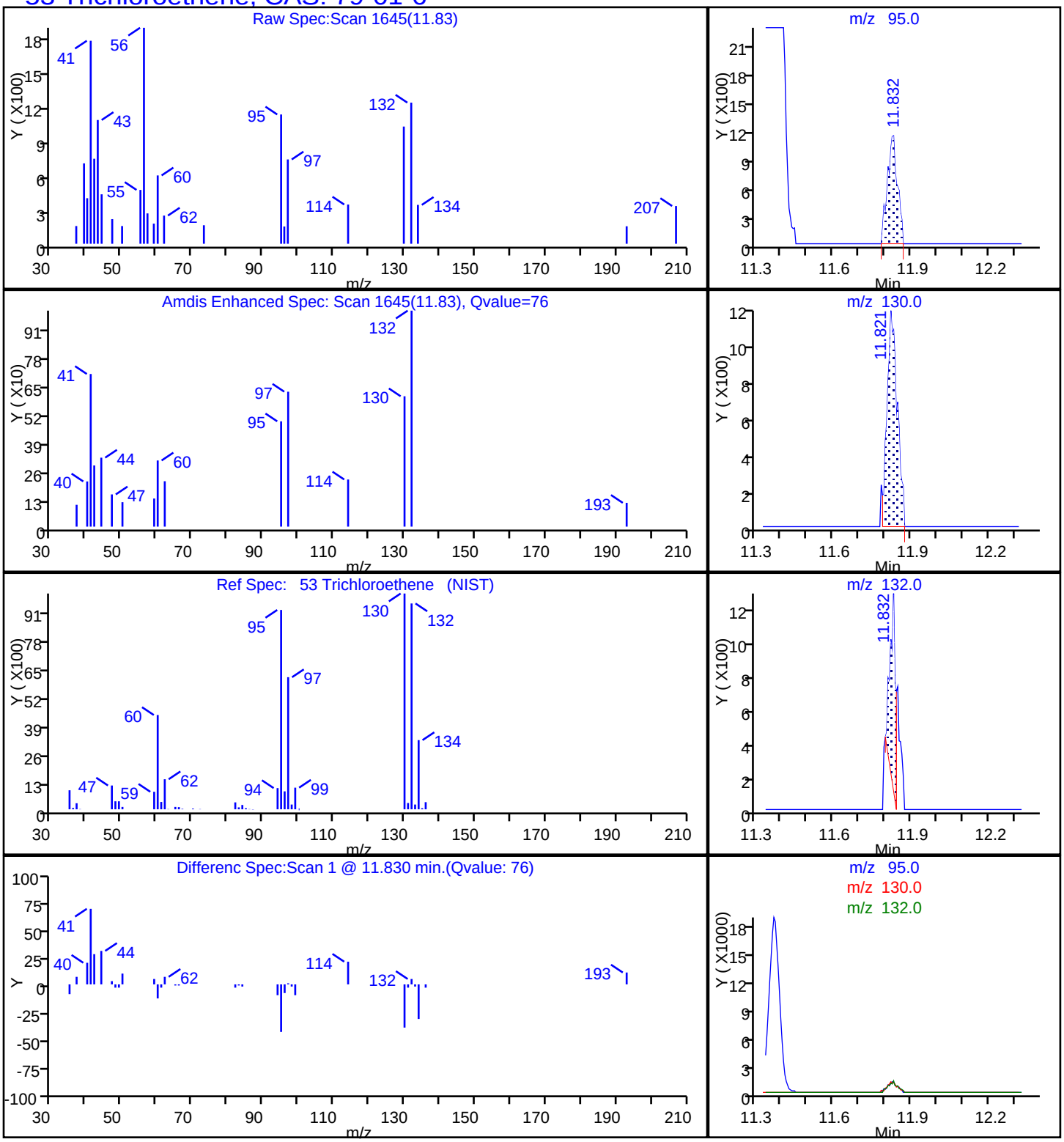
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



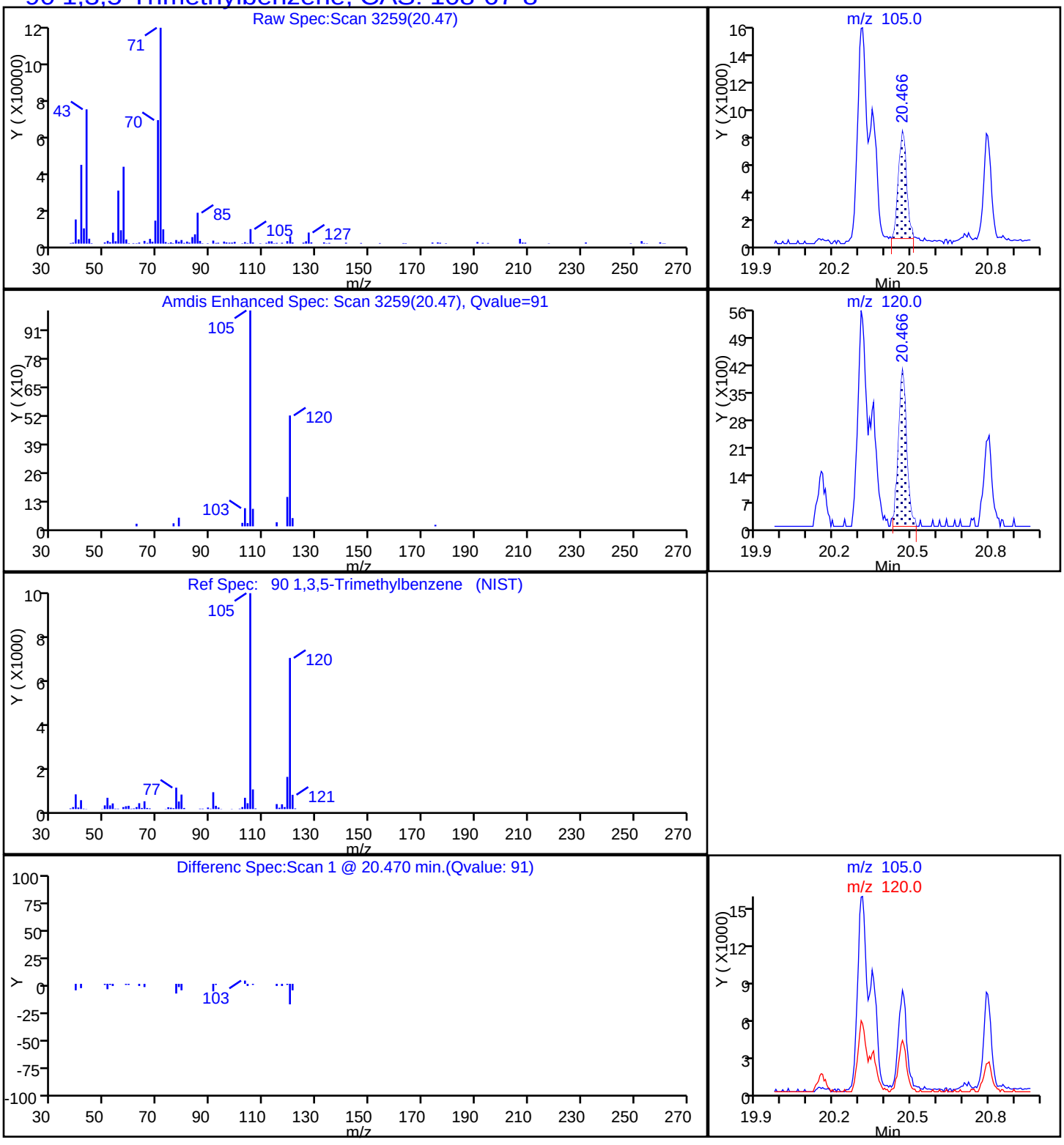
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8



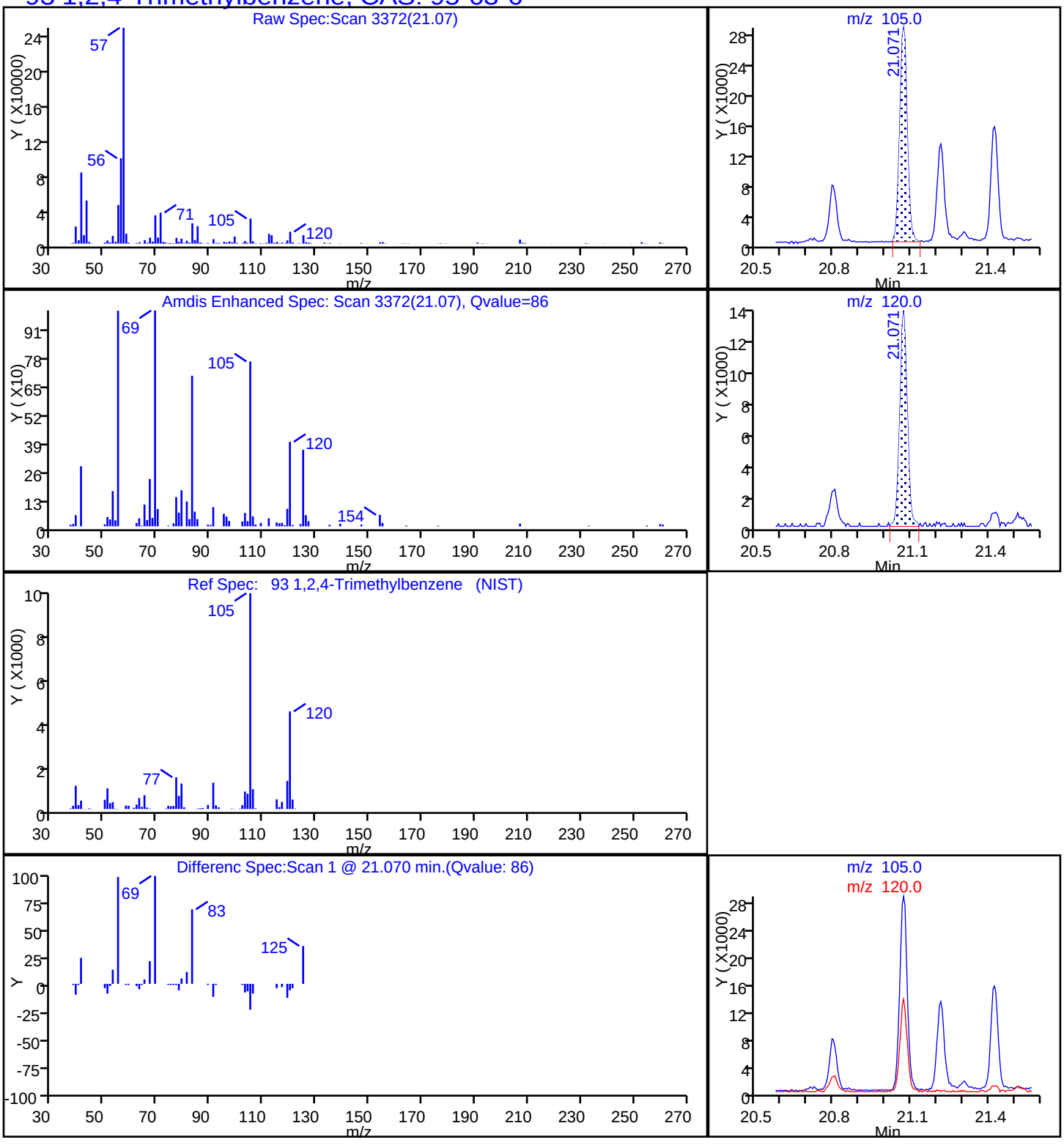
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6



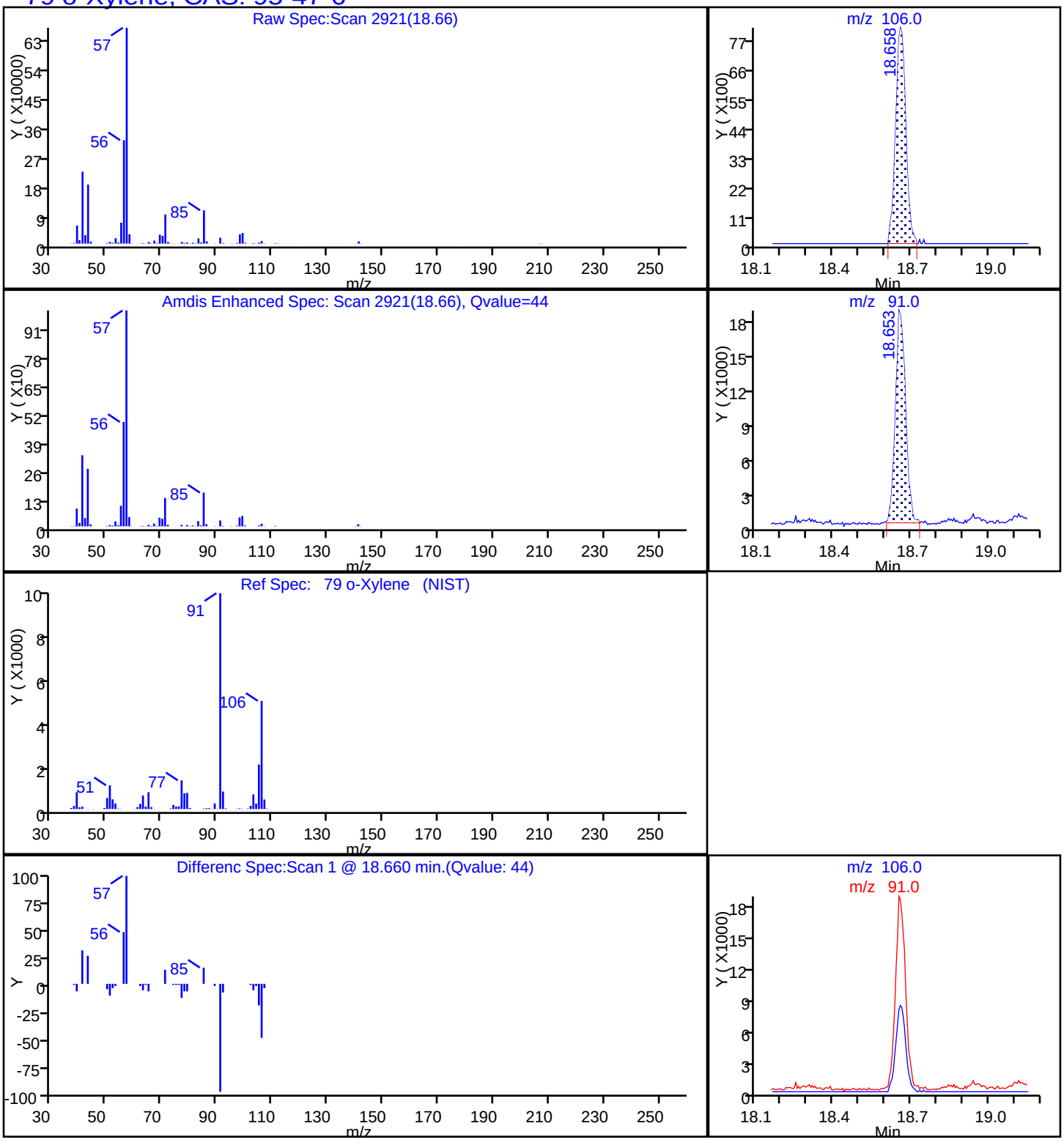
Report Date: 28-Aug-2017 11:40:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D

Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

TestAmerica Burlington

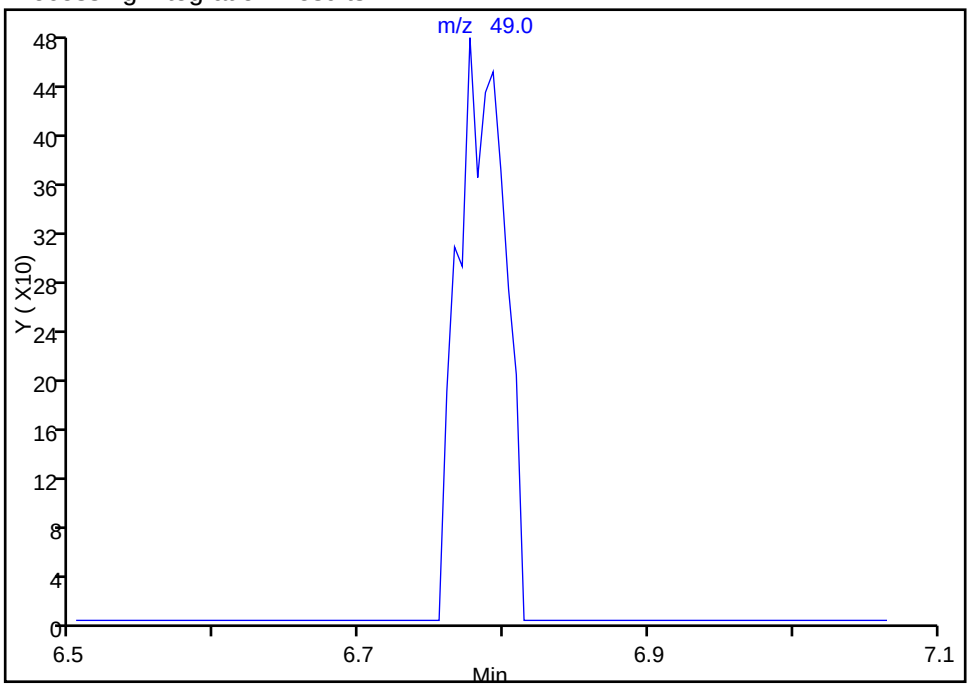
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D				
Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

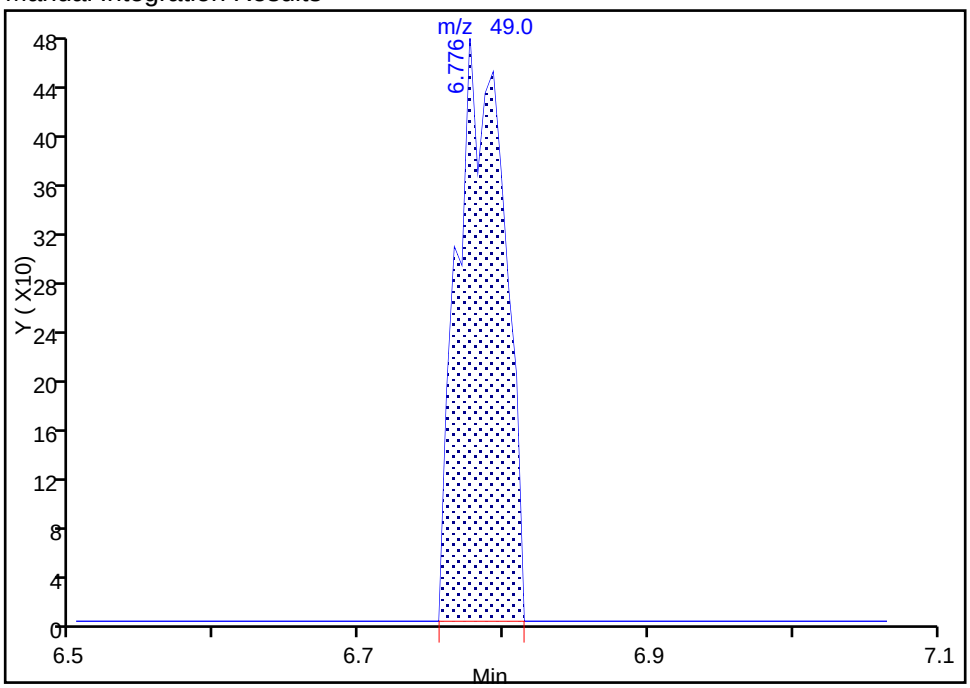
Not Detected
Expected RT: 6.79

Processing Integration Results



Manual Integration Results

RT: 6.78
Area: 1078
Amount: 0.034853
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:39:04
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

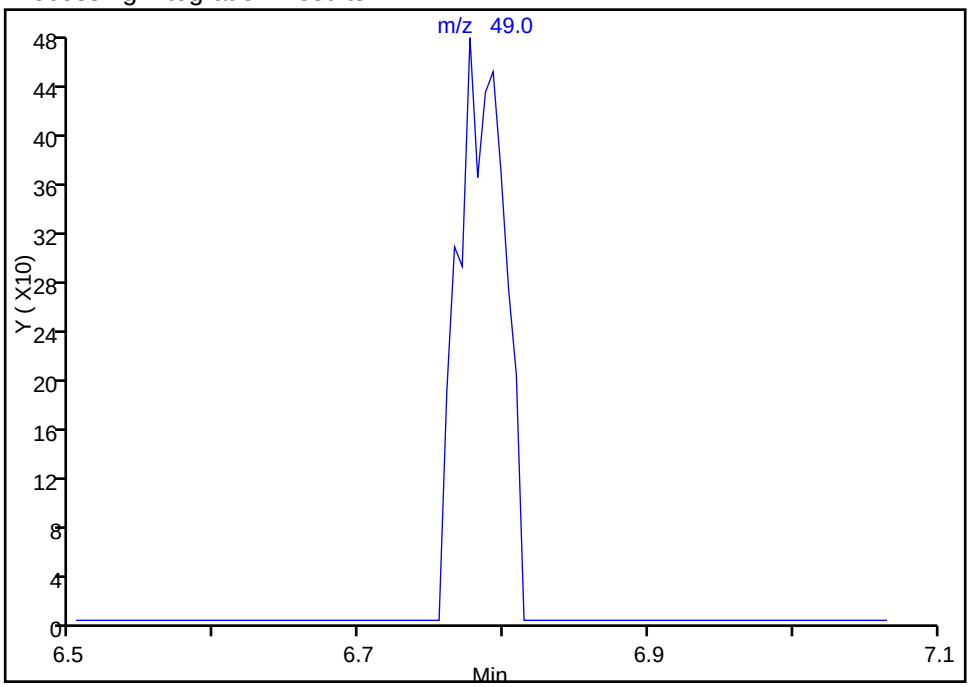
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-017.D				
Injection Date:	25-Aug-2017 23:16:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-6	Lab Sample ID:	200-39823-6		
Client ID:	SV-12				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

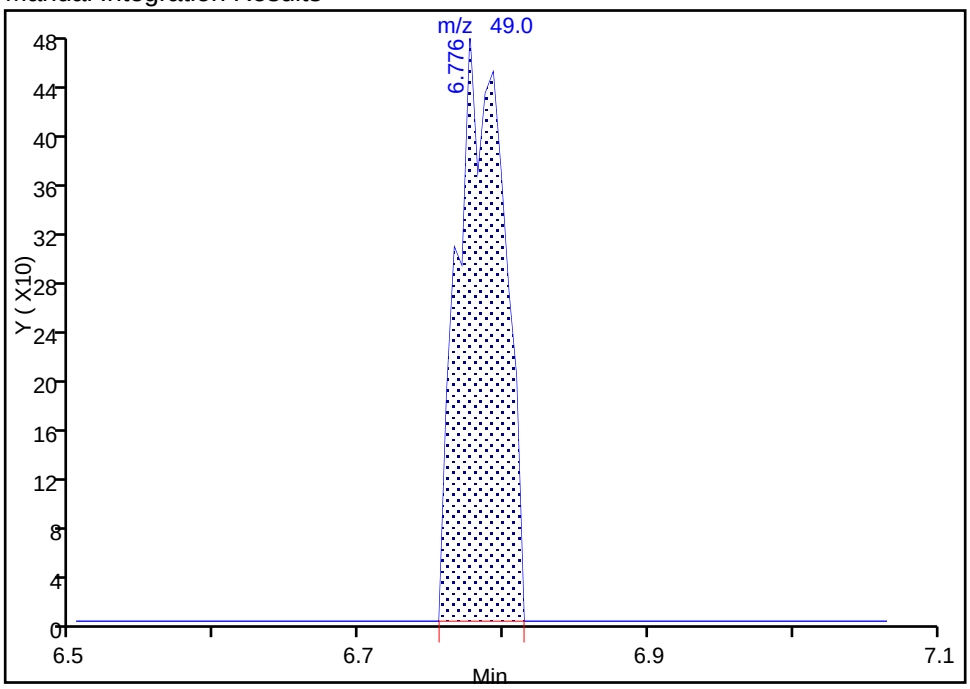
Not Detected
Expected RT: 6.79

Processing Integration Results



Manual Integration Results

RT: 6.78
Area: 1078
Amount: 0.034853
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:39:12
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-11 Lab Sample ID: 200-39823-7

Matrix: Air Lab File ID: 200-26579-018.D

Analysis Method: TO-15 Date Collected: 08/22/2017 16:10

Sample wt/vol: 200(mL) Date Analyzed: 08/26/2017 00:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.39		0.20	0.028
56-23-5	Carbon tetrachloride	153.81	0.060	J	0.20	0.011
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
74-87-3	Chloromethane	50.49	0.19	J	0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	13		0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	0.38		0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	0.087	J	0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
100-41-4	Ethylbenzene	106.17	3.7		0.20	0.034
75-09-2	Methylene Chloride	84.93	0.35	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
179601-23-1	m,p-Xylene	106.17	8.5		0.50	0.077
91-20-3	Naphthalene	128.17	0.36	J	0.50	0.10
127-18-4	Tetrachloroethene	165.83	11		0.20	0.0098
108-88-3	Toluene	92.14	1.7		0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	0.24		0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	0.12	J	0.20	0.026
79-01-6	Trichloroethene	131.39	5.2		0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	0.32		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3		0.20	0.057
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
95-47-6	Xylene, o-	106.17	1.7		0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-11 Lab Sample ID: 200-39823-7

Matrix: Air Lab File ID: 200-26579-018.D

Analysis Method: TO-15 Date Collected: 08/22/2017 16:10

Sample wt/vol: 200(mL) Date Analyzed: 08/26/2017 00:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.2		0.64	0.089
56-23-5	Carbon tetrachloride	153.81	0.37	J	1.3	0.069
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
74-87-3	Chloromethane	50.49	0.39	J	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	96.94	51		0.79	0.11
541-73-1	1,3-Dichlorobenzene	147.00	2.3		1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
75-34-3	1,1-Dichloroethane	98.96	0.35	J	0.81	0.069
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
100-41-4	Ethylbenzene	106.17	16		0.87	0.15
75-09-2	Methylene Chloride	84.93	1.2	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
179601-23-1	m,p-Xylene	106.17	37		2.2	0.33
91-20-3	Naphthalene	128.17	1.9	J	2.6	0.52
127-18-4	Tetrachloroethene	165.83	72		1.4	0.066
108-88-3	Toluene	92.14	6.4		0.75	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.94		0.79	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.65	J	1.1	0.14
79-01-6	Trichloroethene	131.39	28		1.1	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	1.6		0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	6.2		0.98	0.28
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
95-47-6	Xylene, o-	106.17	7.5		0.87	0.17

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D
Lims ID: 200-39823-A-7
Client ID: SV-11
Sample Type: Client
Inject. Date: 26-Aug-2017 00:06:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-018
Misc. Info.: 39823-07
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:43:46 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:43:46

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5	Chloromethane	50	3.513	3.513	0.000	98	5173	0.1908	
7	Vinyl chloride	62		3.705				ND	
11	Chloroethane	64	4.503	4.503	0.000	6	1110	0.0832	
21	1,1-Dichloroethene	96		5.840				ND	
27	Methylene Chloride	49	6.787	6.787	0.000	91	11281	0.3488	
29	Methyl tert-butyl ether	73		7.161				ND	
31	trans-1,2-Dichloroethene	61	7.178	7.178	0.001	1	10086	0.2363	M
34	1,1-Dichloroethane	63	7.996	7.991	0.005	98	4908	0.0874	
37	cis-1,2-Dichloroethene	96	9.018	9.023	-0.005	94	436634	13.0	
* 40	Chlorobromomethane	128	9.467	9.467	0.000	83	351747	10.0	
44	1,1,1-Trichloroethane	97	9.842	9.852	-0.010	89	11890	0.1185	
45	Carbon tetrachloride	117	10.072	10.088	-0.016	36	6210	0.0596	
47	Benzene	78	10.548	10.553	-0.005	97	40904	0.3872	
48	1,2-Dichloroethane	62		10.740				ND	
* 50	1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1904531	10.0	
53	Trichloroethene	95	11.826	11.832	-0.006	96	313558	5.17	
54	1,2-Dichloropropane	63		12.393				ND	
65	Toluene	92	14.426	14.426	0.000	94	122747	1.69	
68	Tetrachloroethene	166	15.486	15.486	0.000	92	732756	10.6	
* 74	Chlorobenzene-d5	117	17.331	17.337	-0.006	88	1612904	10.0	
75	Chlorobenzene	112		17.395				ND	
76	Ethylbenzene	91	17.551	17.551	0.001	99	588133	3.72	
78	m-Xylene & p-Xylene	106	17.802	17.807	-0.005	0	526255	8.51	
79	o-Xylene	106	18.658	18.663	-0.005	52	106901	1.72	
90	1,3,5-Trimethylbenzene	105	20.461	20.466	-0.005	93	46645	0.3240	
93	1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	177385	1.26	
96	1,3-Dichlorobenzene	146	21.536	21.536	0.000	96	36640	0.3768	
101	1,2-Dichlorobenzene	146		22.210				ND	
105	Naphthalene	128	25.153	25.147	0.006	99	40988	0.3619	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

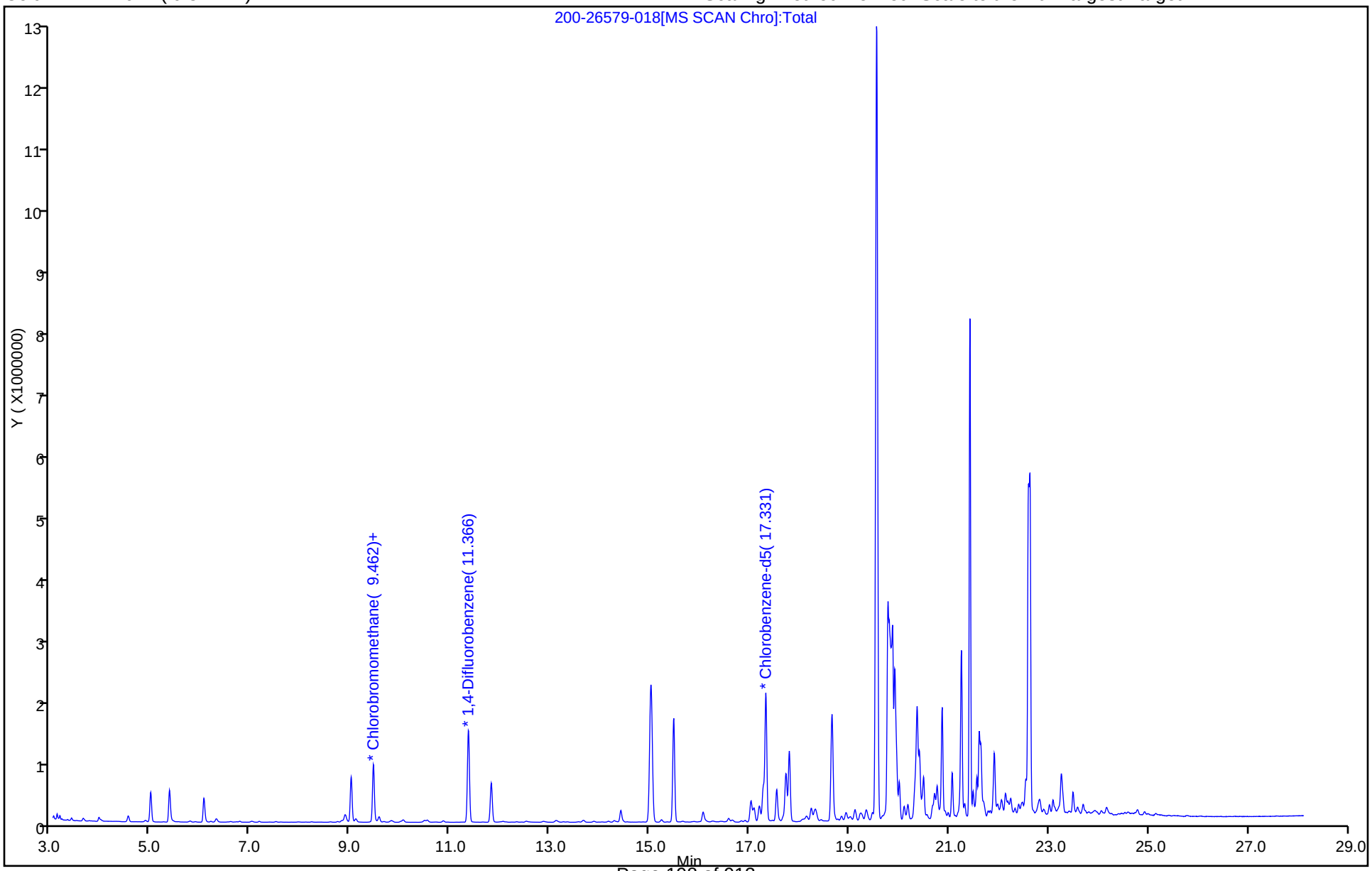
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7	Worklist Smp#:	18
Client ID:	SV-11				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



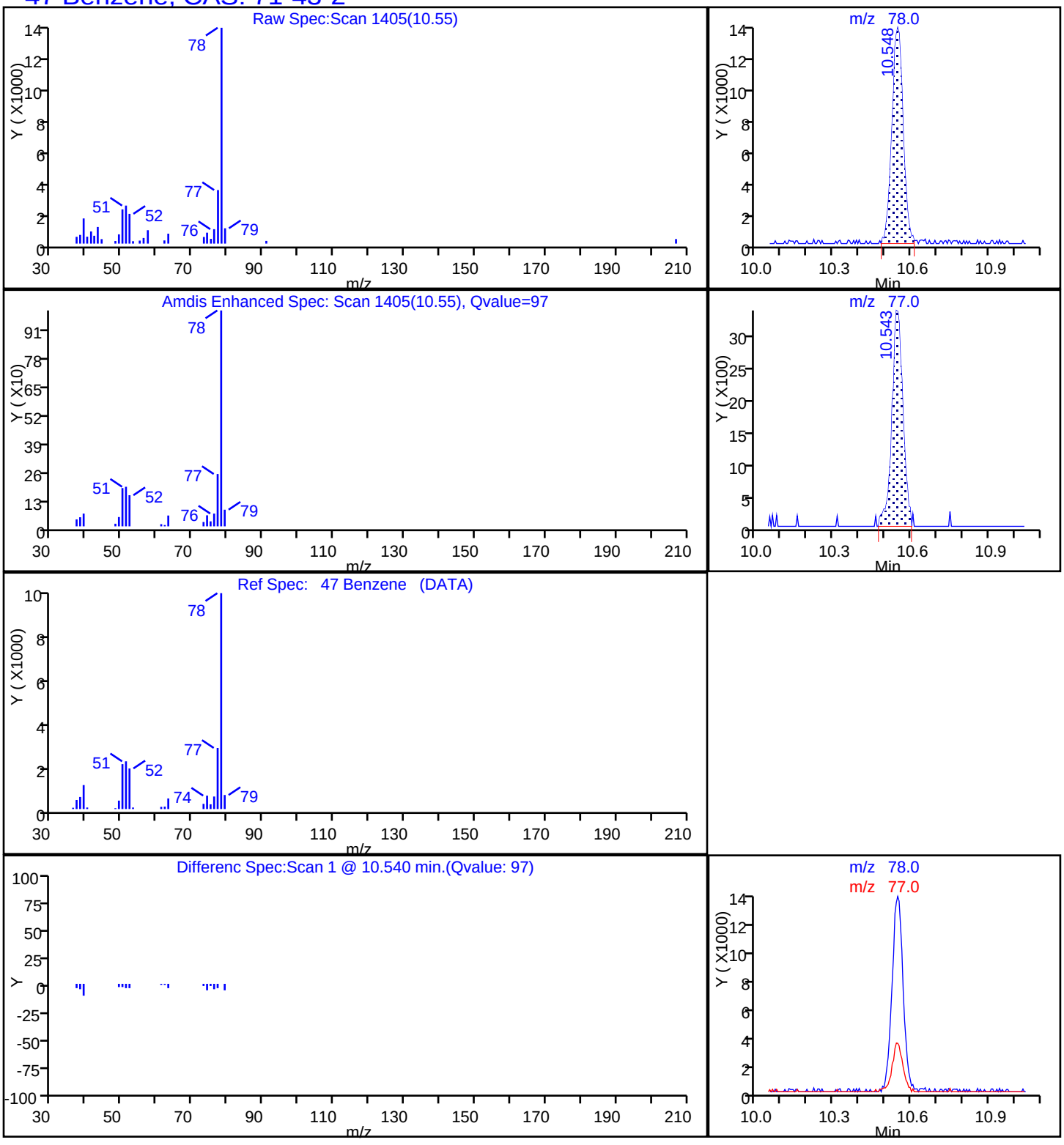
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



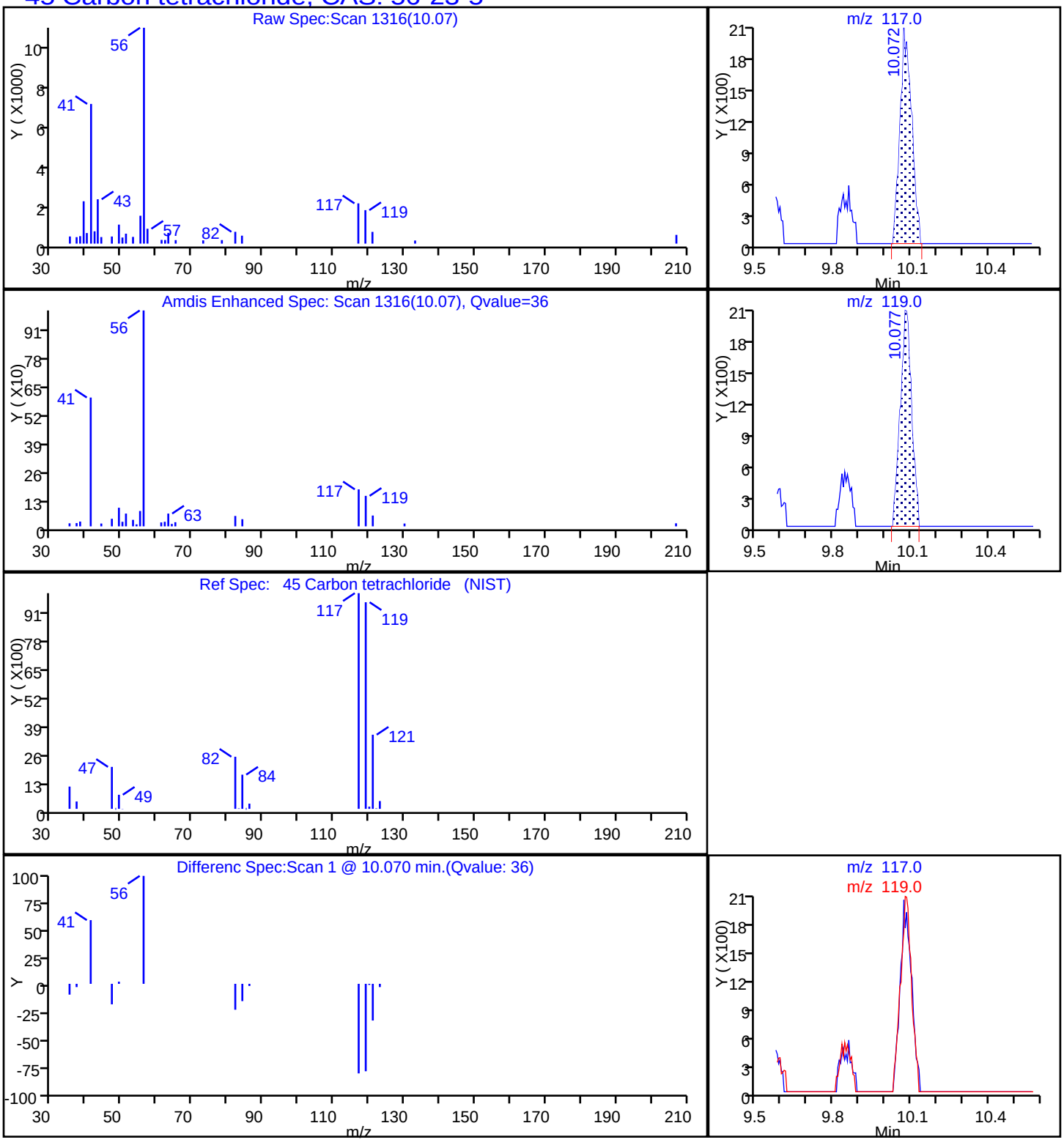
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



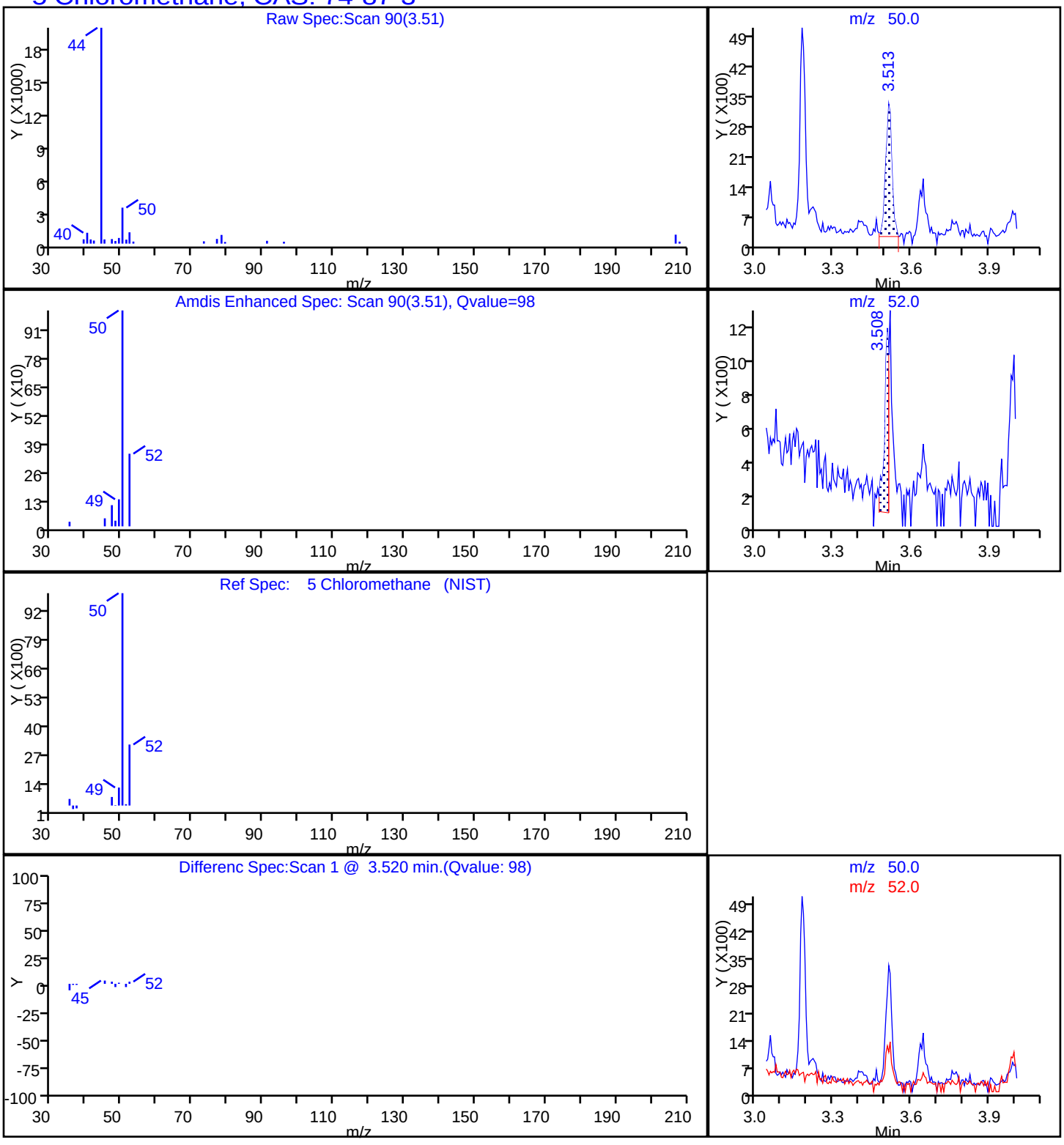
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



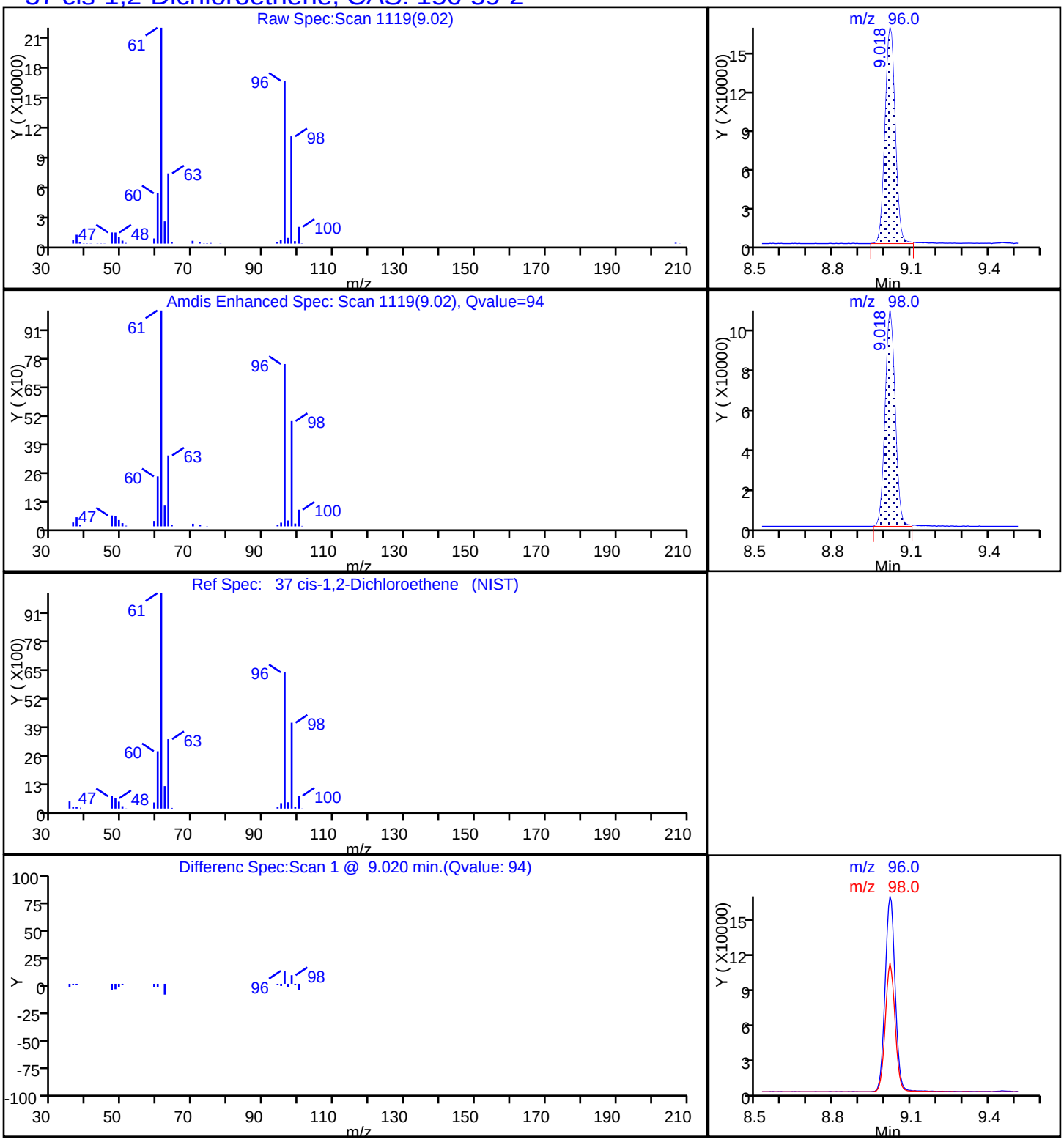
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

37 cis-1,2-Dichloroethene, CAS: 156-59-2



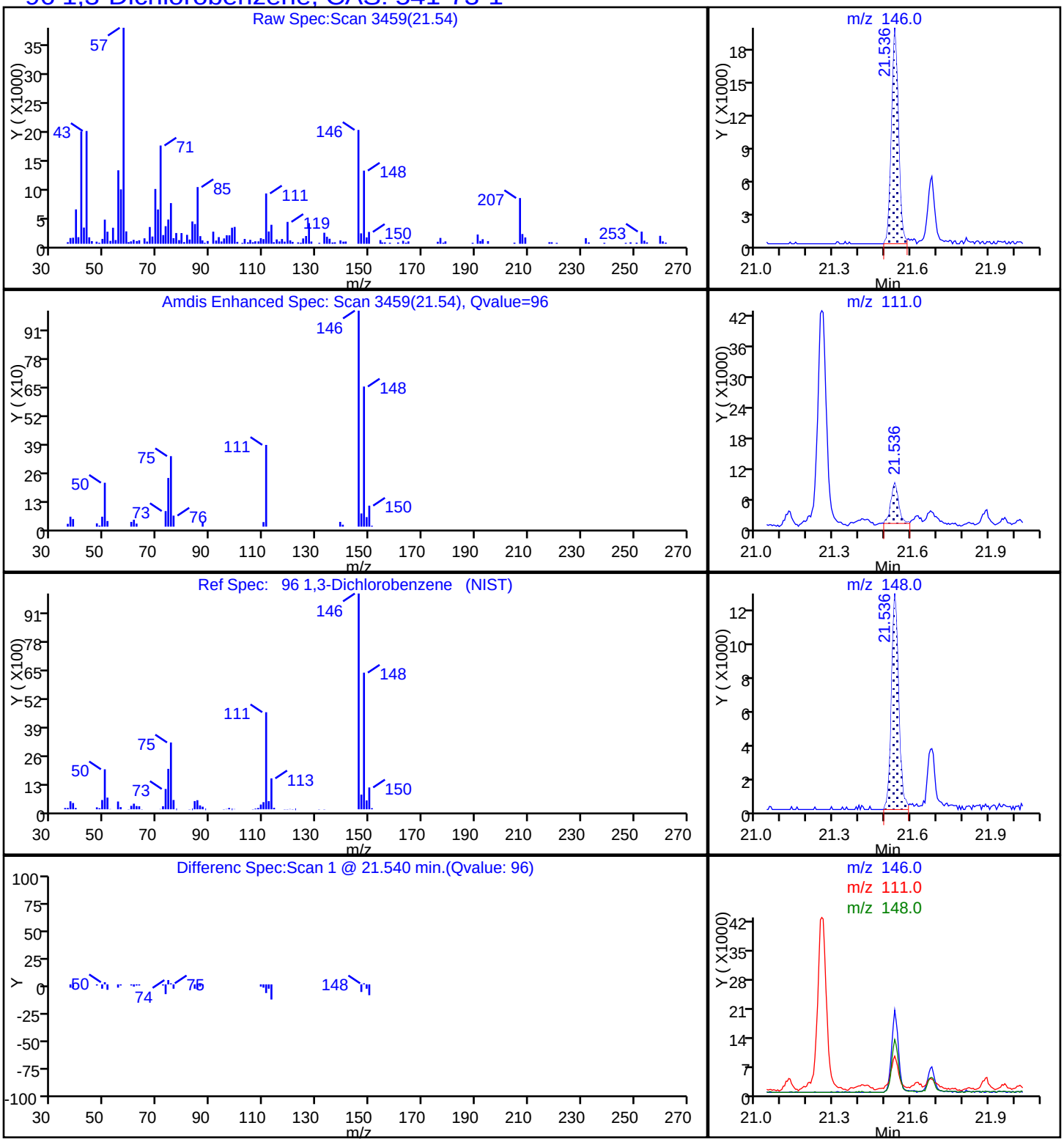
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1



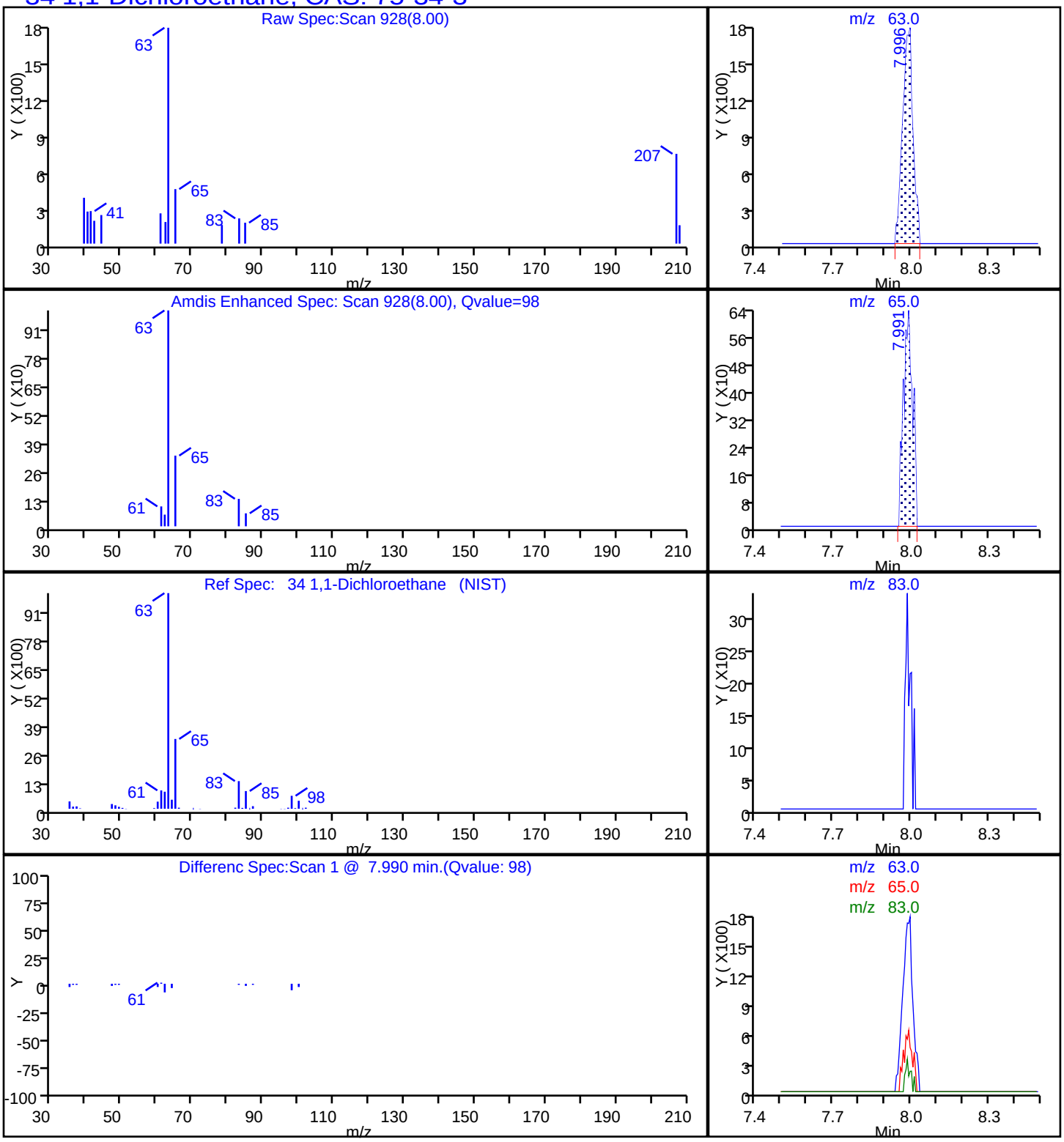
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

34 1,1-Dichloroethane, CAS: 75-34-3



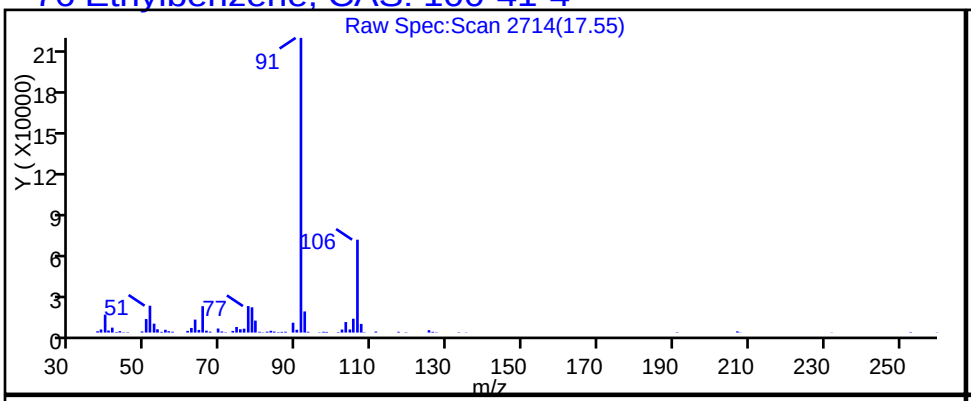
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

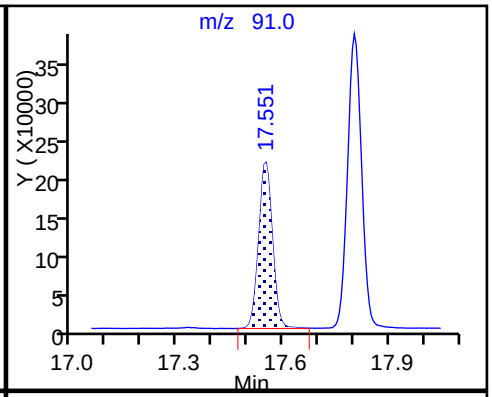
TestAmerica Burlington

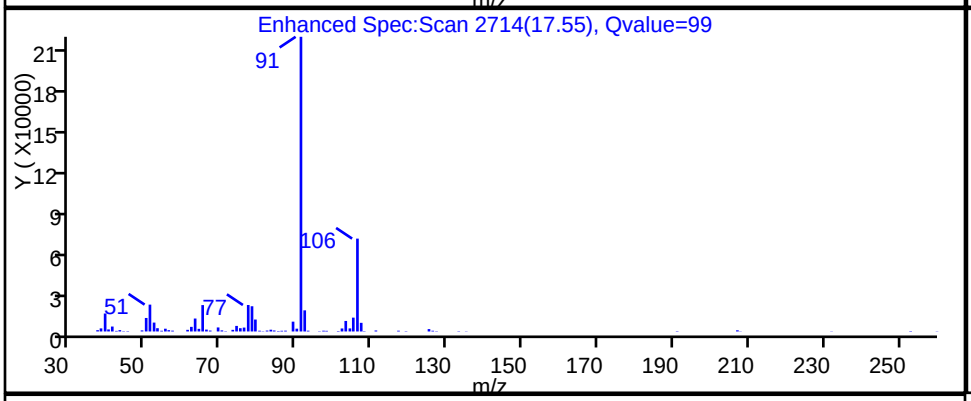
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

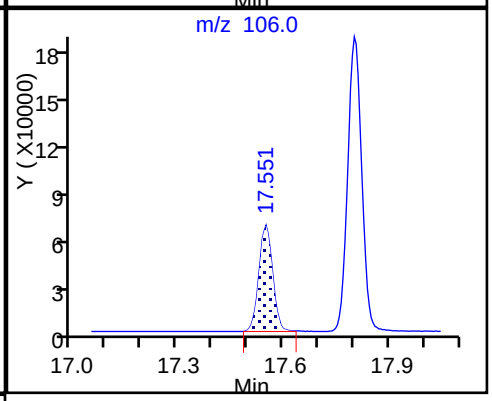
Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

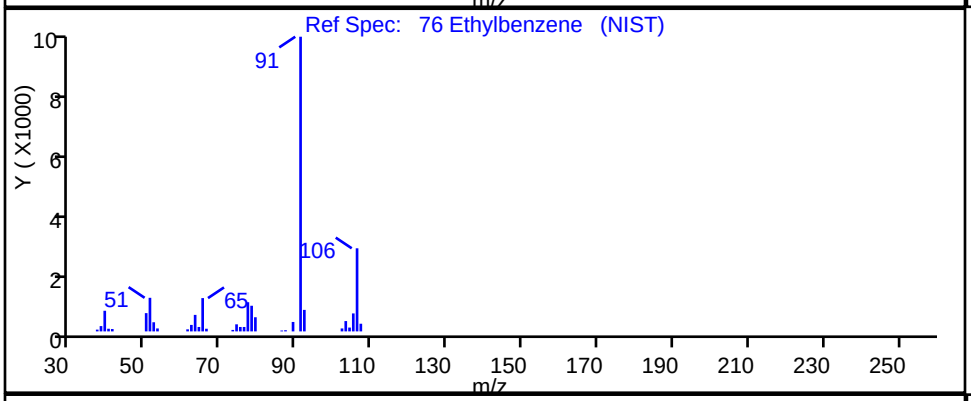
76 Ethylbenzene, CAS: 100-41-4

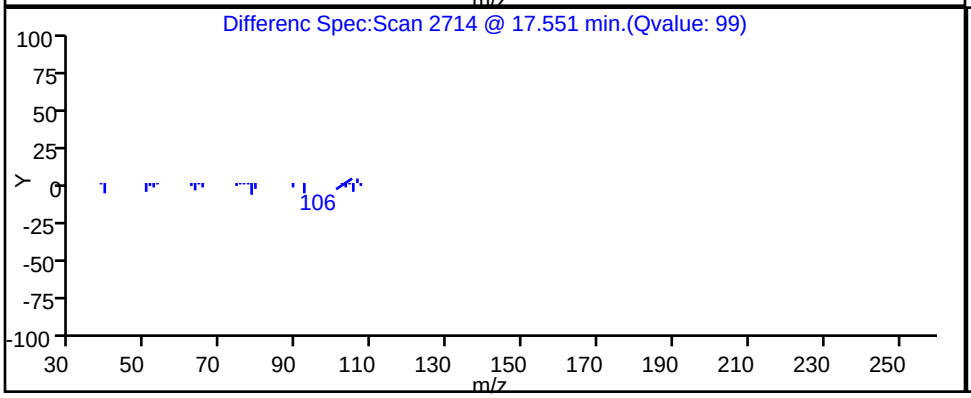


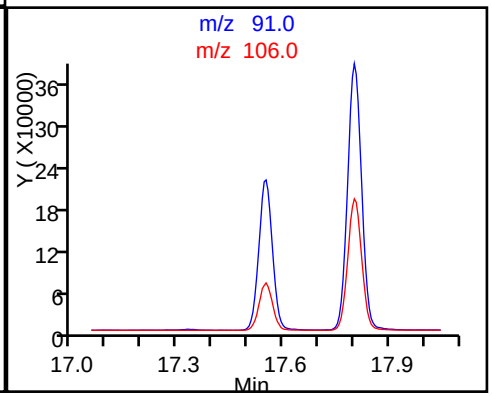












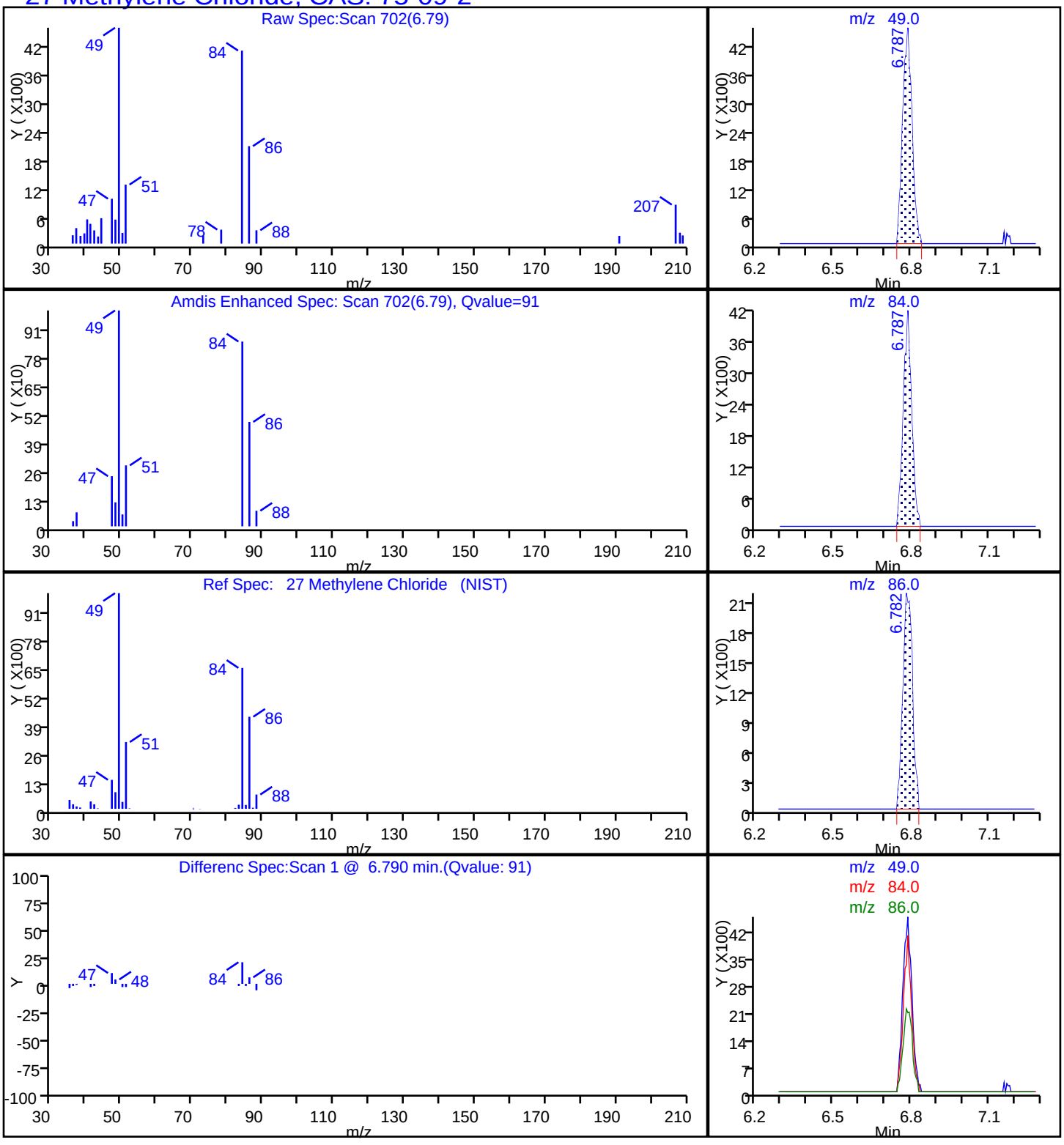
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



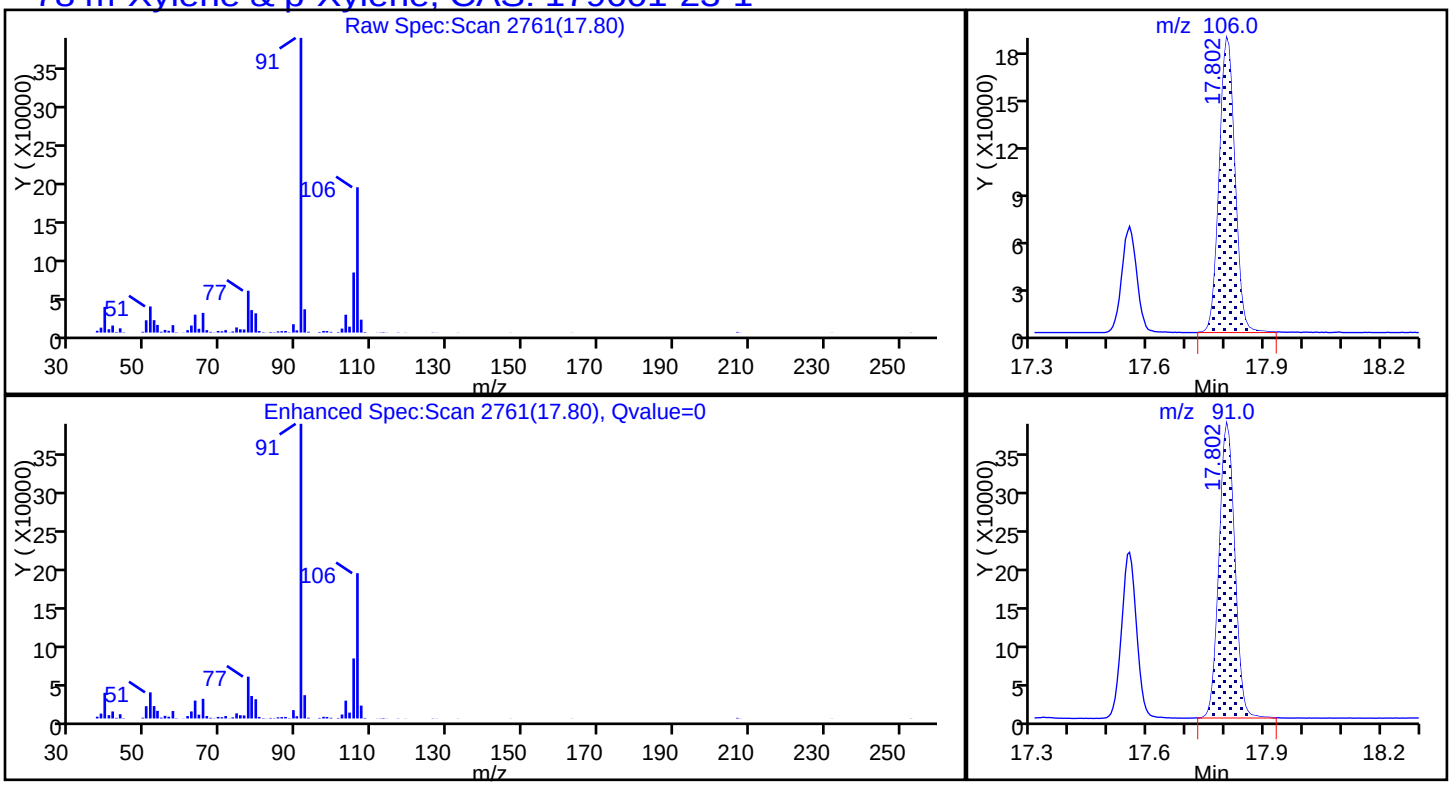
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

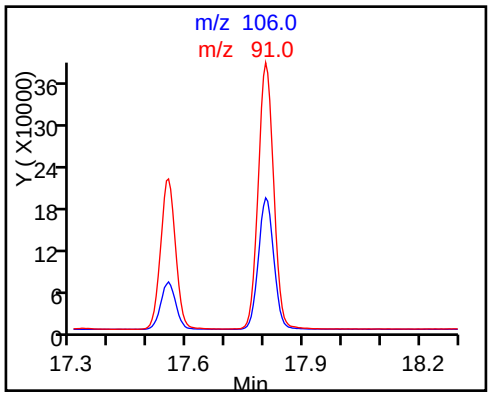
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





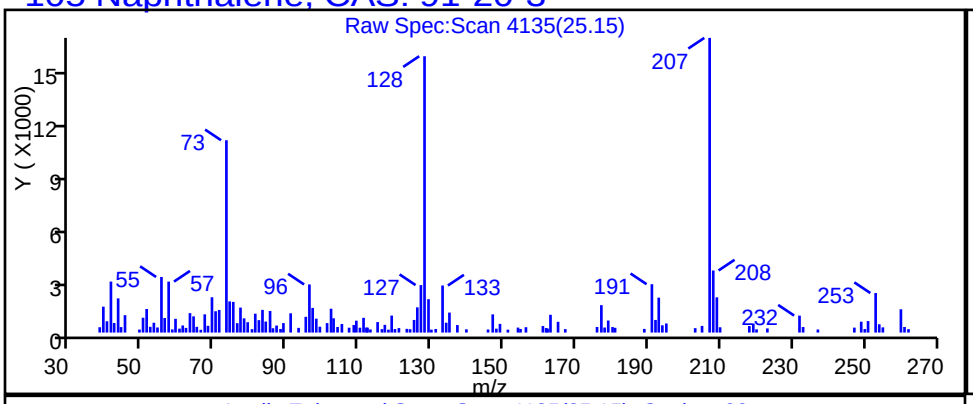
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

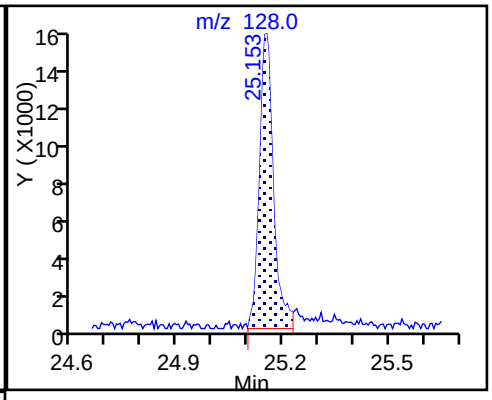
TestAmerica Burlington

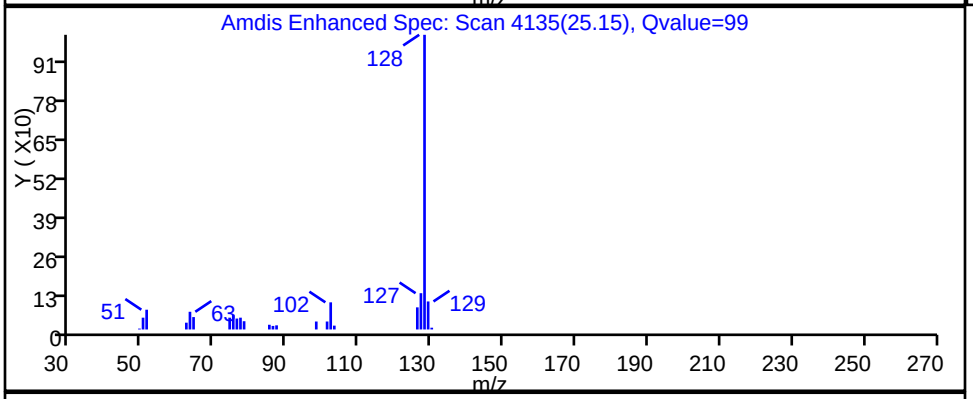
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

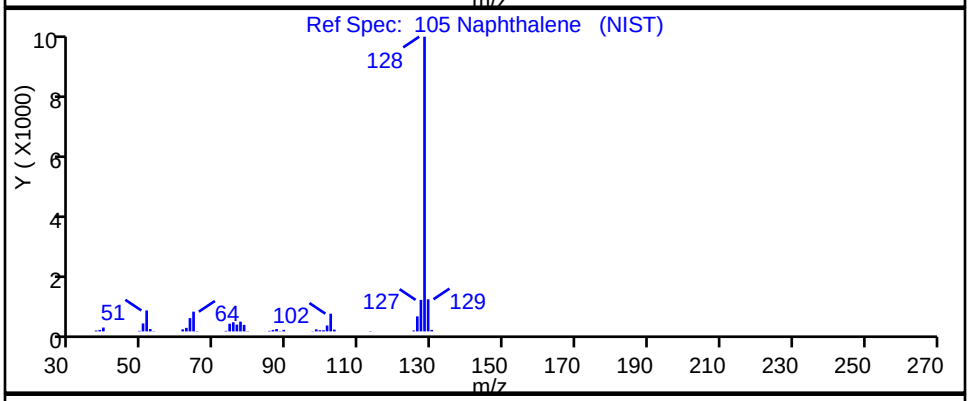
Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

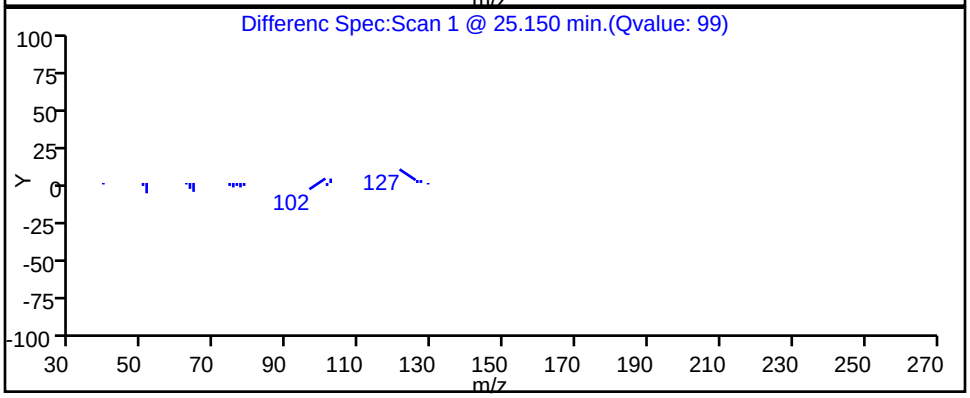
105 Naphthalene, CAS: 91-20-3











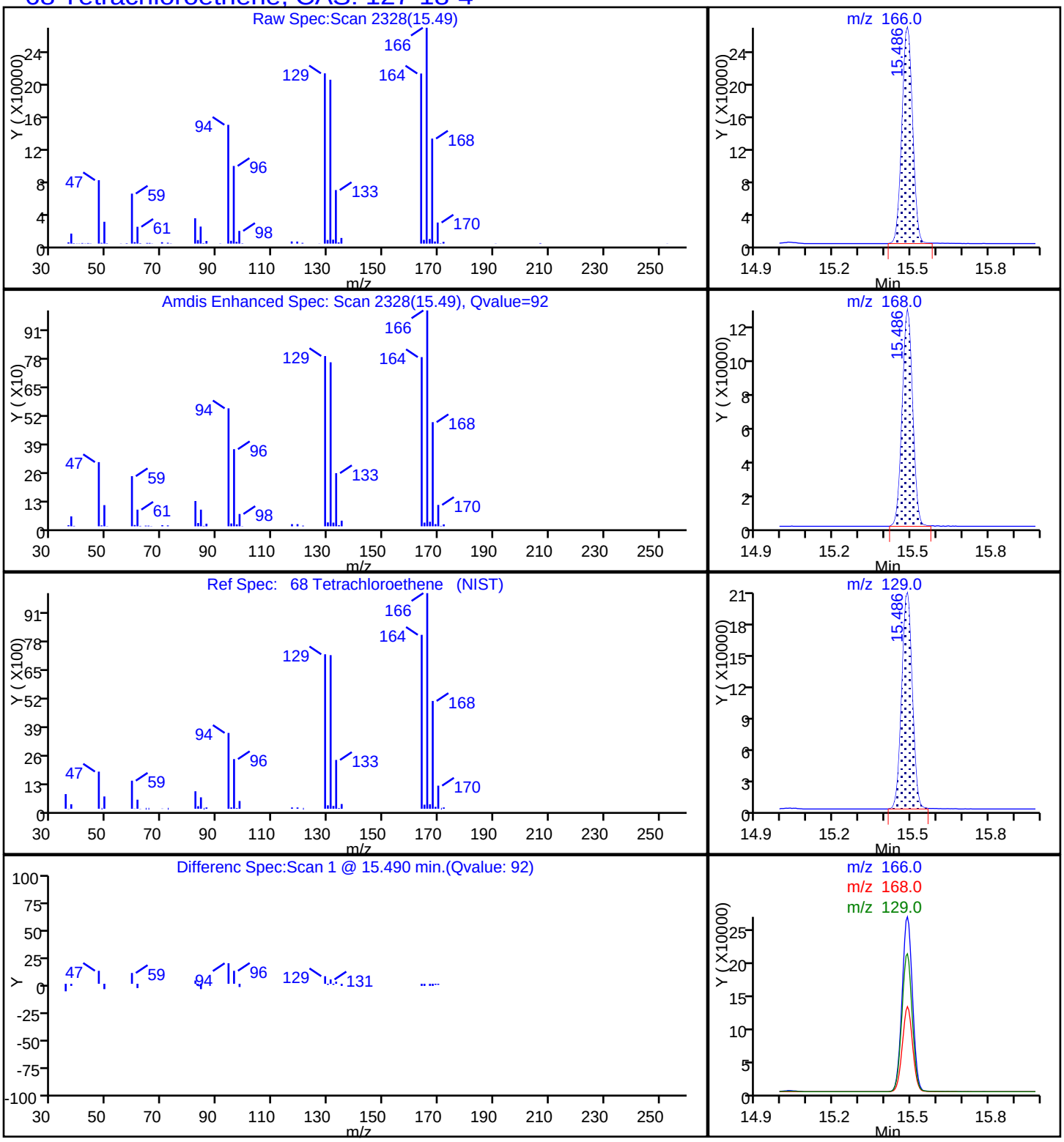
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
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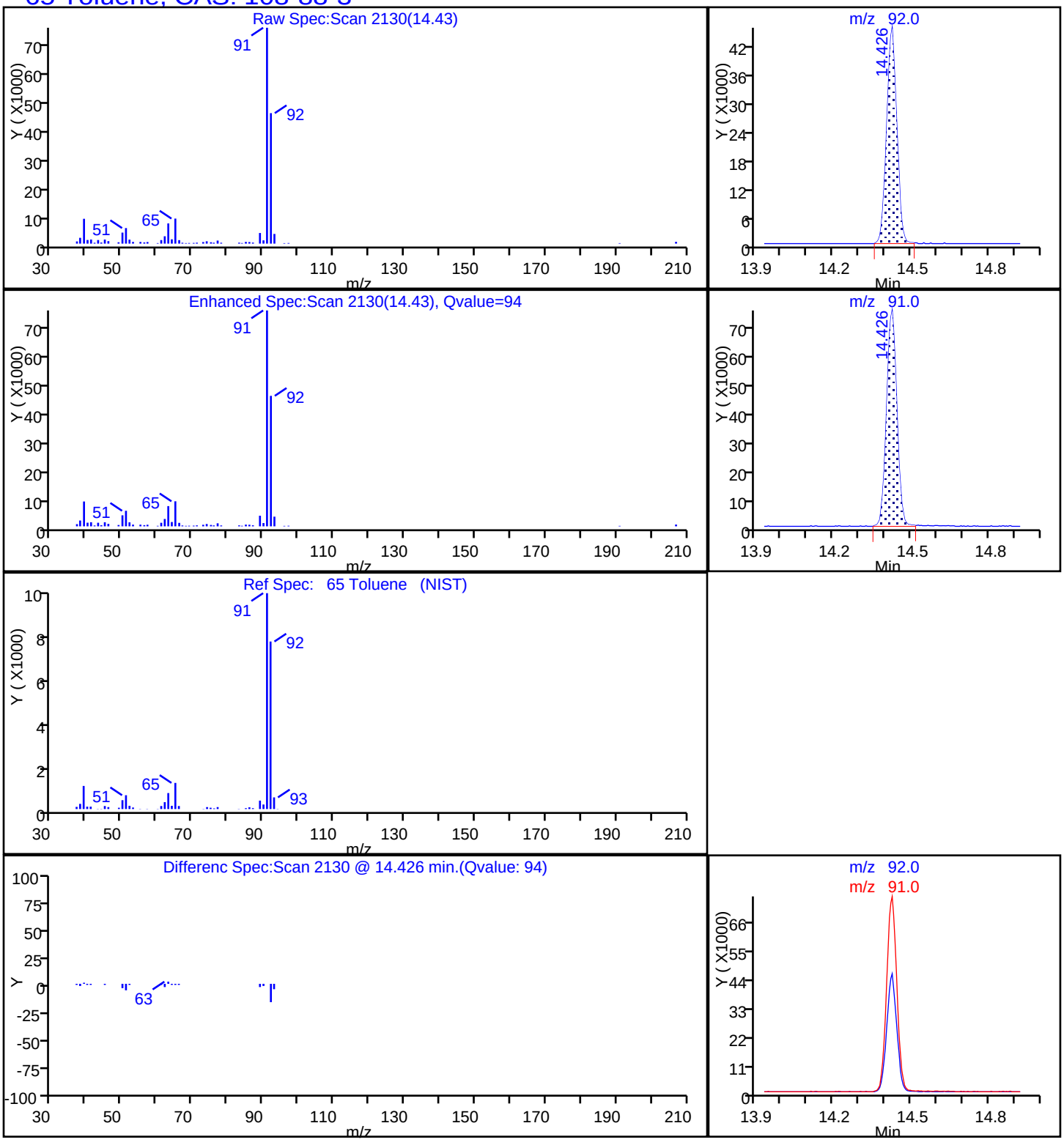
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

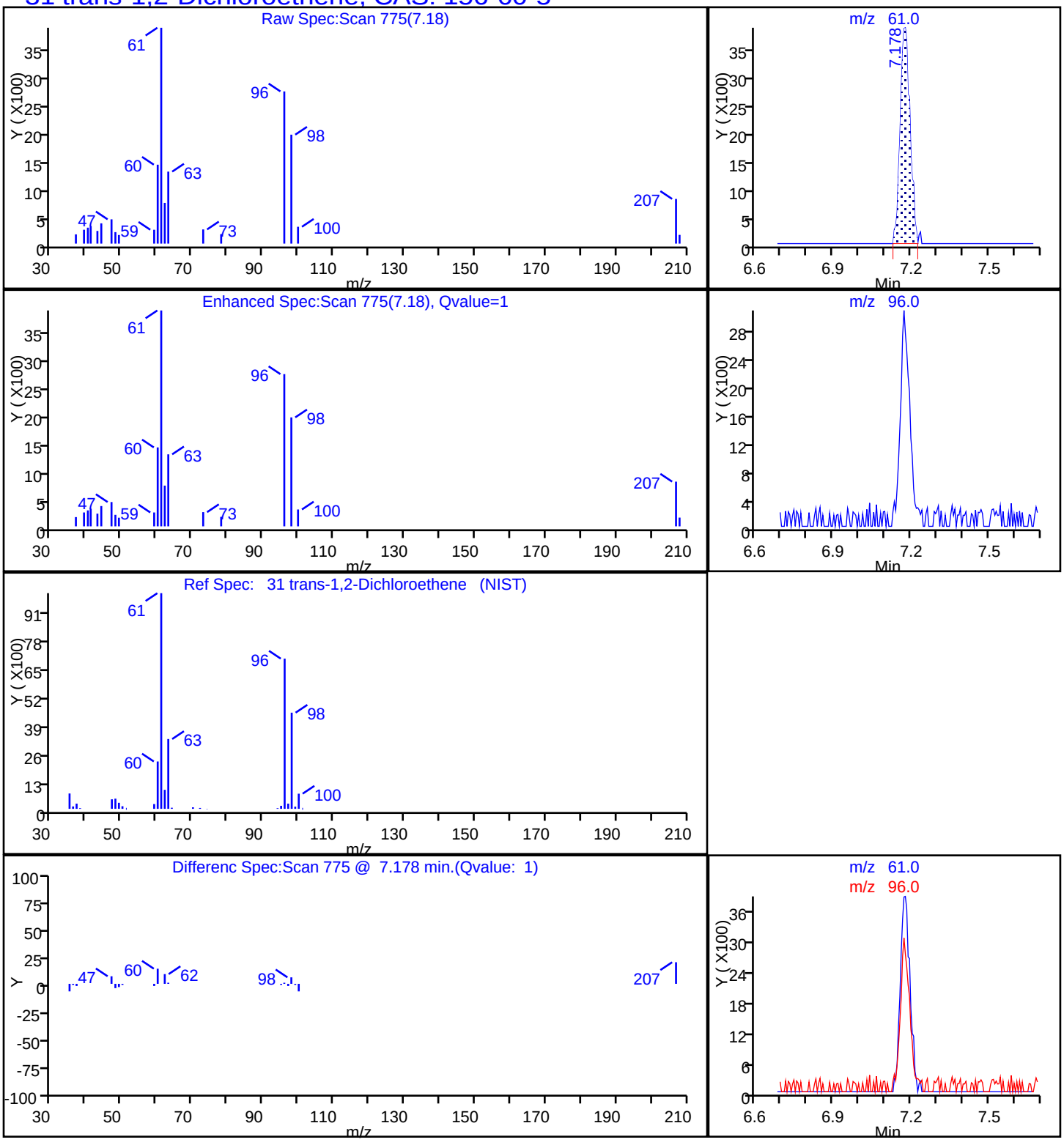


Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D				
Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

31 trans-1,2-Dichloroethene, CAS: 156-60-5



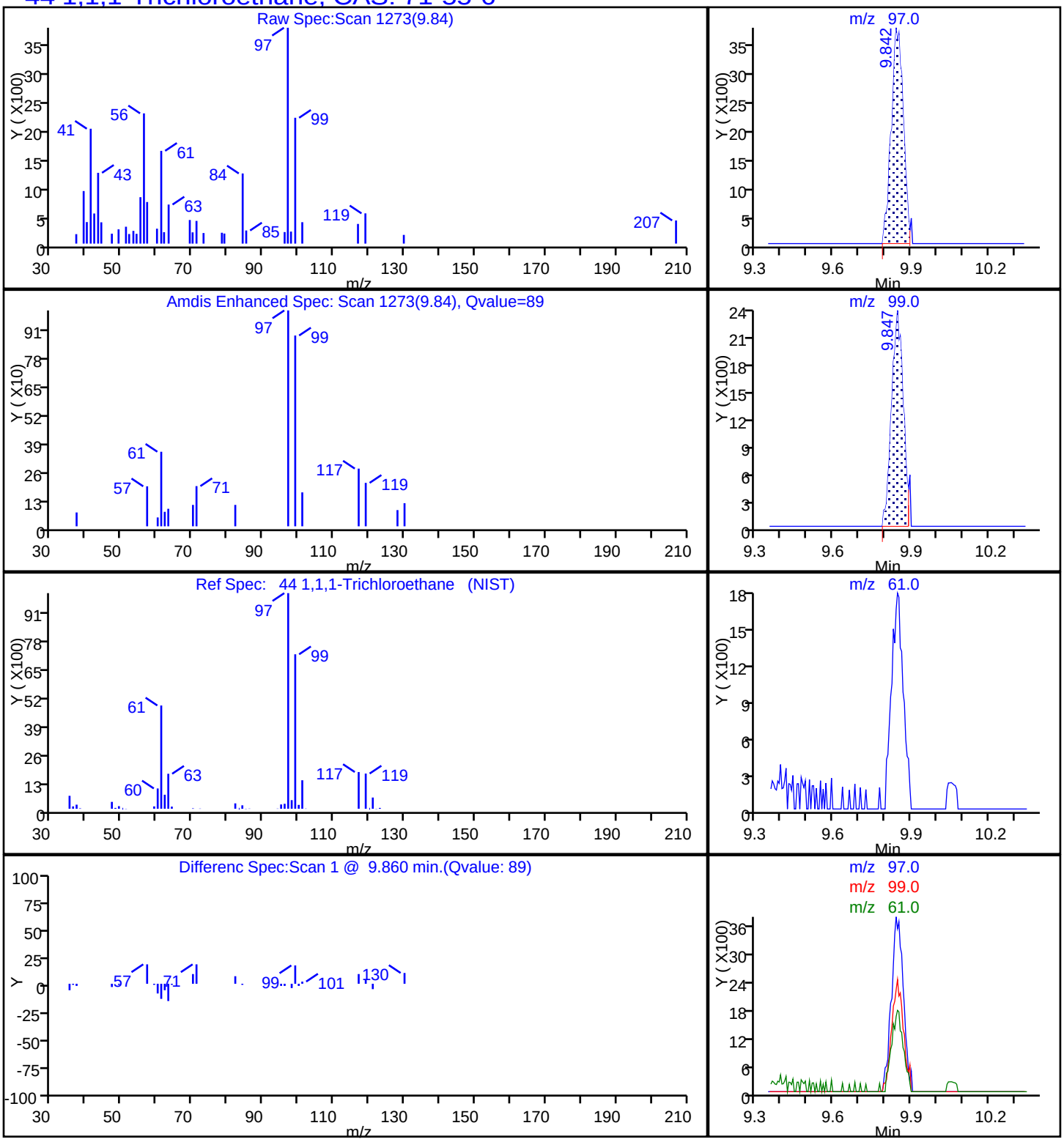
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6

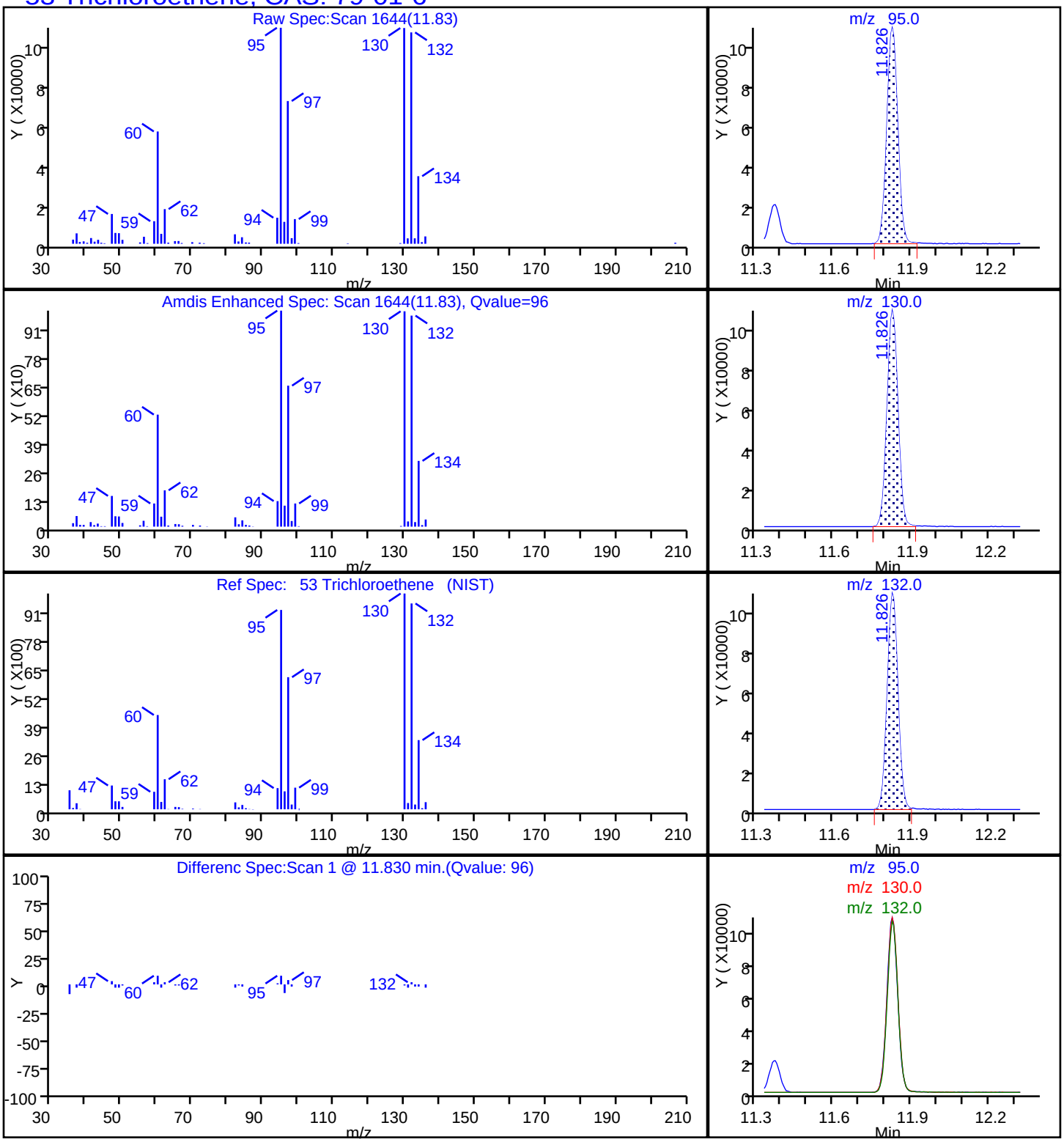


Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D				
Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



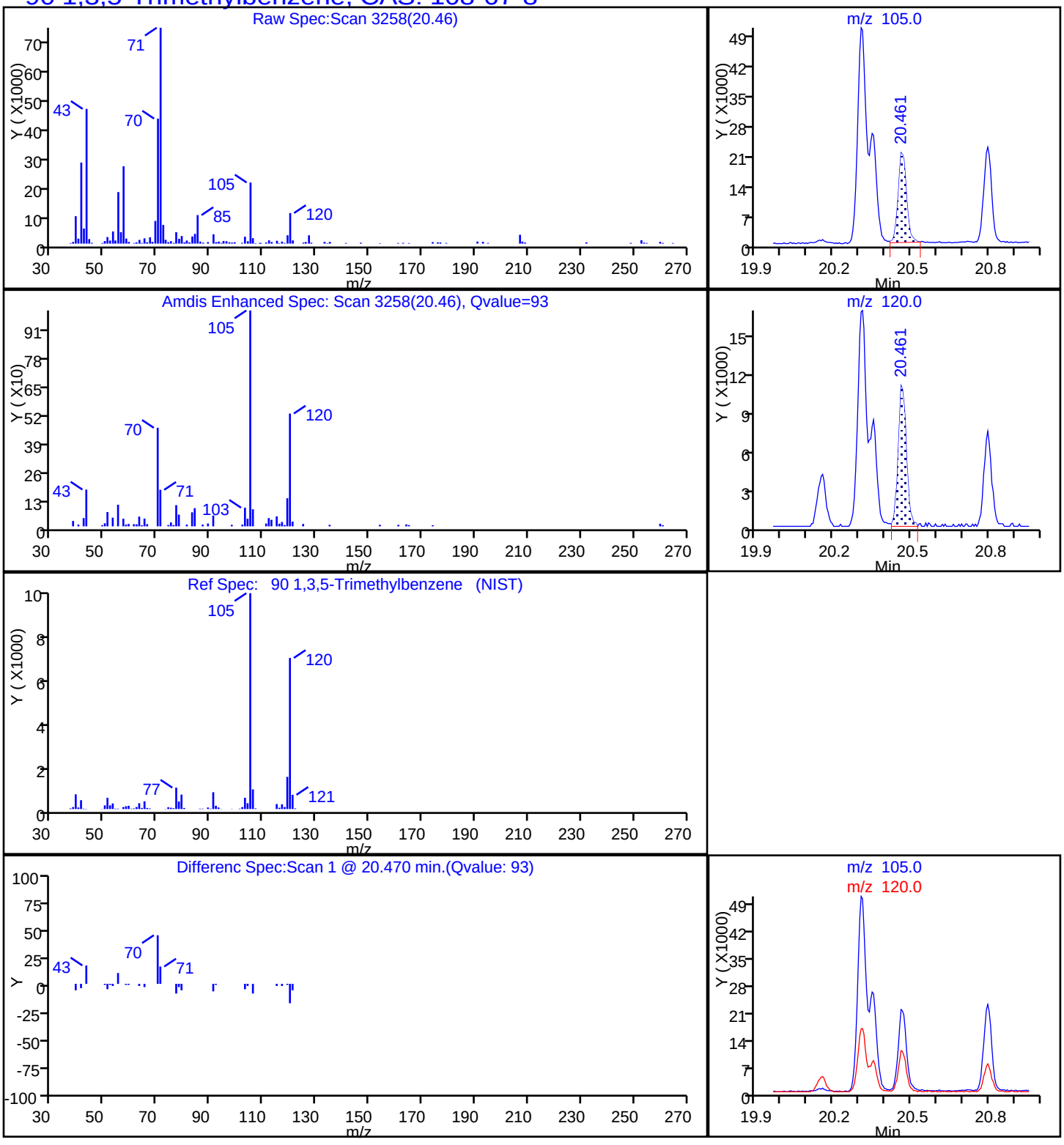
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8



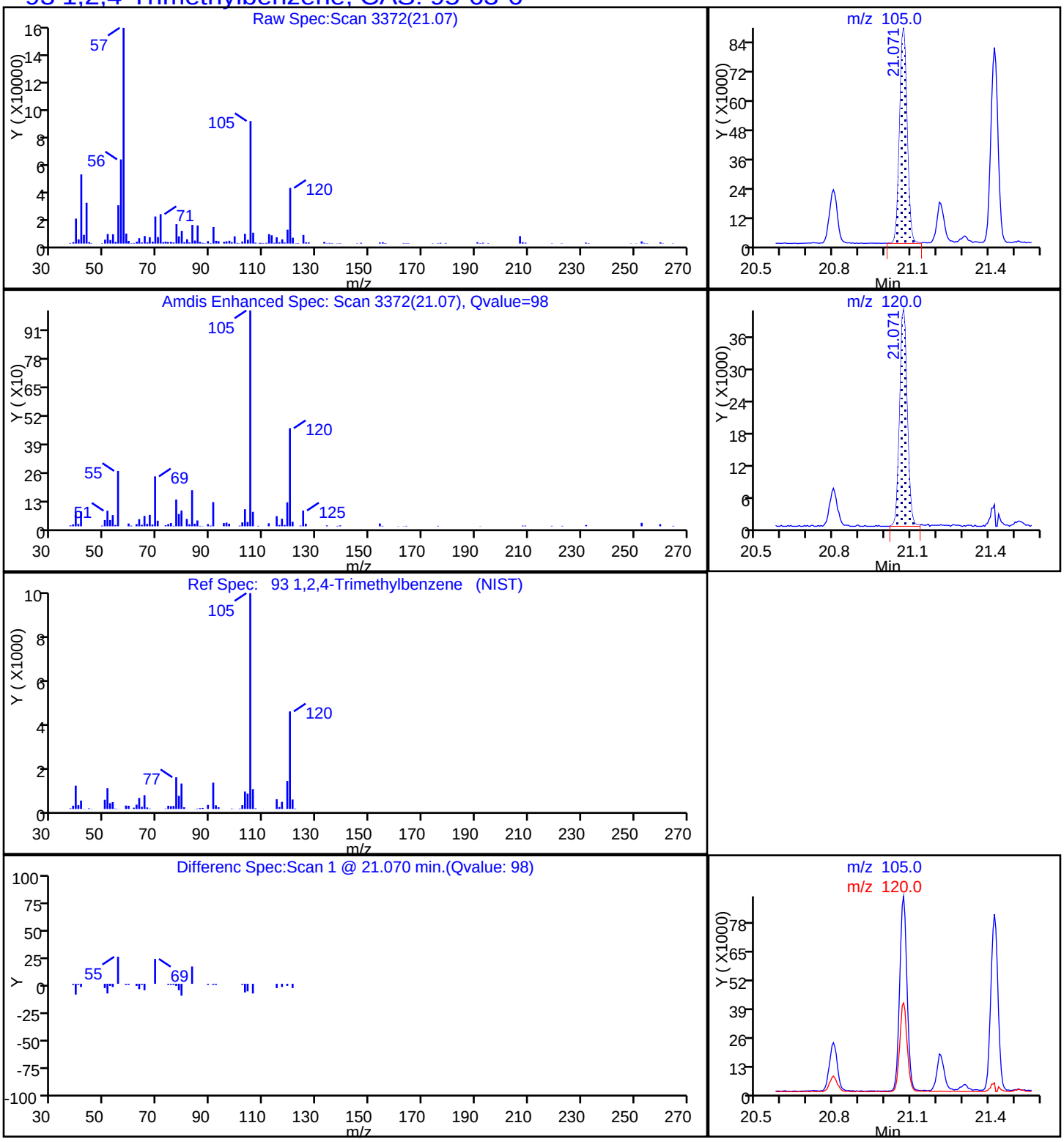
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6



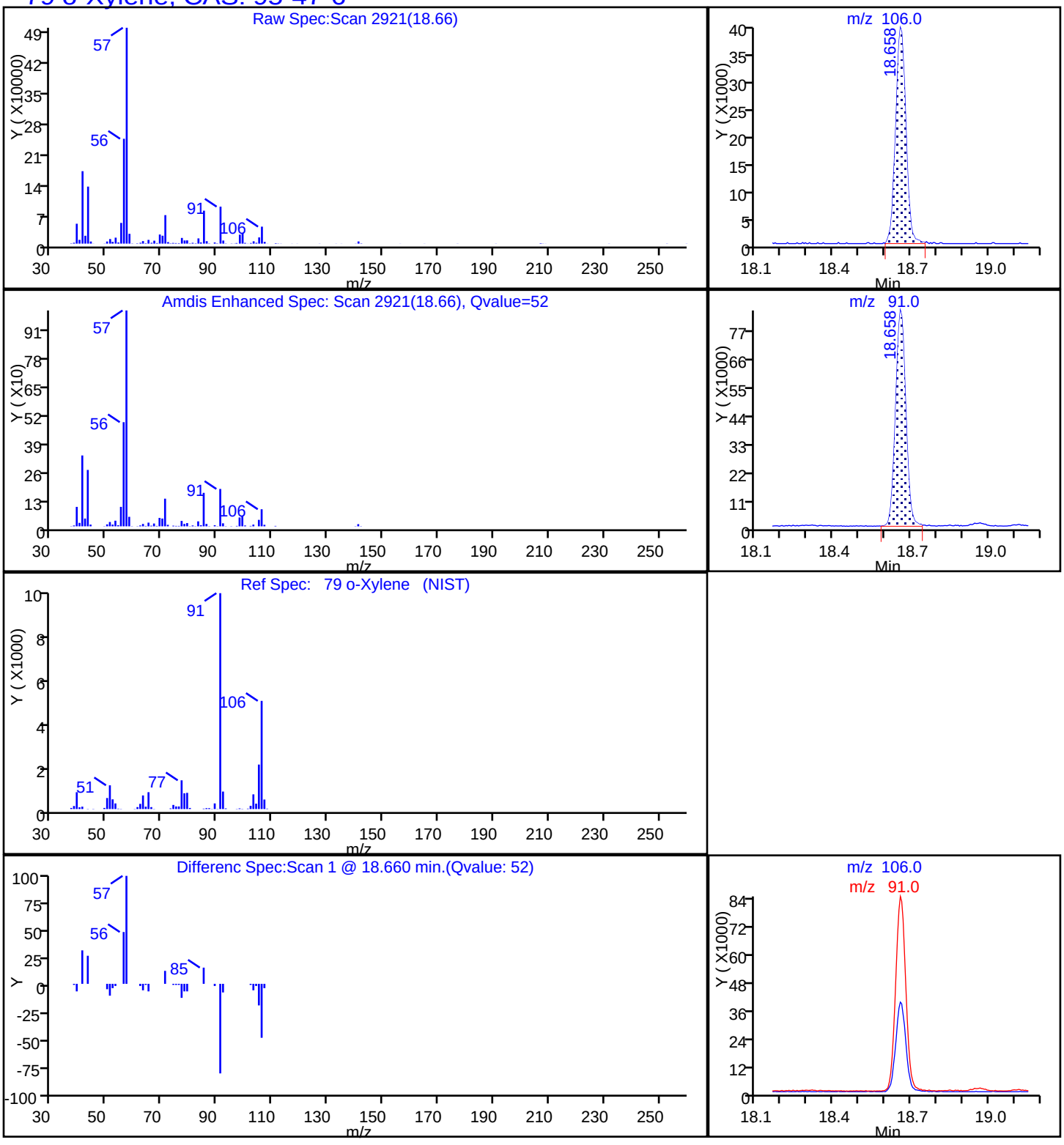
Report Date: 28-Aug-2017 11:43:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D

Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

TestAmerica Burlington

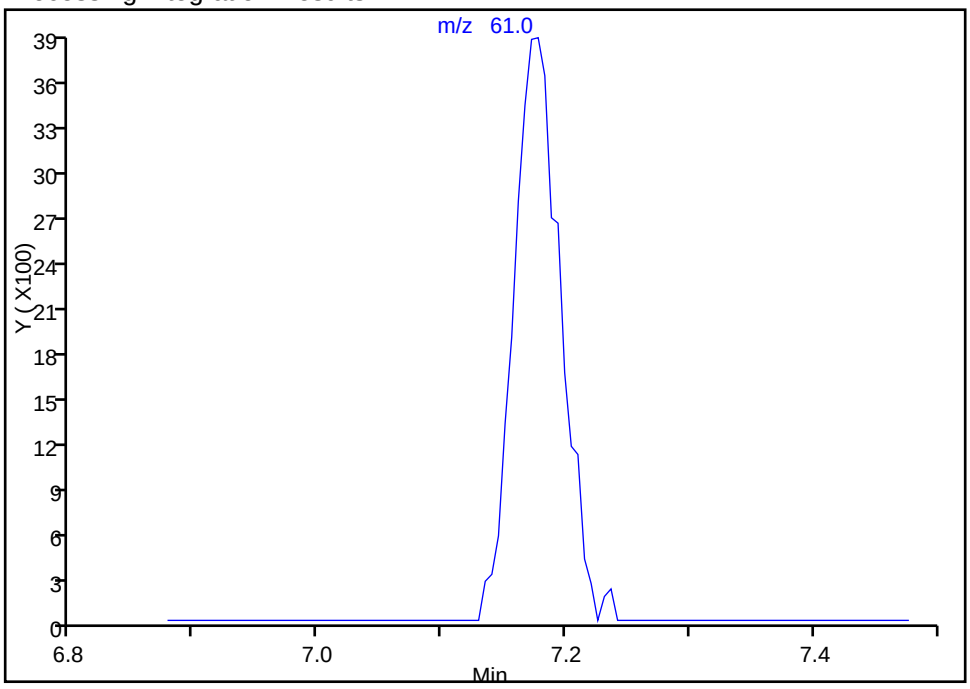
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D				
Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

31 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

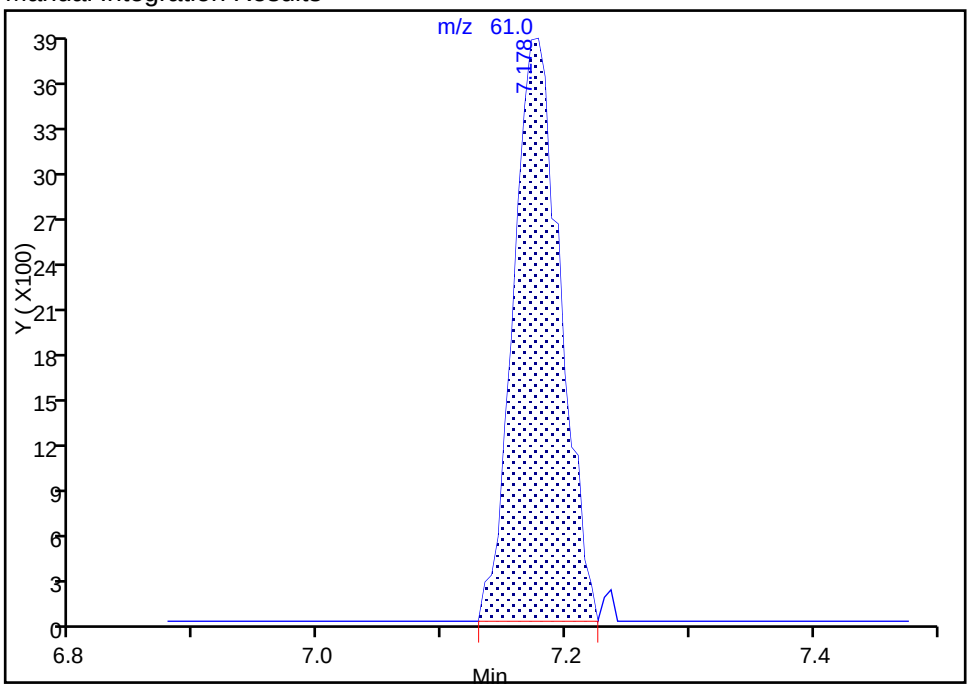
Not Detected
Expected RT: 7.18

Processing Integration Results



Manual Integration Results

RT: 7.18
Area: 10086
Amount: 0.236259
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:41:46
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

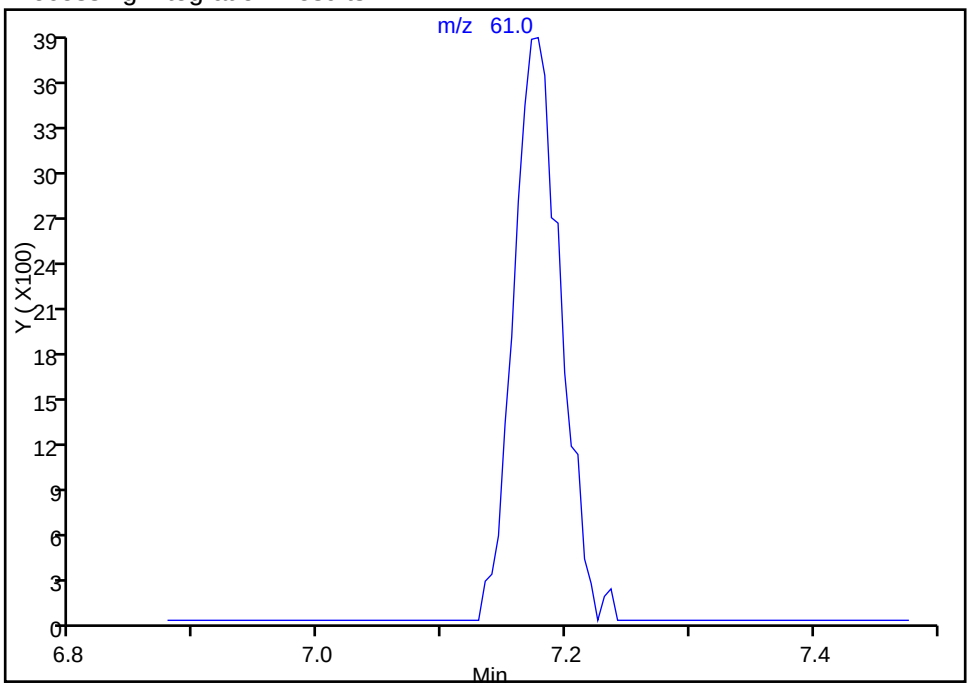
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-018.D				
Injection Date:	26-Aug-2017 00:06:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-7	Lab Sample ID:	200-39823-7		
Client ID:	SV-11				
Operator ID:	pad	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

31 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

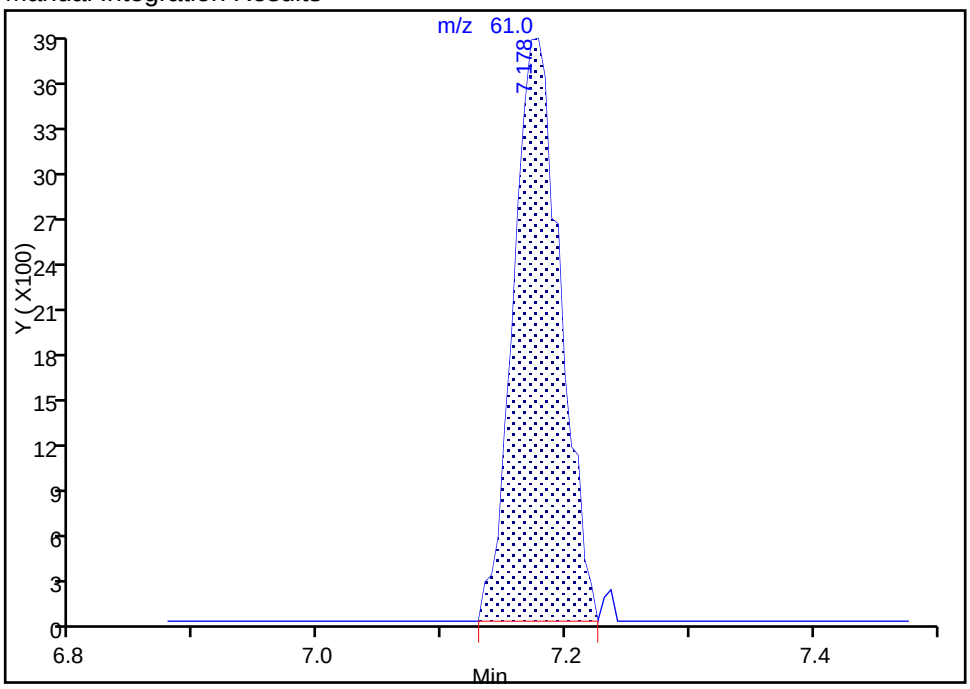
Processing Integration Results

Not Detected
Expected RT: 7.18



Manual Integration Results

RT: 7.18
Area: 10086
Amount: 0.236259
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:41:56
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-14 Lab Sample ID: 200-39823-8

Matrix: Air Lab File ID: 200-26579-019.D

Analysis Method: TO-15 Date Collected: 08/23/2017 10:03

Sample wt/vol: 200(mL) Date Analyzed: 08/26/2017 00:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.67		0.20	0.028
56-23-5	Carbon tetrachloride	153.81	0.064	J	0.20	0.011
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
74-87-3	Chloromethane	50.49	0.16	U	0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	0.22		0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
100-41-4	Ethylbenzene	106.17	2.3		0.20	0.034
75-09-2	Methylene Chloride	84.93	0.079	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
179601-23-1	m,p-Xylene	106.17	5.4		0.50	0.077
91-20-3	Naphthalene	128.17	0.33	J	0.50	0.10
127-18-4	Tetrachloroethene	165.83	0.23		0.20	0.0098
108-88-3	Toluene	92.14	3.1		0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	5.5		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	8.3		0.20	0.057
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
95-47-6	Xylene, o-	106.17	2.1		0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-14 Lab Sample ID: 200-39823-8

Matrix: Air Lab File ID: 200-26579-019.D

Analysis Method: TO-15 Date Collected: 08/23/2017 10:03

Sample wt/vol: 200(mL) Date Analyzed: 08/26/2017 00:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.1		0.64	0.089
56-23-5	Carbon tetrachloride	153.81	0.40	J	1.3	0.069
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
74-87-3	Chloromethane	50.49	0.33	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
541-73-1	1,3-Dichlorobenzene	147.00	1.3		1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
100-41-4	Ethylbenzene	106.17	9.9		0.87	0.15
75-09-2	Methylene Chloride	84.93	0.27	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
179601-23-1	m,p-Xylene	106.17	23		2.2	0.33
91-20-3	Naphthalene	128.17	1.7	J	2.6	0.52
127-18-4	Tetrachloroethene	165.83	1.6		1.4	0.066
108-88-3	Toluene	92.14	12		0.75	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	27		0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	41		0.98	0.28
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
95-47-6	Xylene, o-	106.17	9.0		0.87	0.17

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D
Lims ID: 200-39823-A-8
Client ID: SV-14
Sample Type: Client
Inject. Date: 26-Aug-2017 00:56:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-019
Misc. Info.: 39823-08
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 11:56:13 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 11:56:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.513	3.513	0.000	97	4165	0.1543	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49	6.776	6.787	-0.011	82	2545	0.0790	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	82	350129	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117	10.093	10.088	0.005	88	6538	0.0642	
47 Benzene	78	10.548	10.553	-0.005	95	68644	0.6652	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.366	11.372	-0.006	94	1860568	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.421	14.426	-0.005	94	222598	3.10	
68 Tetrachloroethene	166	15.486	15.486	0.000	91	15829	0.2328	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1590066	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.551	17.551	0.001	99	356099	2.29	
78 m-Xylene & p-Xylene	106	17.802	17.807	-0.005	0	329817	5.41	
79 o-Xylene	106	18.658	18.663	-0.005	67	126529	2.07	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	778419	5.48	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	99	1159788	8.34	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	75	20986	0.2189	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128	25.152	25.147	0.005	99	36906	0.3306	

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

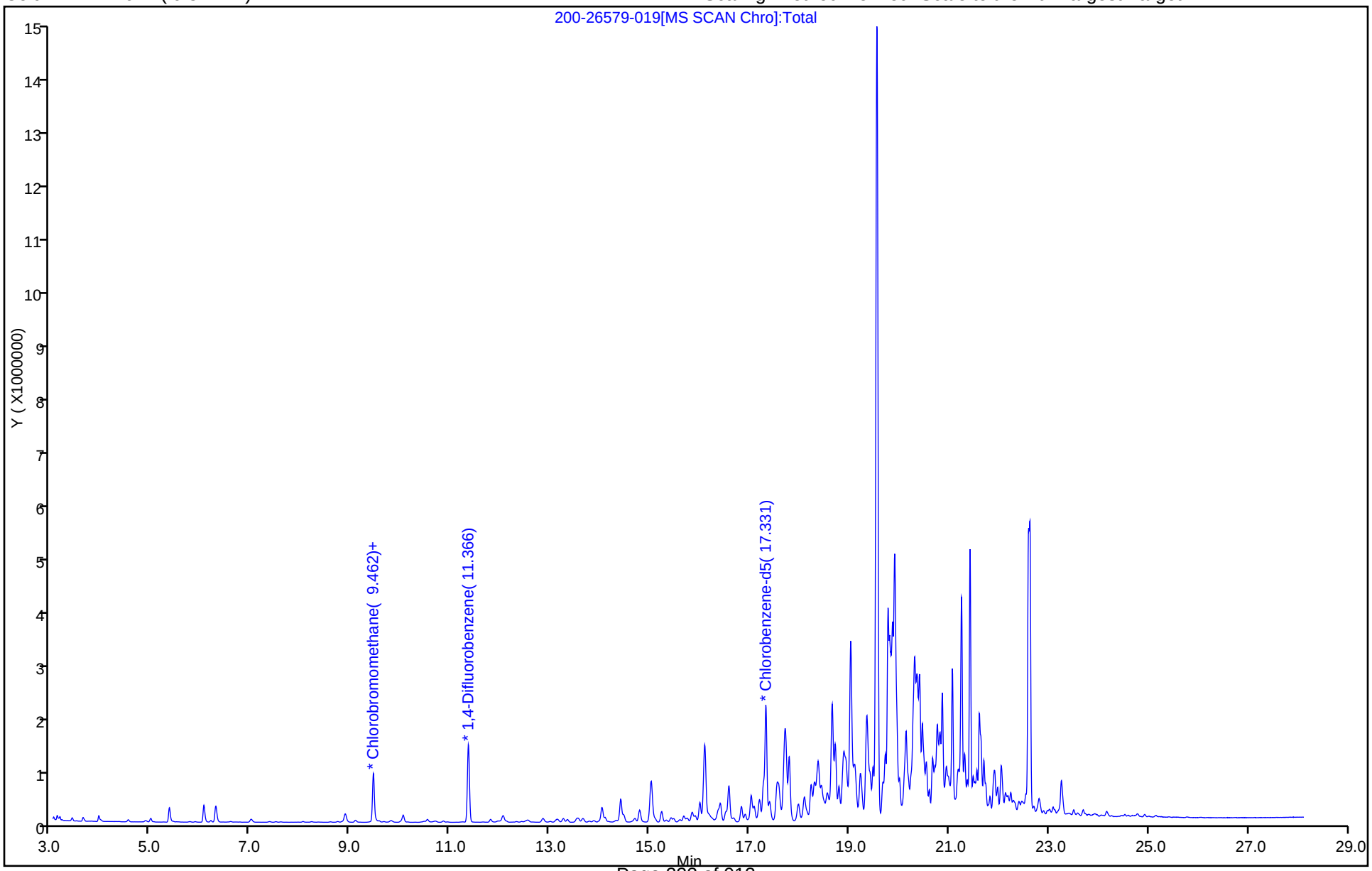
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8	Worklist Smp#:	19
Client ID:	SV-14				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



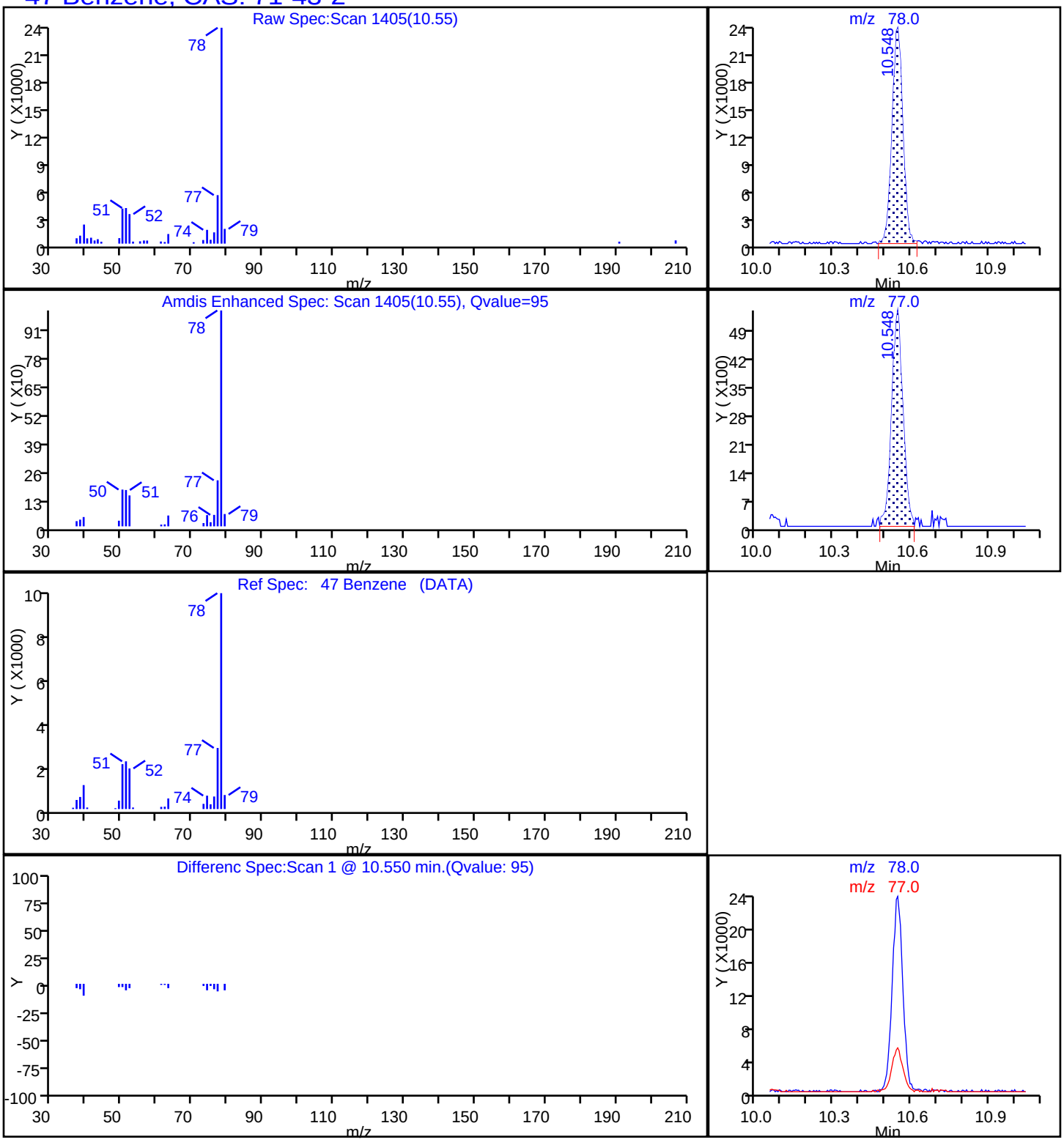
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



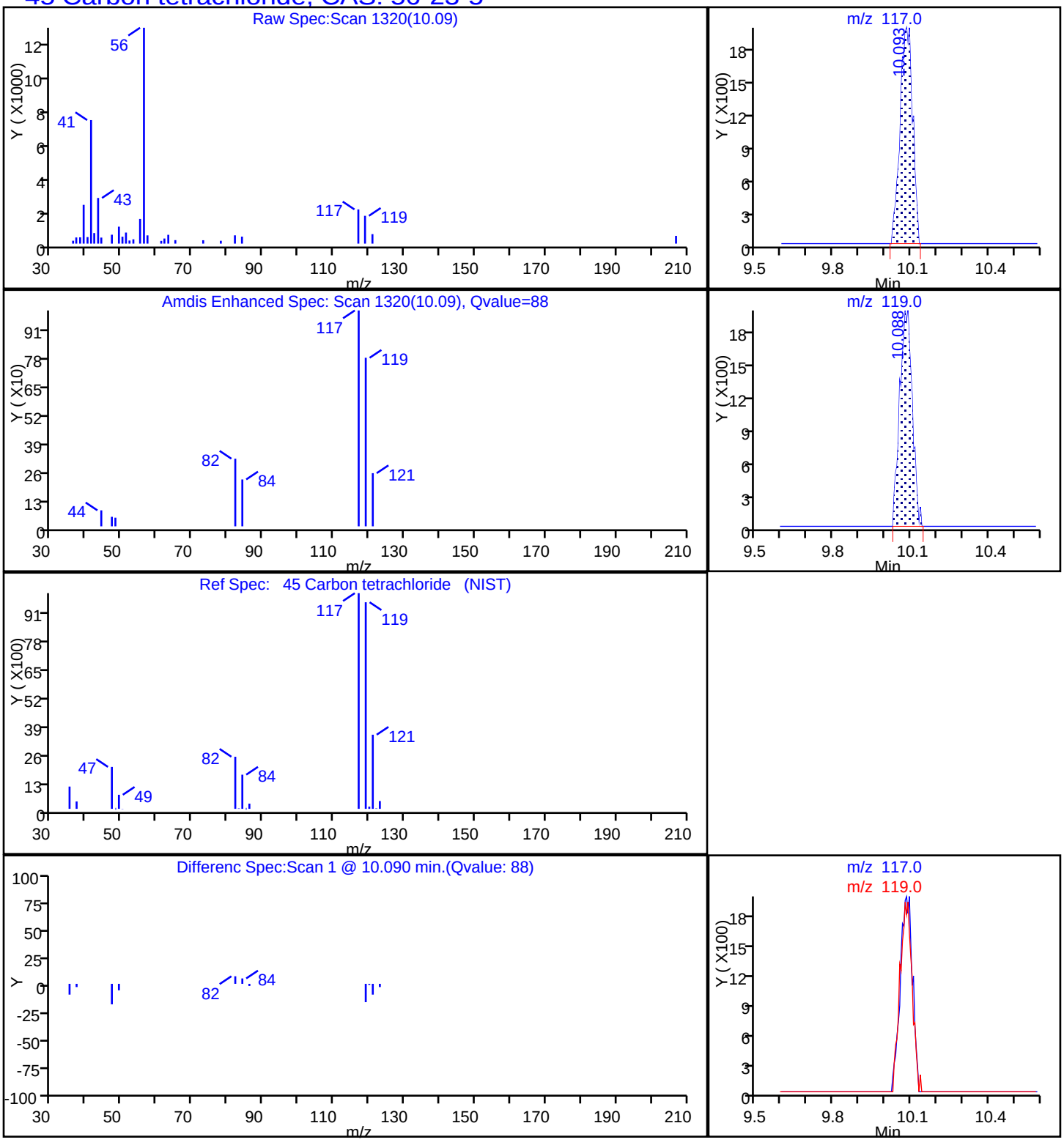
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



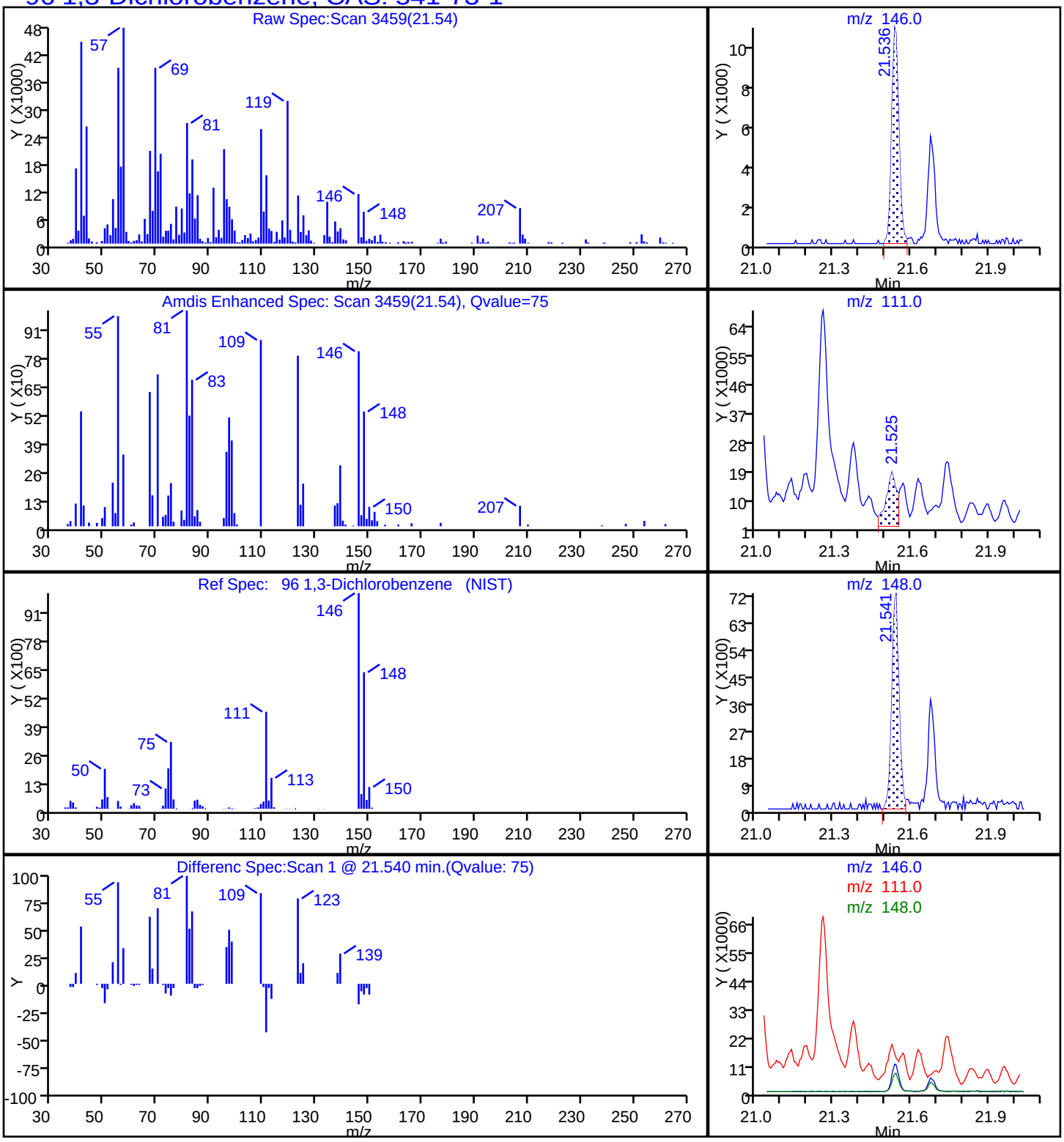
Report Date: 28-Aug-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1



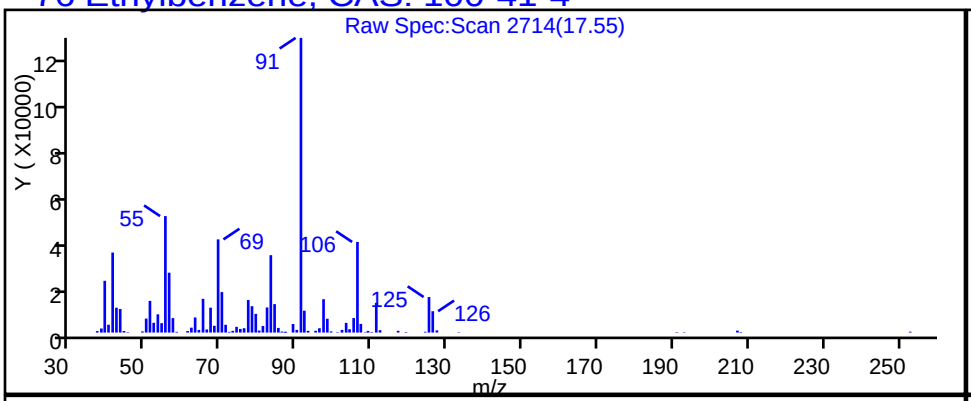
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

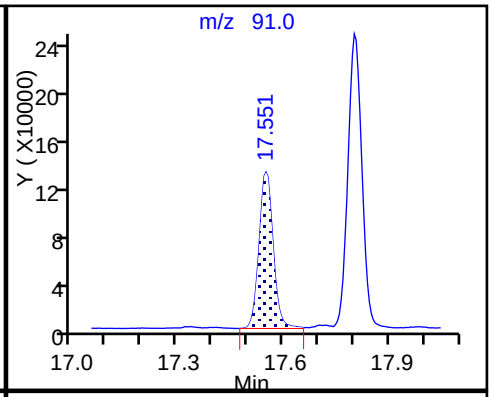
TestAmerica Burlington

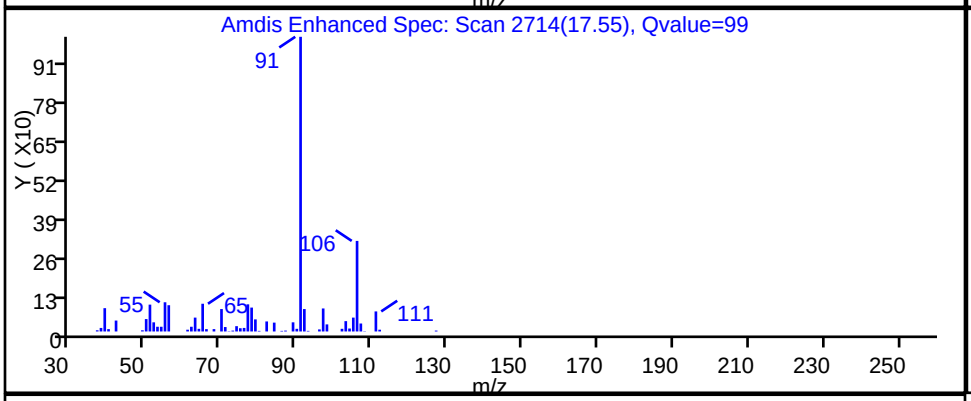
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

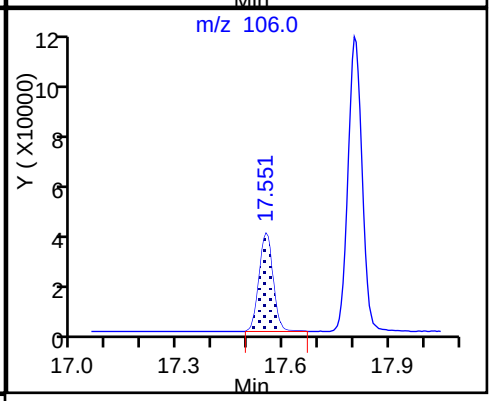
Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

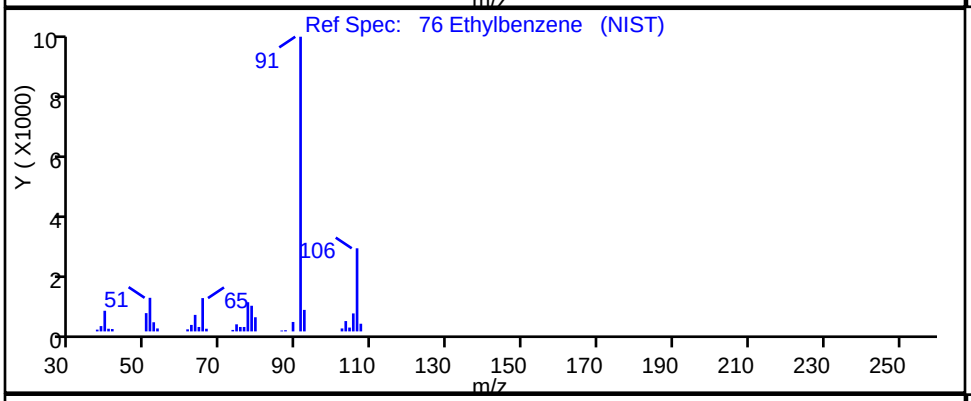
76 Ethylbenzene, CAS: 100-41-4

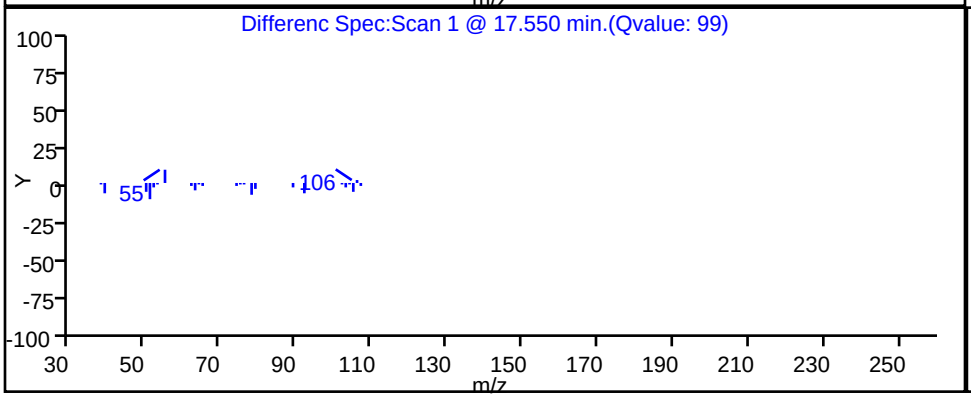


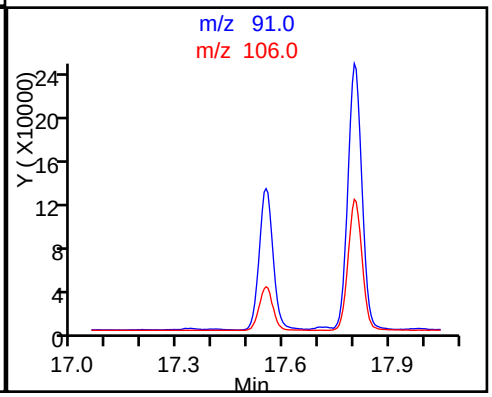












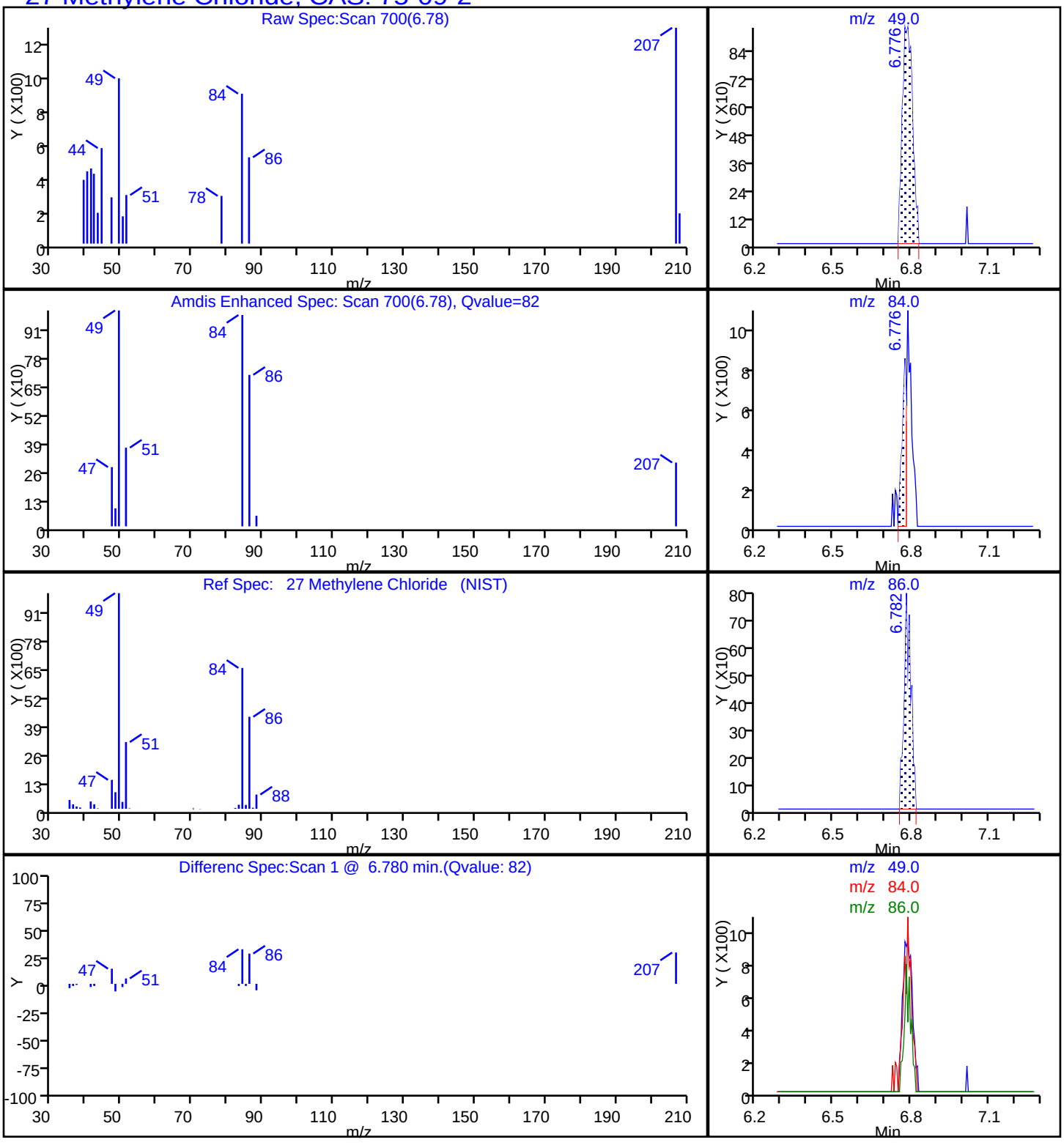
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

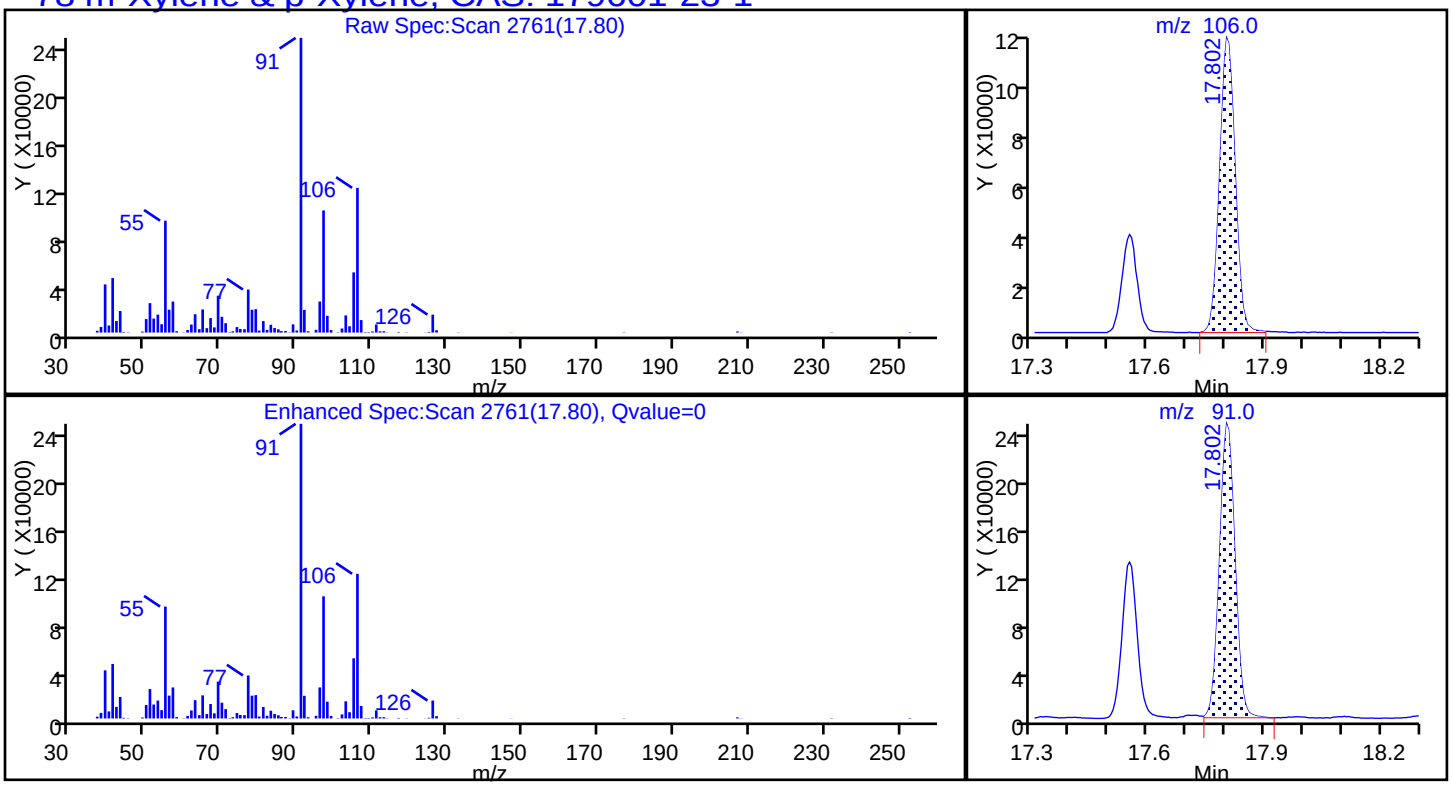


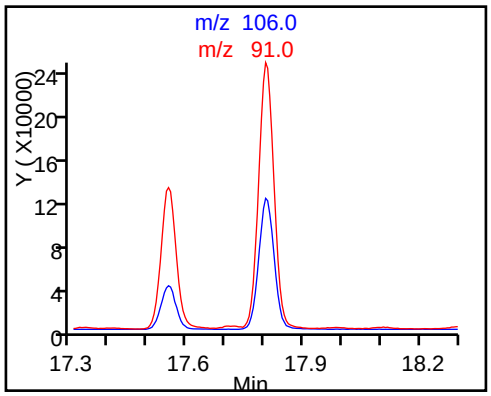
Report Date: 28-Aug-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D				
Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





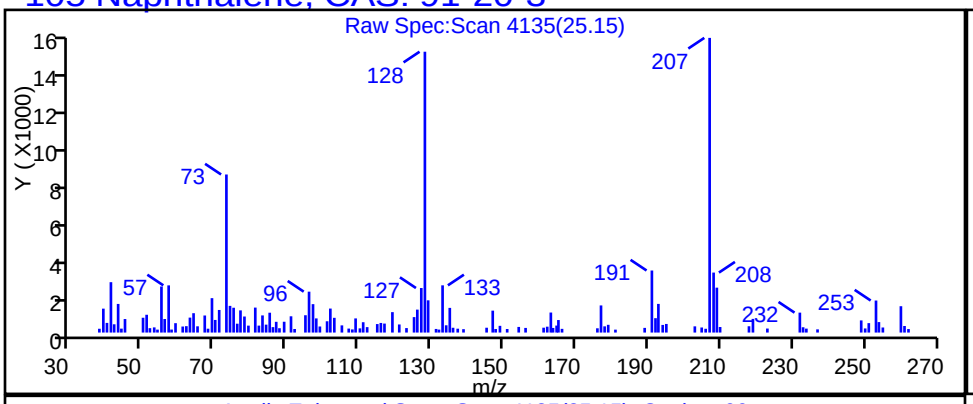
Report Date: 28-Aug-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

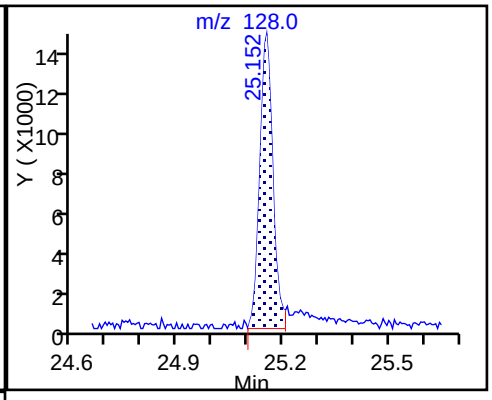
TestAmerica Burlington

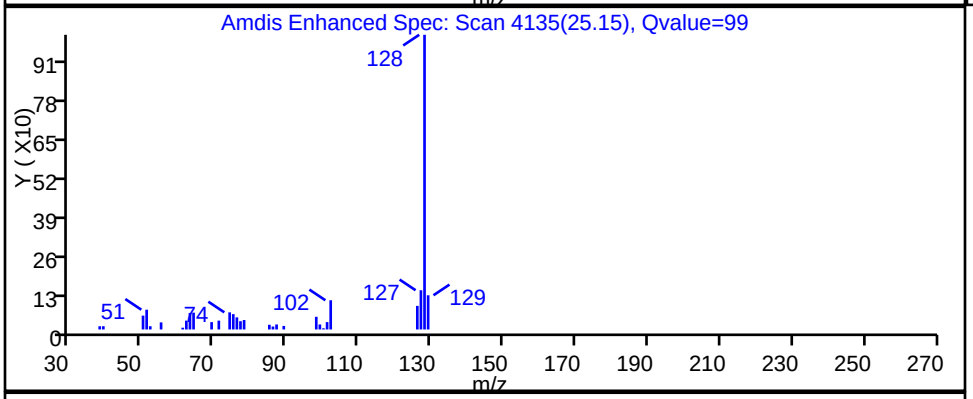
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

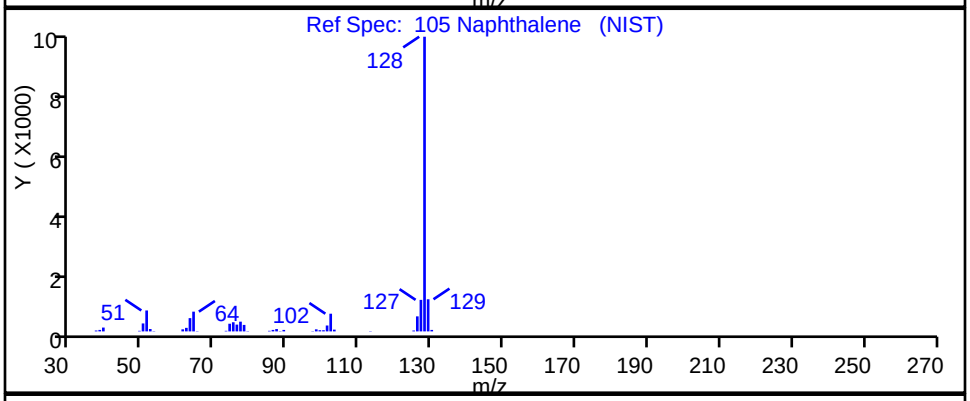
Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

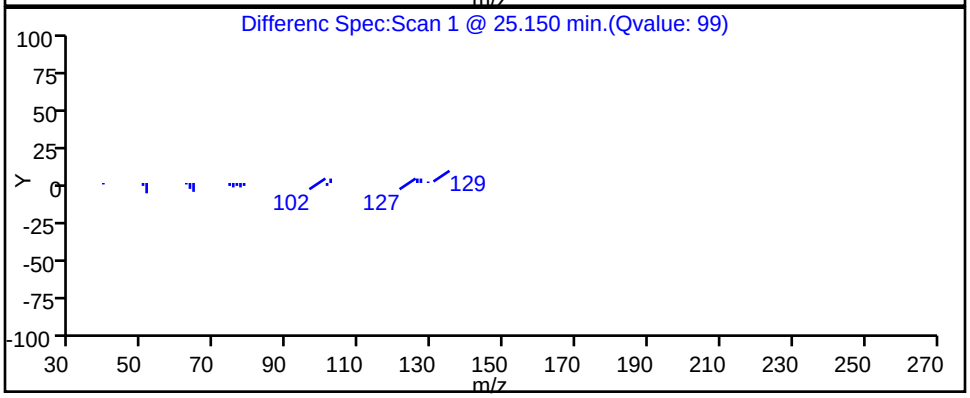
105 Naphthalene, CAS: 91-20-3











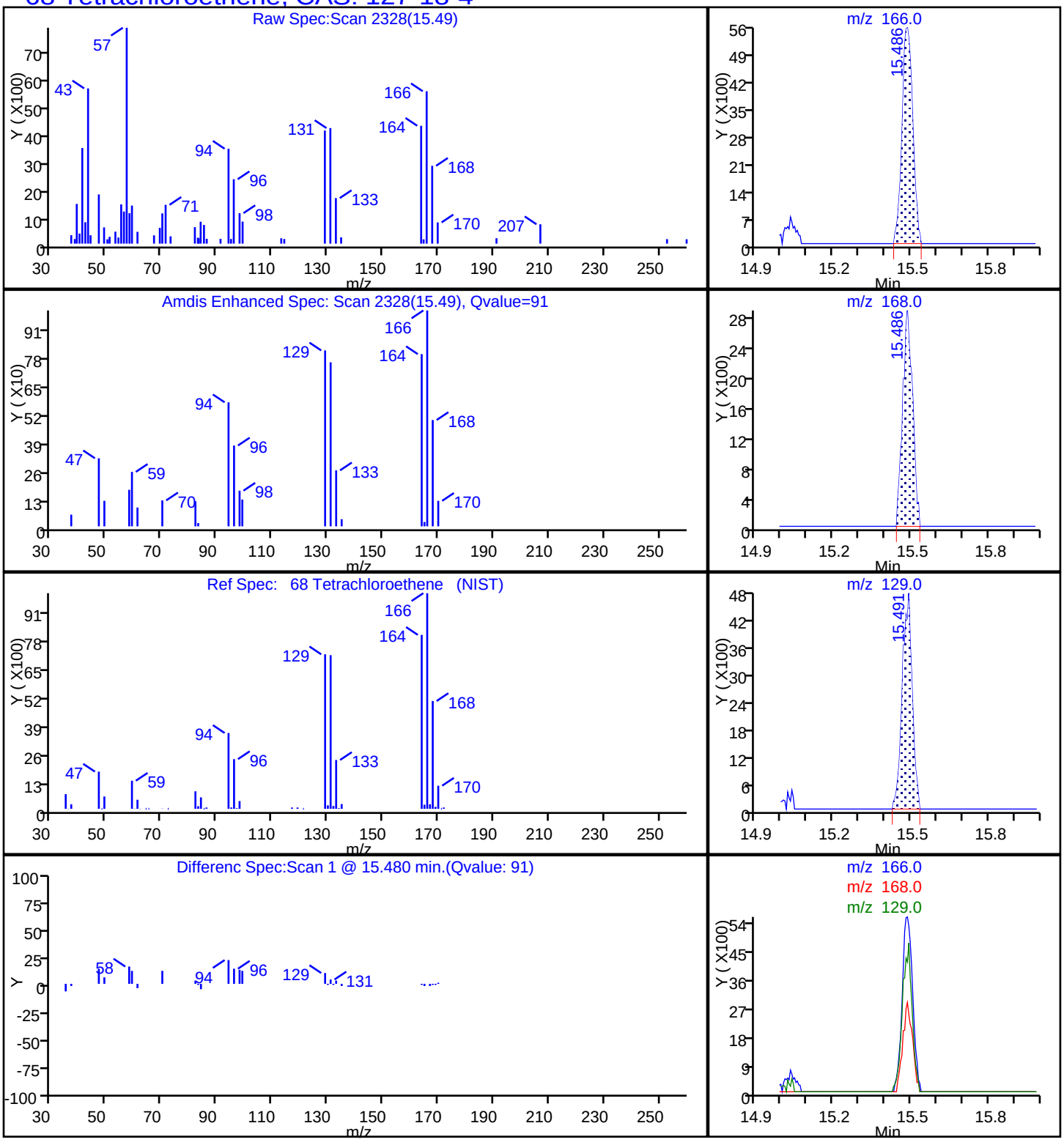
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



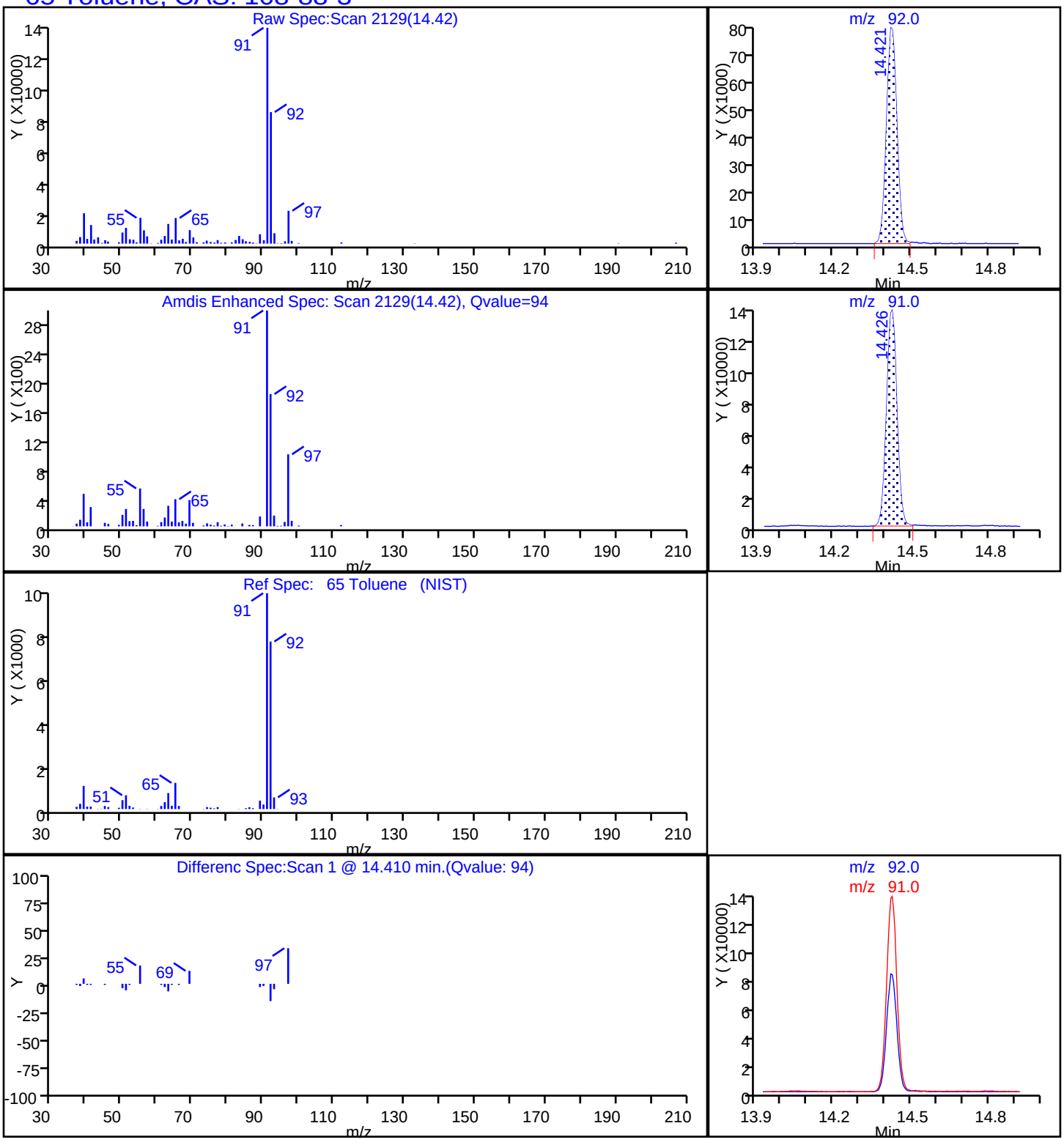
Report Date: 28-Aug-2017 11:56:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



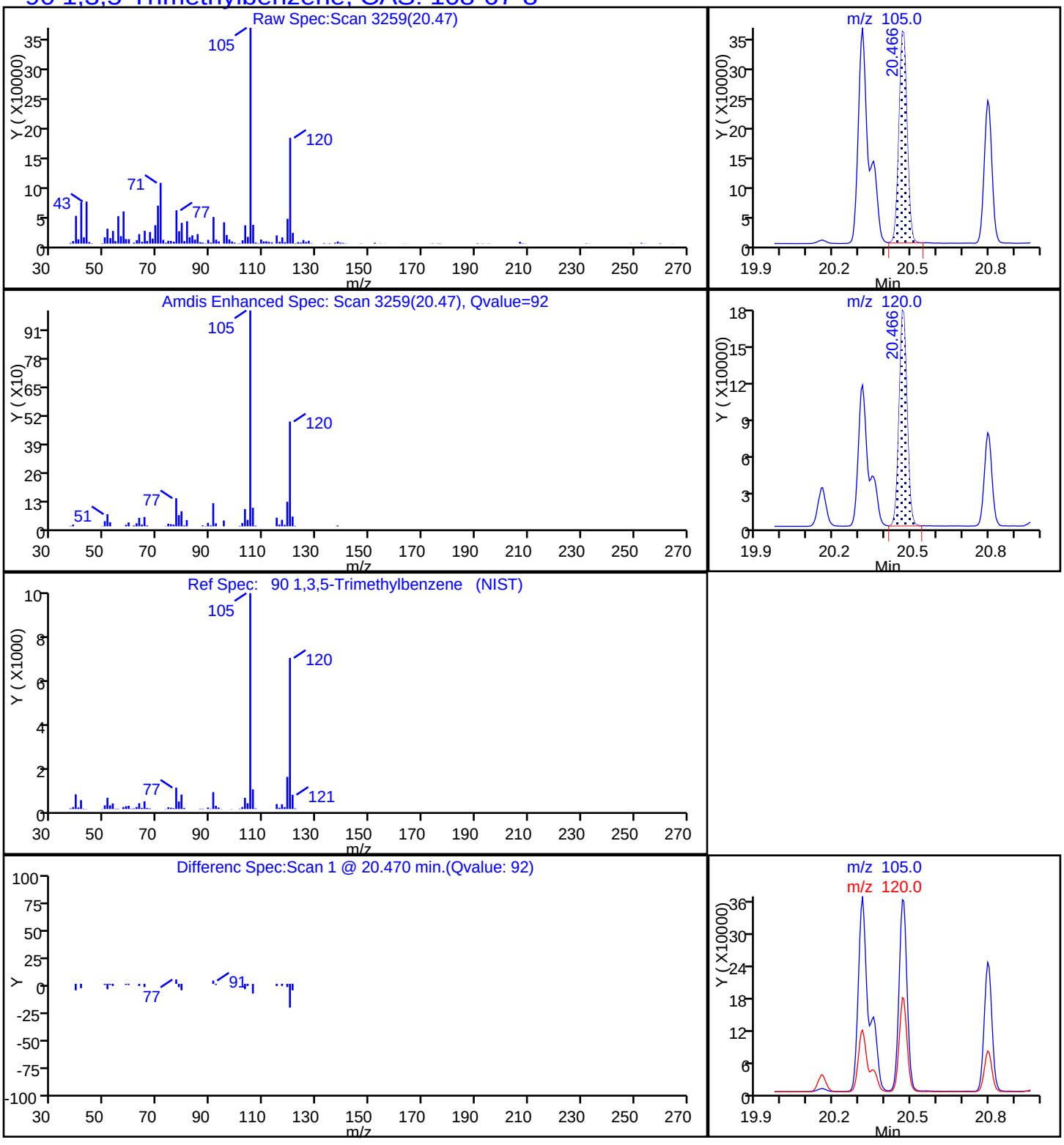
Report Date: 28-Aug-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

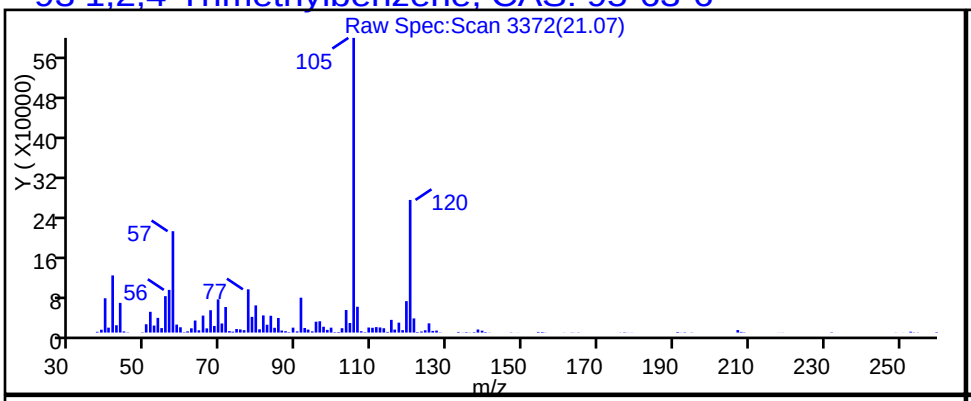


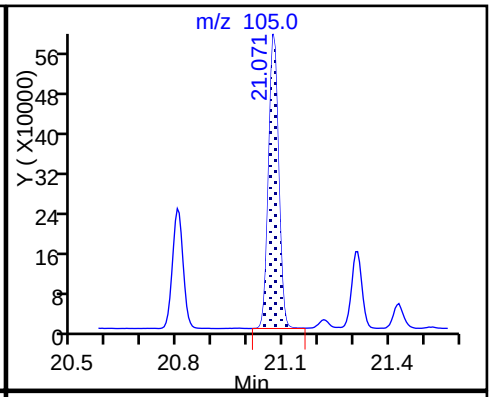
Report Date: 28-Aug-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

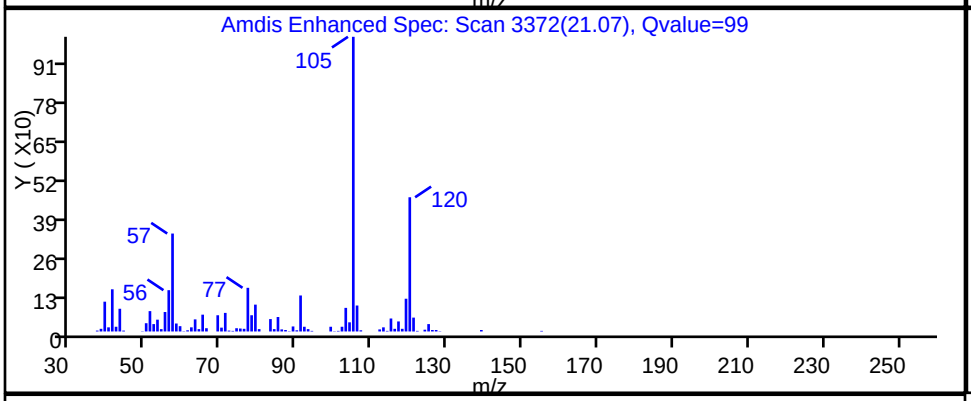
TestAmerica Burlington

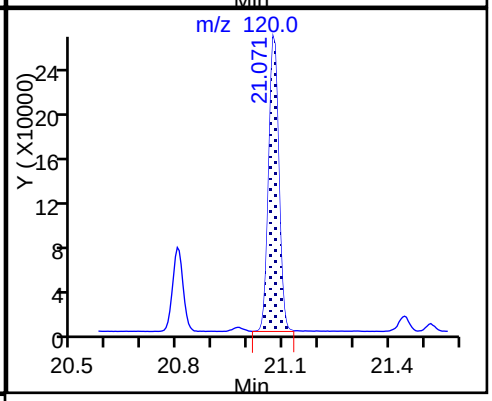
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D				
Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

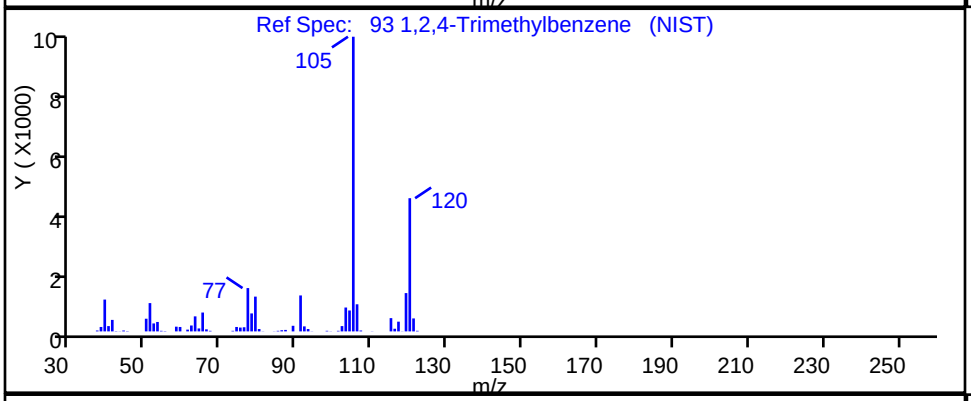
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

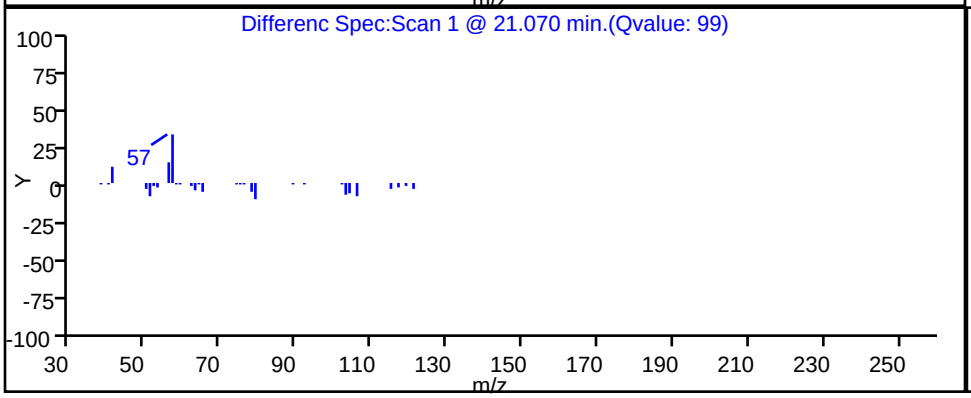


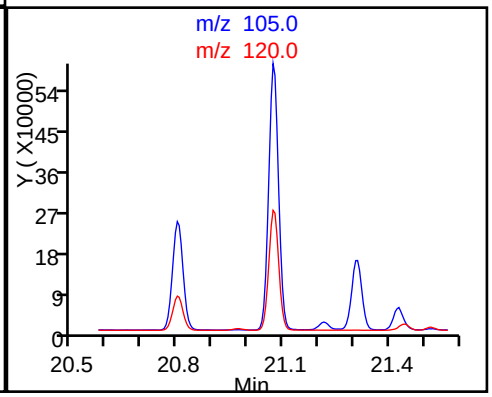












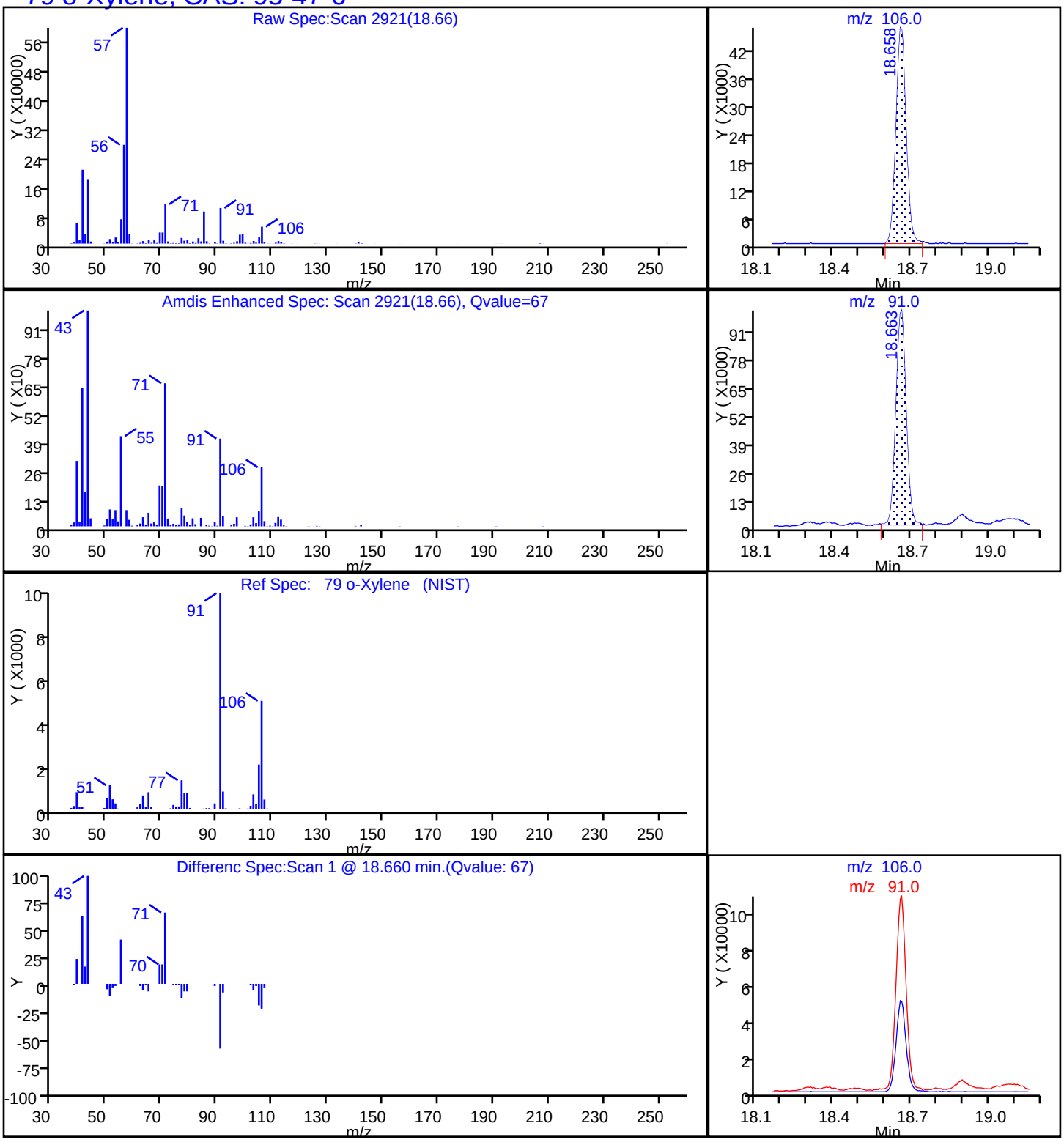
Report Date: 28-Aug-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-019.D

Injection Date:	26-Aug-2017 00:56:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-8	Lab Sample ID:	200-39823-8		
Client ID:	SV-14				
Operator ID:	pad	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-13 Lab Sample ID: 200-39823-9

Matrix: Air Lab File ID: 200-26579-020.D

Analysis Method: TO-15 Date Collected: 08/23/2017 10:06

Sample wt/vol: 200(mL) Date Analyzed: 08/26/2017 01:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.48		0.20	0.028
56-23-5	Carbon tetrachloride	153.81	0.093	J	0.20	0.011
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
74-87-3	Chloromethane	50.49	0.25	J	0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	0.050	U	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	0.053	J	0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
100-41-4	Ethylbenzene	106.17	0.71		0.20	0.034
75-09-2	Methylene Chloride	84.93	0.068	U	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
179601-23-1	m,p-Xylene	106.17	0.74		0.50	0.077
91-20-3	Naphthalene	128.17	0.10	U	0.50	0.10
127-18-4	Tetrachloroethene	165.83	0.11	J	0.20	0.0098
108-88-3	Toluene	92.14	0.46		0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	0.027	J	0.20	0.026
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	0.040	U	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.057	U	0.20	0.057
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
95-47-6	Xylene, o-	106.17	0.13	J	0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-13 Lab Sample ID: 200-39823-9

Matrix: Air Lab File ID: 200-26579-020.D

Analysis Method: TO-15 Date Collected: 08/23/2017 10:06

Sample wt/vol: 200(mL) Date Analyzed: 08/26/2017 01:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.5		0.64	0.089
56-23-5	Carbon tetrachloride	153.81	0.58	J	1.3	0.069
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
74-87-3	Chloromethane	50.49	0.51	J	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
107-06-2	1,2-Dichloroethane	98.96	0.22	J	0.81	0.14
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
100-41-4	Ethylbenzene	106.17	3.1		0.87	0.15
75-09-2	Methylene Chloride	84.93	0.24	U	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
179601-23-1	m,p-Xylene	106.17	3.2		2.2	0.33
91-20-3	Naphthalene	128.17	0.52	U	2.6	0.52
127-18-4	Tetrachloroethene	165.83	0.74	J	1.4	0.066
108-88-3	Toluene	92.14	1.7		0.75	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.15	J	1.1	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.28	U	0.98	0.28
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
95-47-6	Xylene, o-	106.17	0.55	J	0.87	0.17

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D
Lims ID: 200-39823-A-9
Client ID: SV-13
Sample Type: Client
Inject. Date: 26-Aug-2017 01:47:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-020
Misc. Info.: 39823-09
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 12:00:59 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 12:00:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.513	3.513	0.000	97	6907	0.2459	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49	6.787	6.787	0.000	50	1329	0.0397	7
29 Methyl tert-butyl ether	73	7.167	7.161	0.006	14	1651	0.0210	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	82	364356	10.0	
44 1,1,1-Trichloroethane	97	9.842	9.842	-0.010	33	2753	0.0269	M
45 Carbon tetrachloride	117	10.088	10.088	0.000	97	9846	0.0925	
47 Benzene	78	10.548	10.553	-0.005	95	51288	0.4758	
48 1,2-Dichloroethane	62	10.735	10.740	-0.005	97	3690	0.0532	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1943549	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.421	14.426	-0.005	94	35517	0.4618	
68 Tetrachloroethene	166	15.480	15.486	-0.006	90	7996	0.1096	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1705661	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.551	17.551	0.001	99	119429	0.7144	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	48230	0.7372	
79 o-Xylene	106	18.663	18.663	0.000	52	8310	0.1266	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	47	2722	0.0179	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	97	6700	0.0449	
96 1,3-Dichlorobenzene	146	21.531	21.536	-0.005	91	1702	0.0165	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015	Amount Added:	20.00	Units: mL	Run Reagent

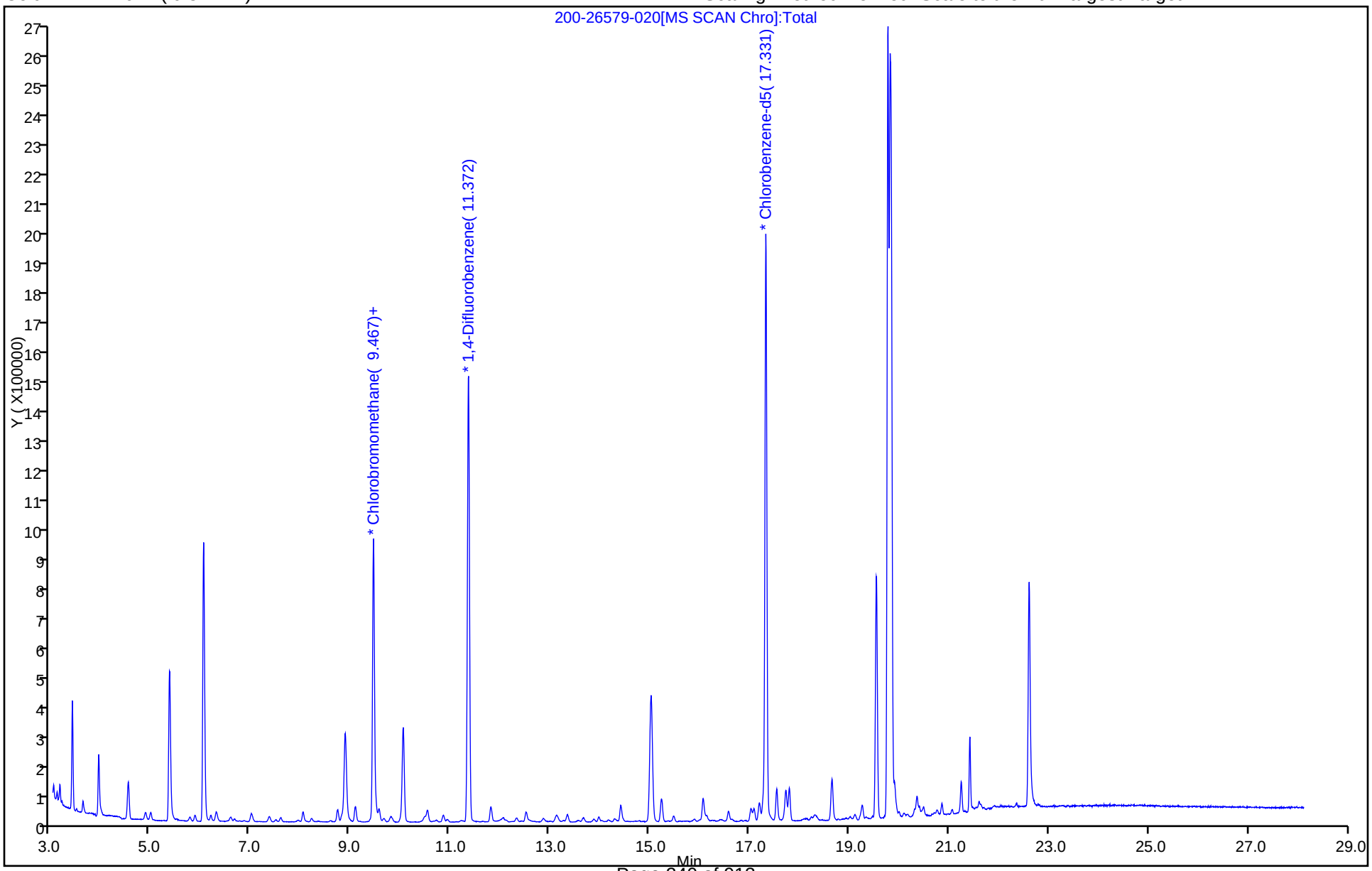
Report Date: 28-Aug-2017 12:00:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9	Worklist Smp#:	20
Client ID:	SV-13				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



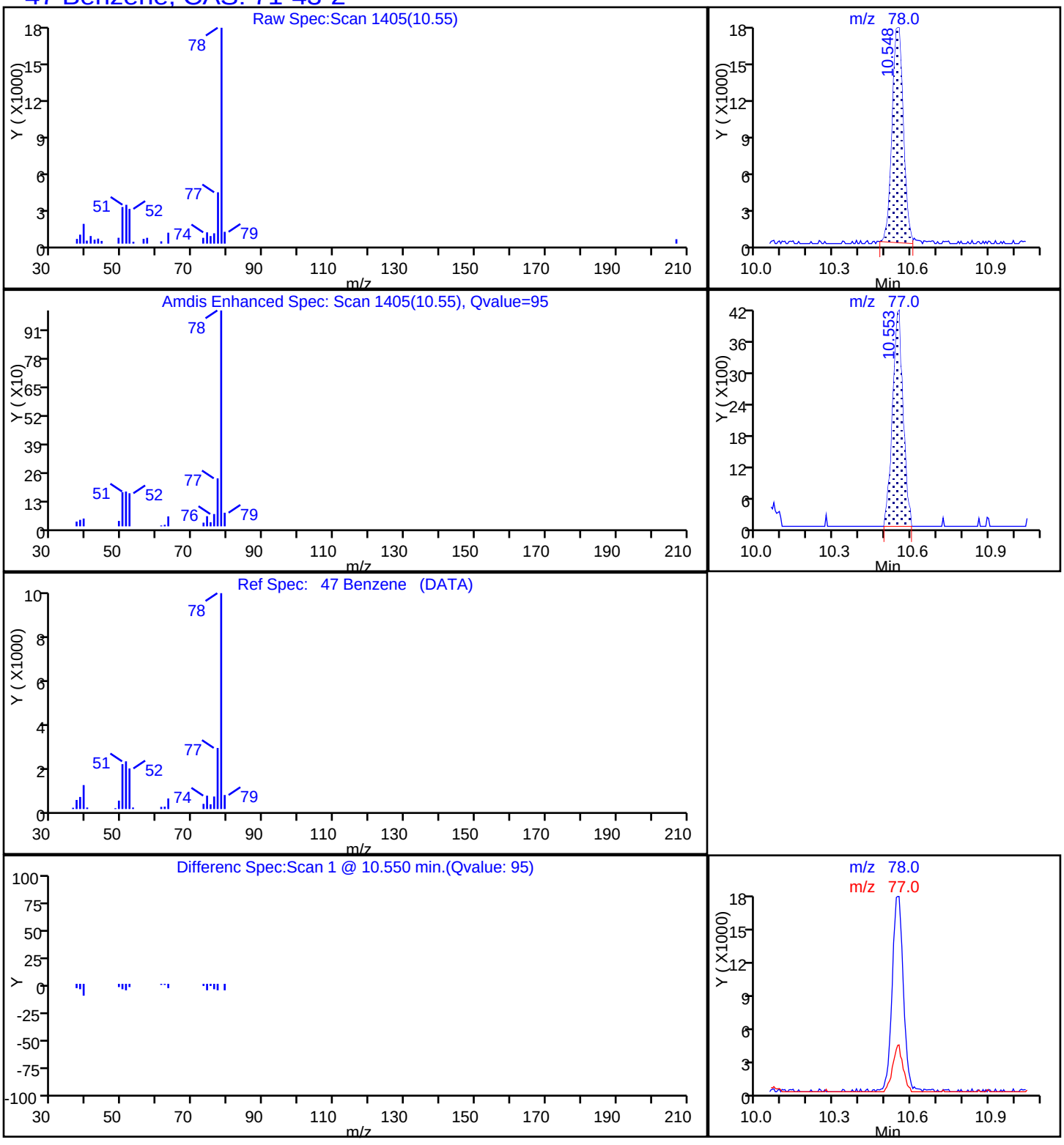
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



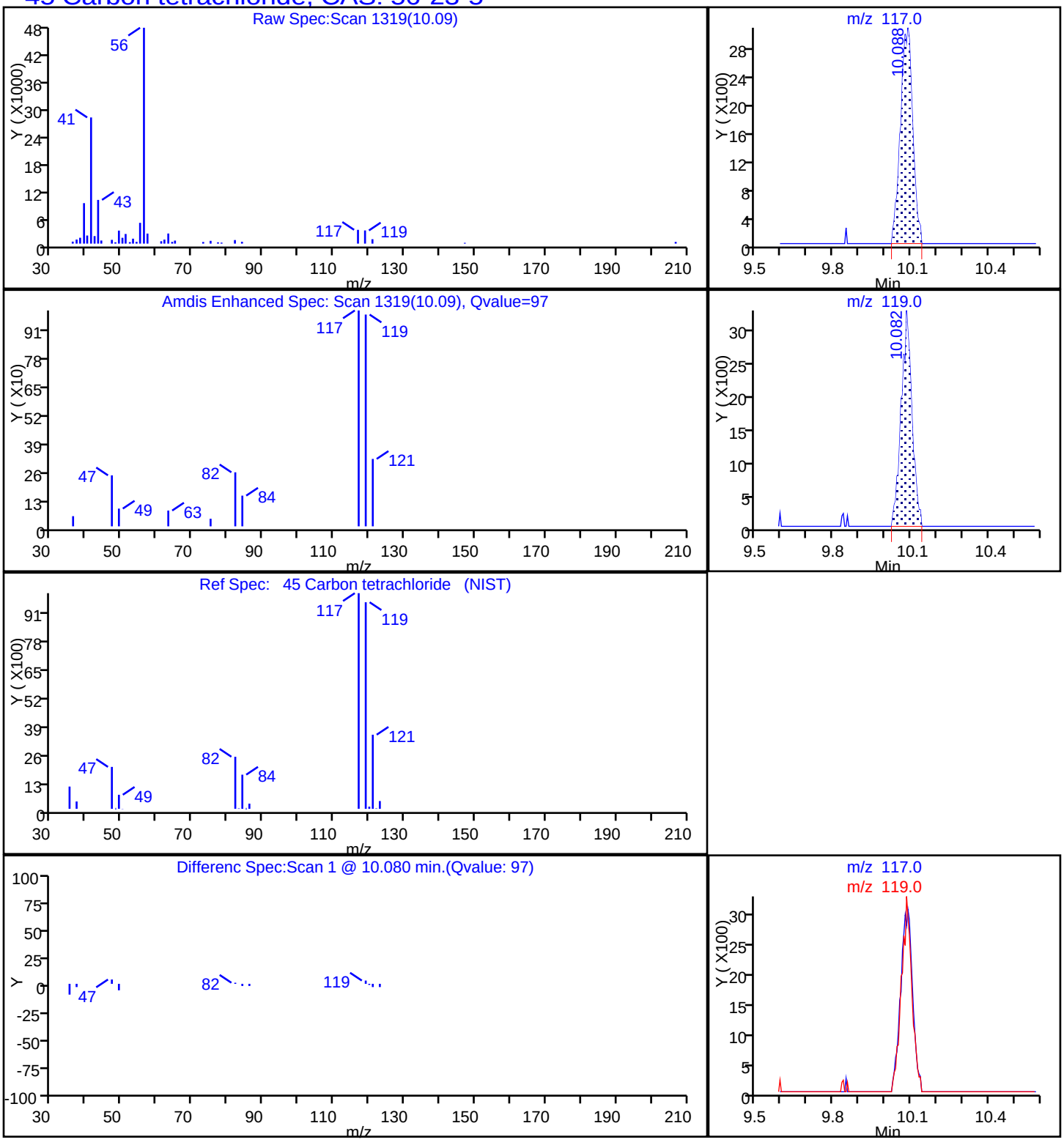
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5



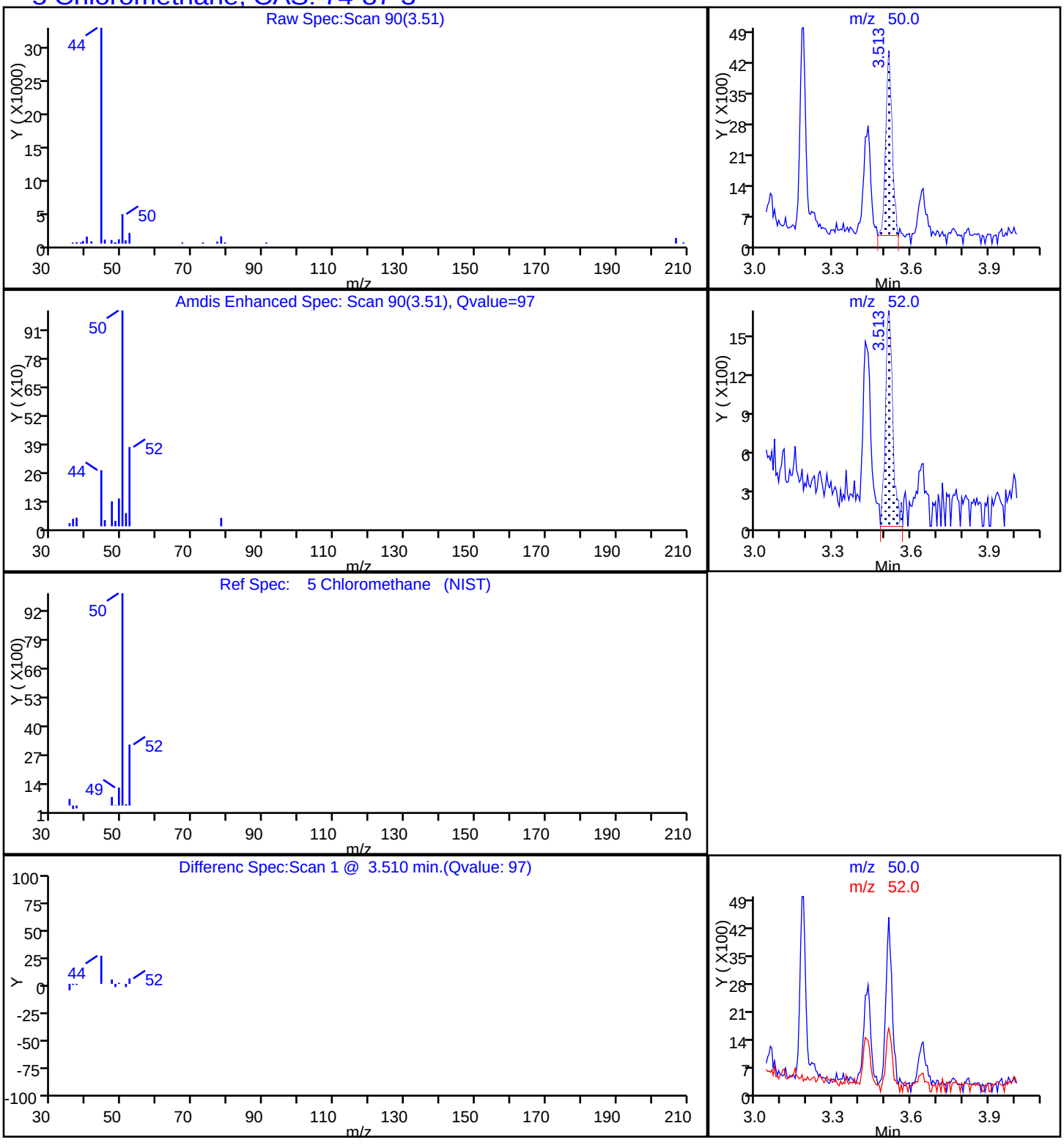
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



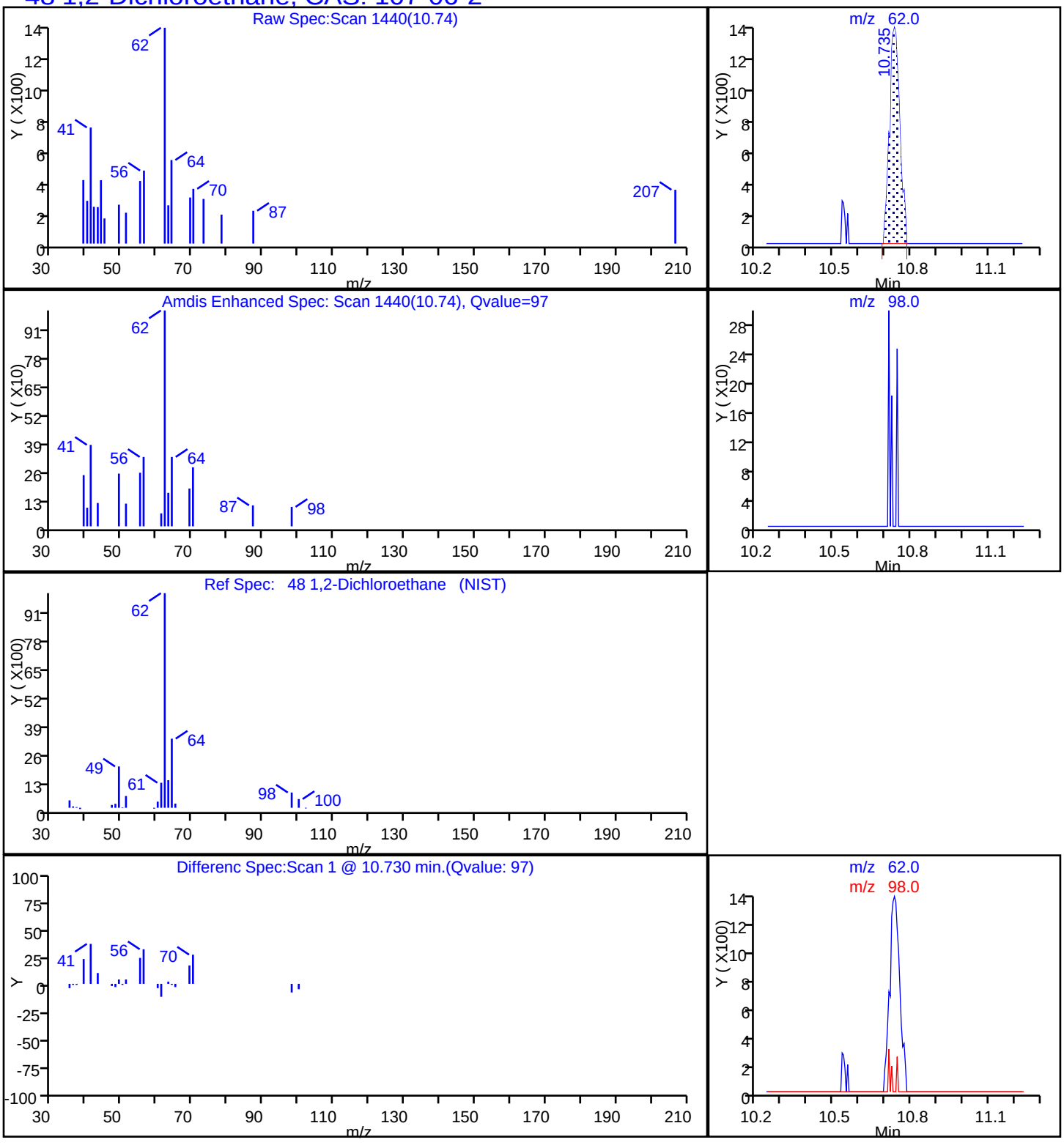
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2



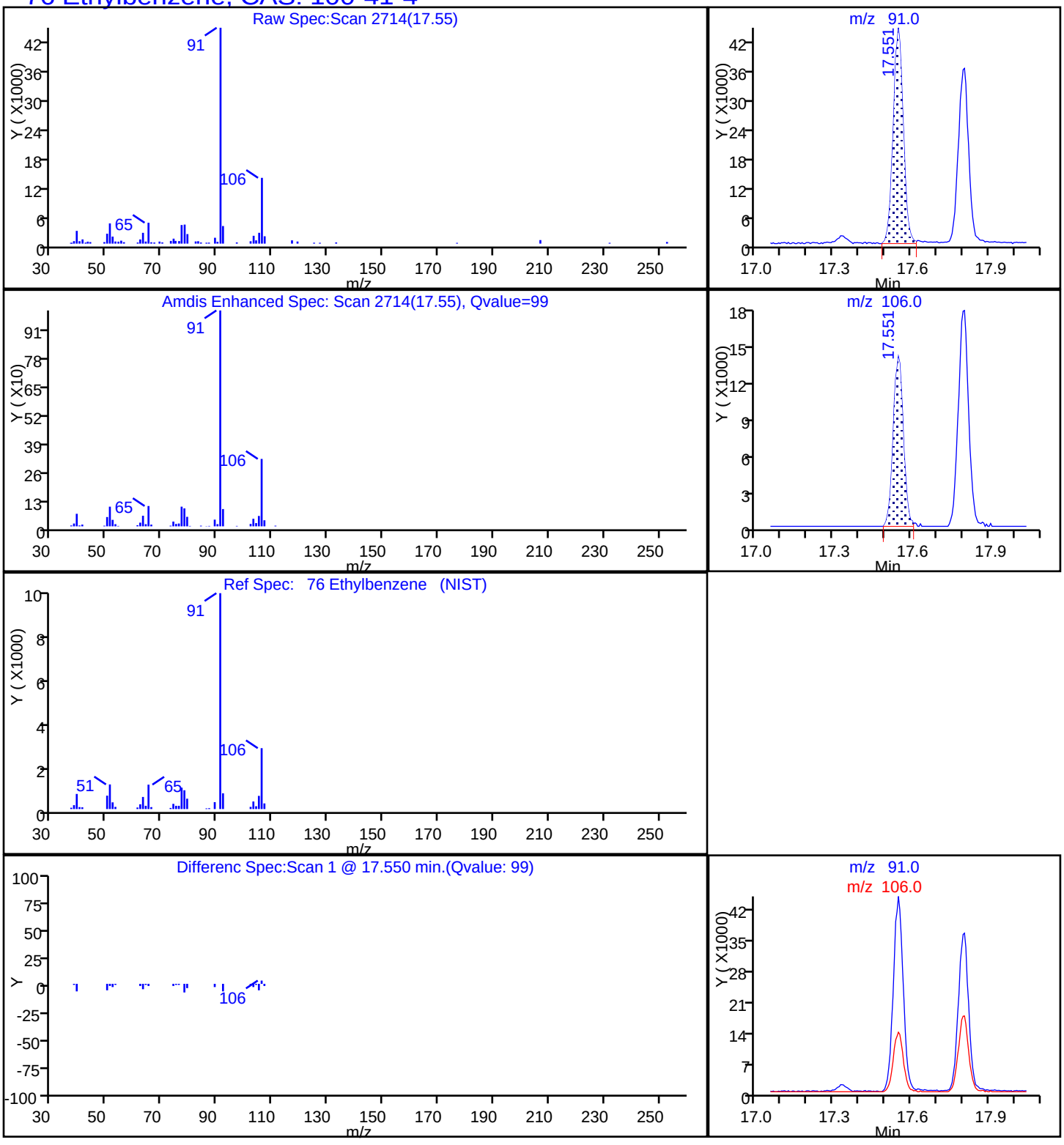
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

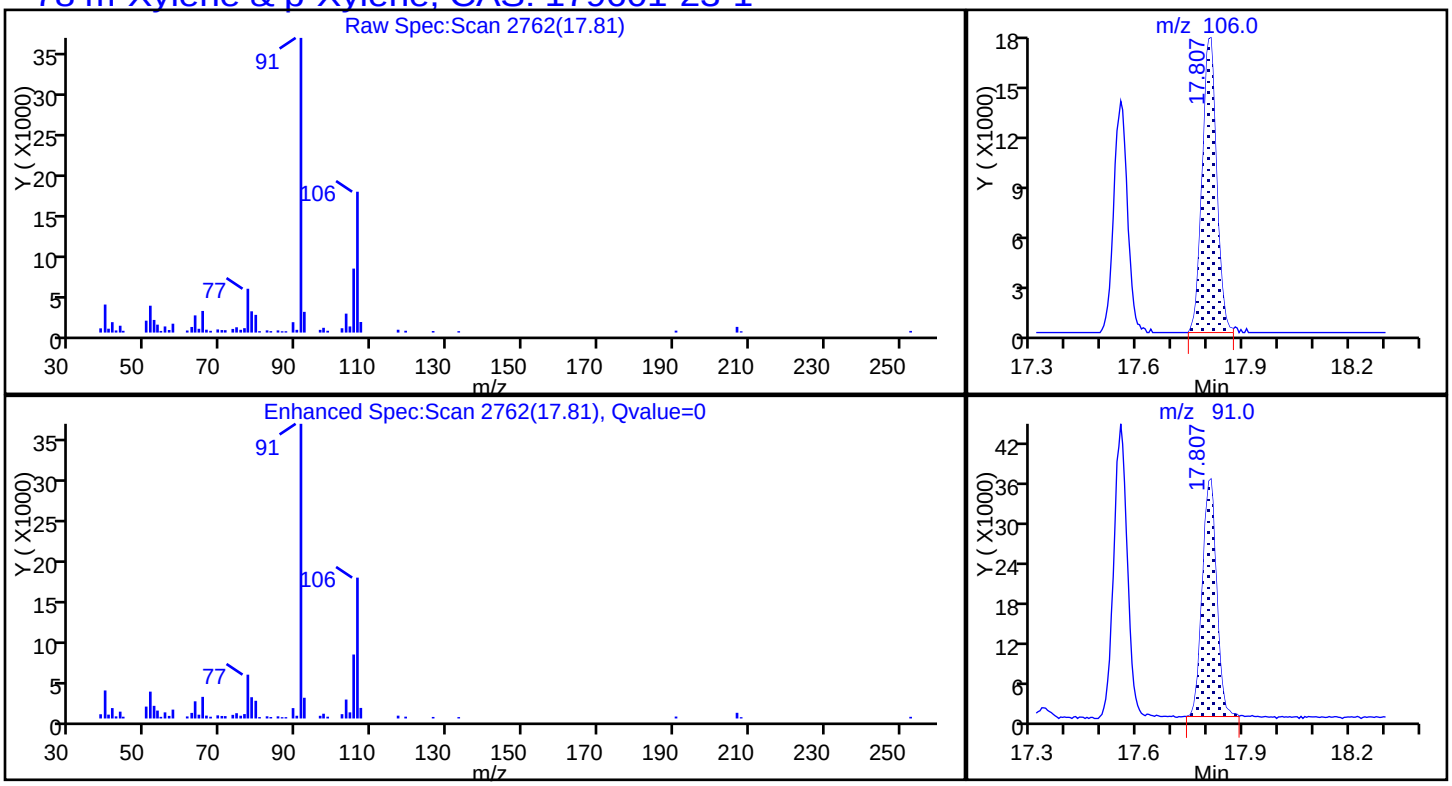


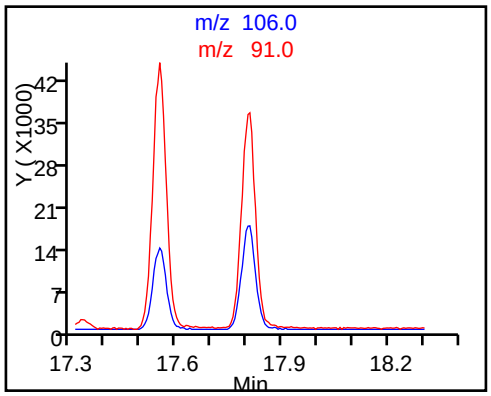
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D				
Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





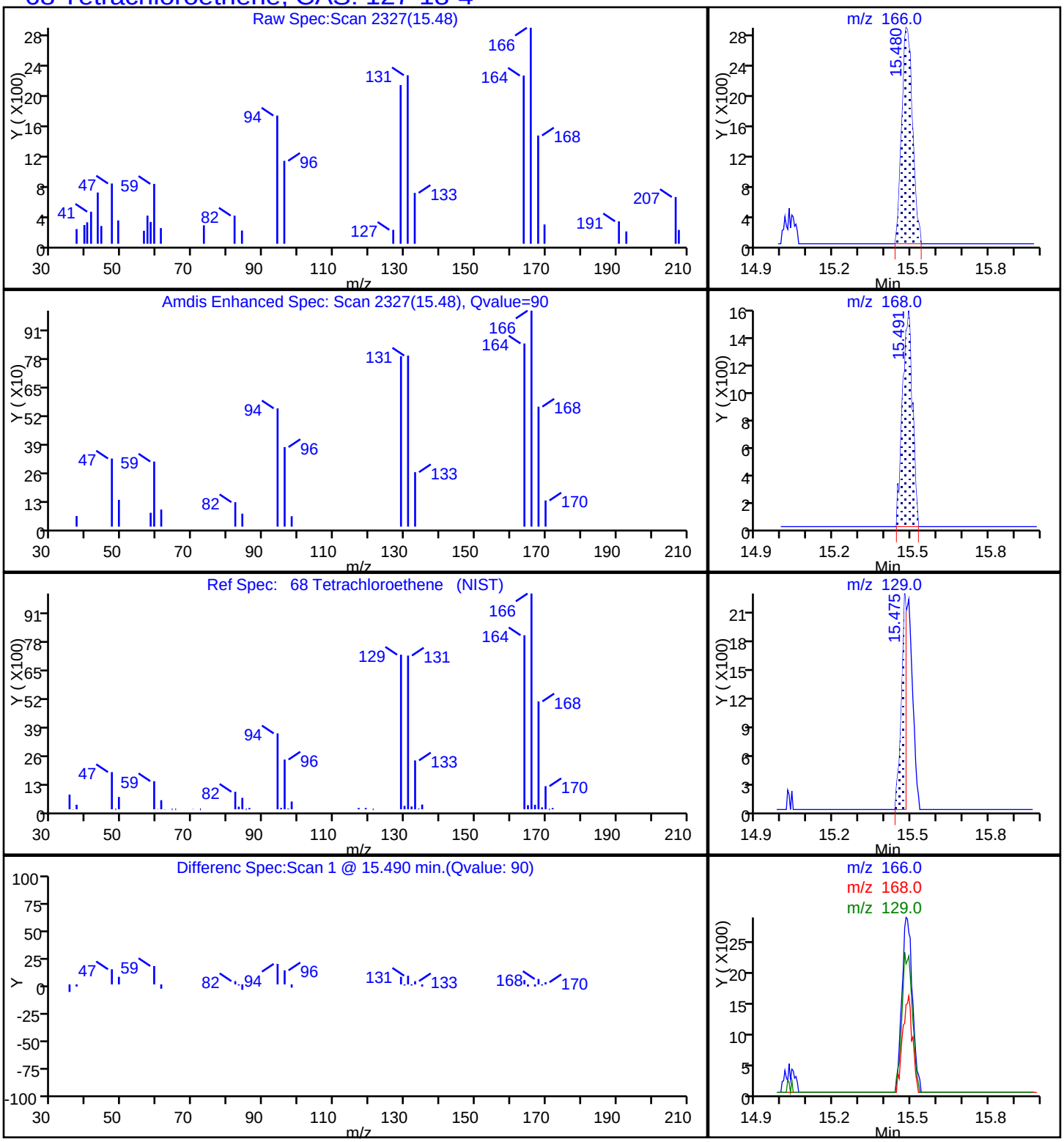
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



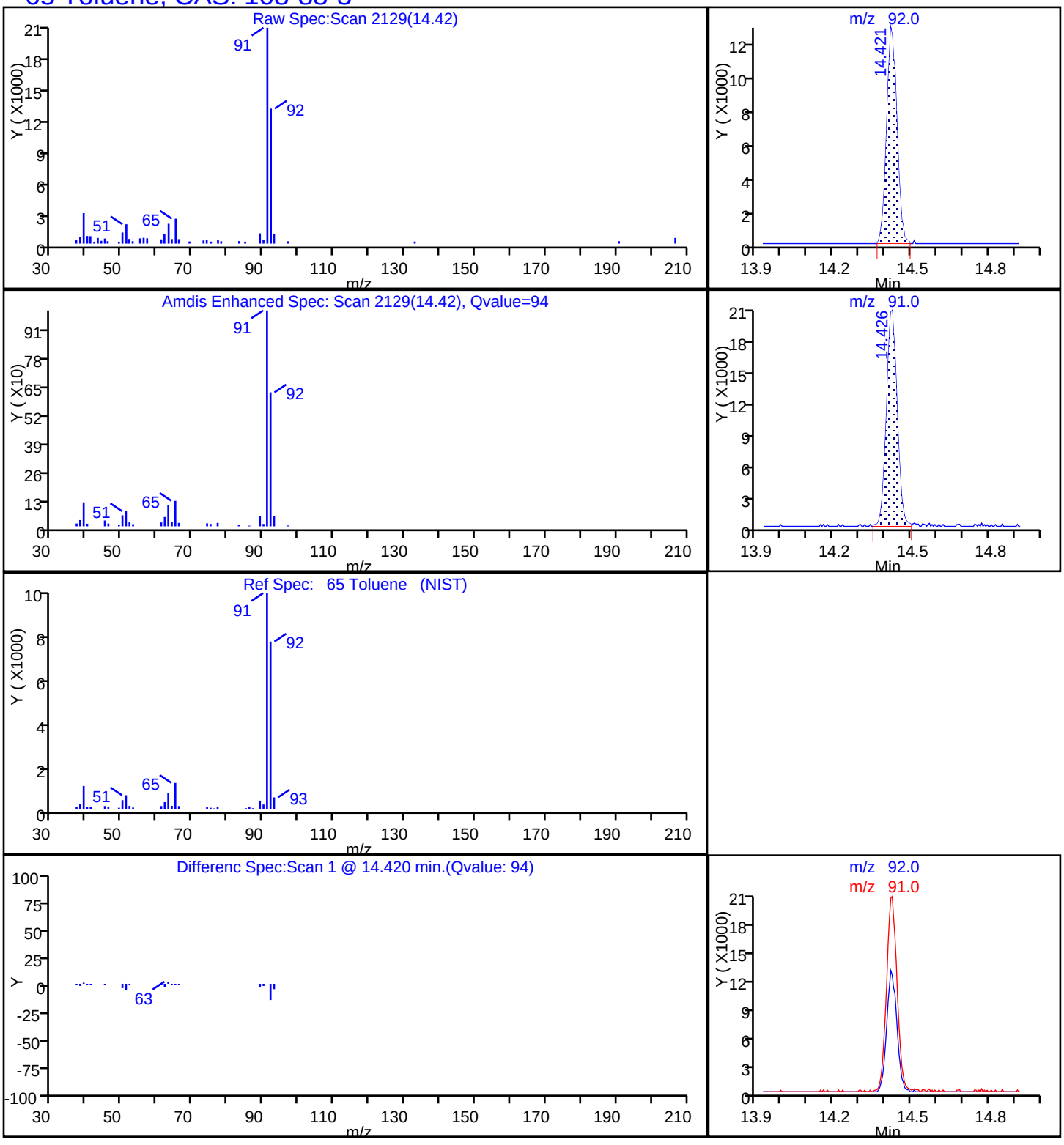
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



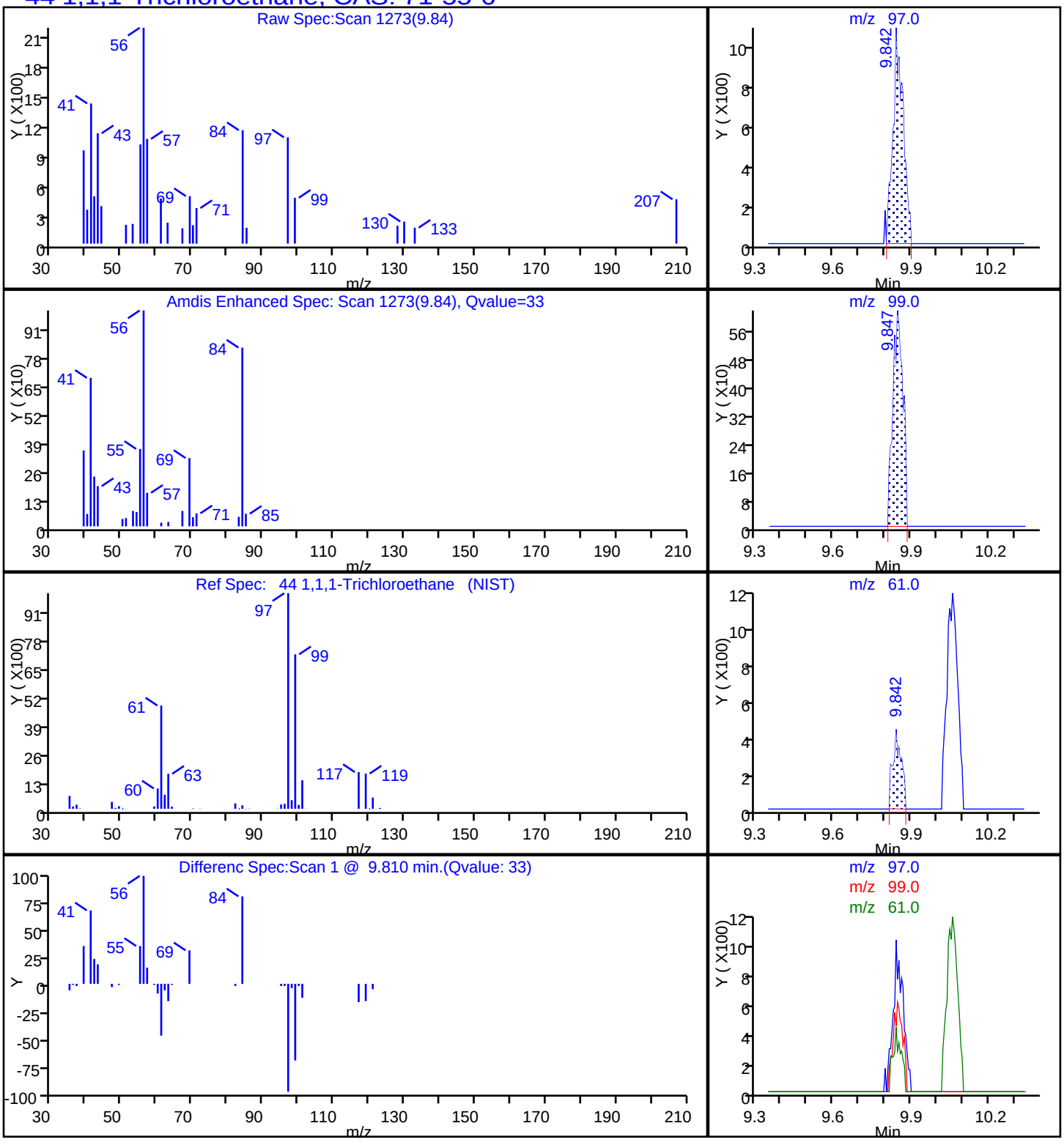
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6



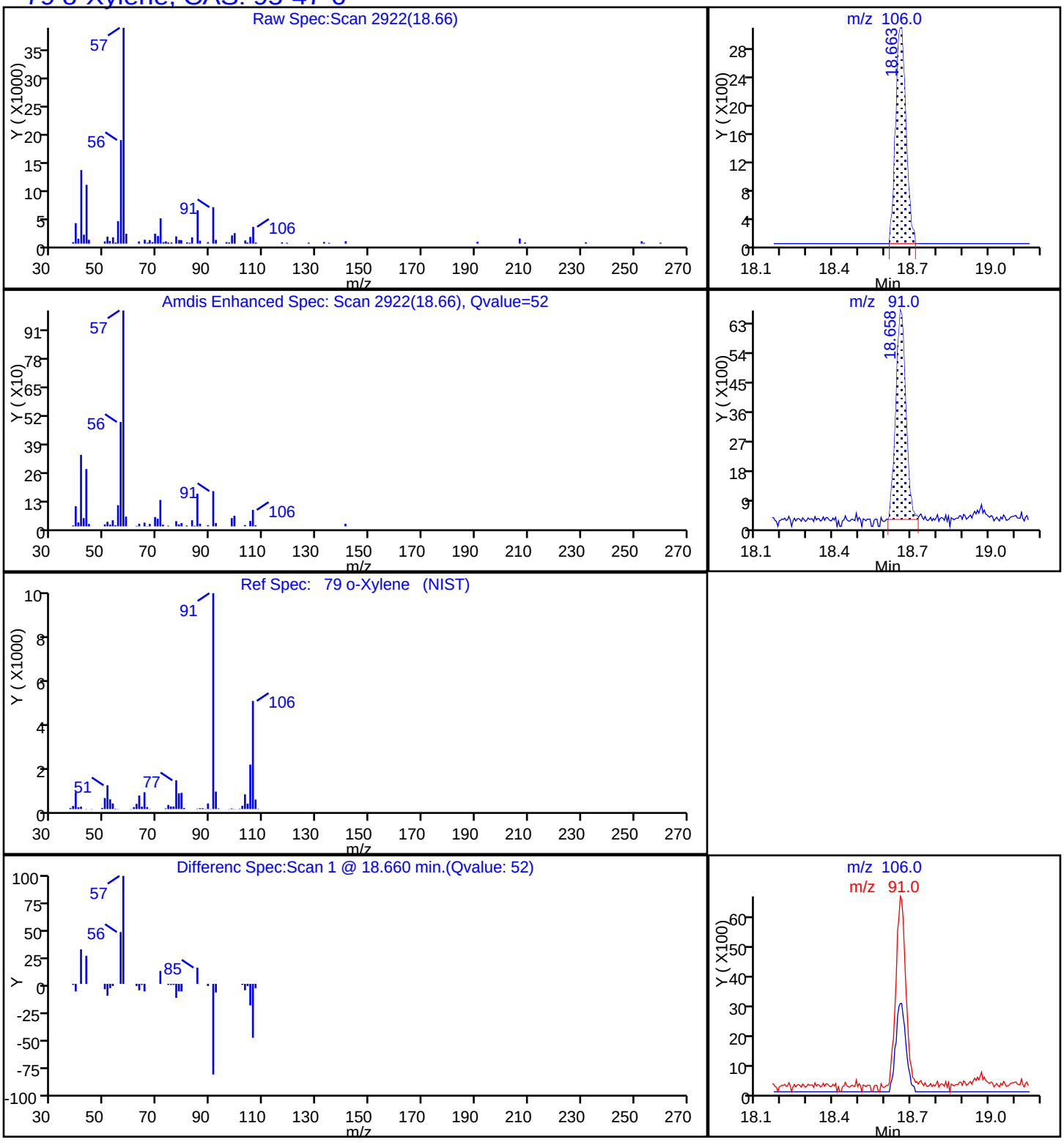
Report Date: 28-Aug-2017 12:01:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D

Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

TestAmerica Burlington

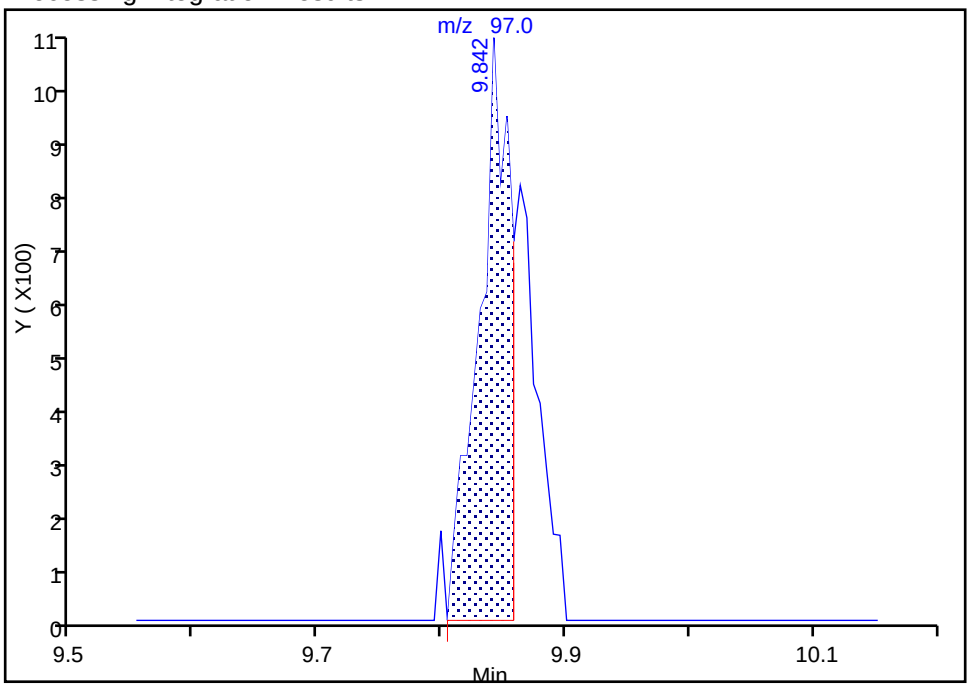
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D				
Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

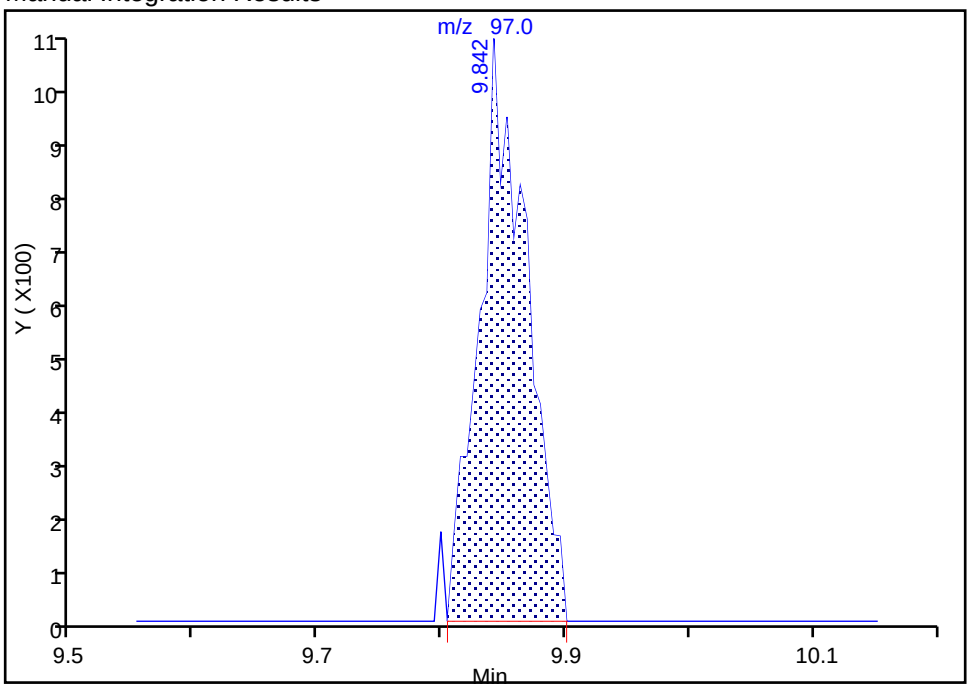
Processing Integration Results

RT: 9.84
Area: 1829
Amount: 0.017861
Amount Units: ppb v/v



Manual Integration Results

RT: 9.84
Area: 2753
Amount: 0.026884
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:58:55

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

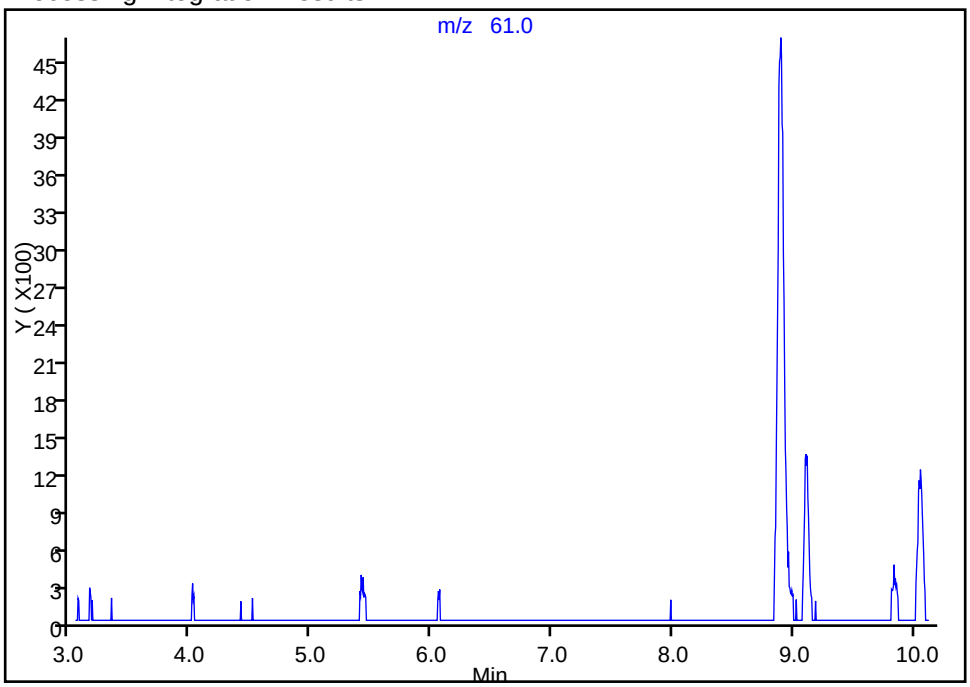
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-020.D				
Injection Date:	26-Aug-2017 01:47:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-9	Lab Sample ID:	200-39823-9		
Client ID:	SV-13				
Operator ID:	pad	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 3

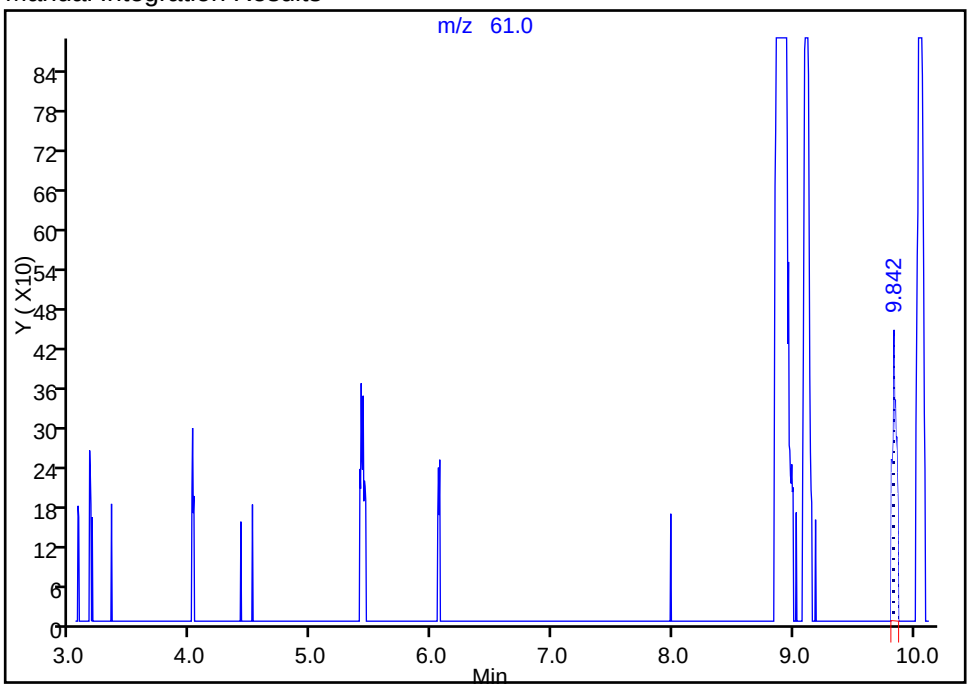
Processing Integration Results

RT: 9.85
Area: 0
Amount: 0.017861
Amount Units: ppb v/v



Manual Integration Results

RT: 9.84
Area: 959
Amount: 0.026884
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 11:59:07

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-16 Lab Sample ID: 200-39823-10

Matrix: Air Lab File ID: 200-26579-021.D

Analysis Method: TO-15 Date Collected: 08/23/2017 11:15

Sample wt/vol: 21(mL) Date Analyzed: 08/26/2017 02:37

Soil Aliquot Vol: Dilution Factor: 49.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.4	U	9.9	1.4
56-23-5	Carbon tetrachloride	153.81	0.54	U	9.9	0.54
108-90-7	Chlorobenzene	112.56	1.2	U	9.9	1.2
75-00-3	Chloroethane	64.52	6.4	U	25	6.4
74-87-3	Chloromethane	50.49	7.9	U	25	7.9
156-59-2	cis-1,2-Dichloroethene	96.94	1.4	U	9.9	1.4
541-73-1	1,3-Dichlorobenzene	147.00	2.5	U	9.9	2.5
95-50-1	1,2-Dichlorobenzene	147.00	2.2	U	9.9	2.2
75-34-3	1,1-Dichloroethane	98.96	2.7	J	9.9	0.84
107-06-2	1,2-Dichloroethane	98.96	1.7	U	9.9	1.7
75-35-4	1,1-Dichloroethene	96.94	1.7	U	9.9	1.7
78-87-5	1,2-Dichloropropane	112.99	1.7	U	9.9	1.7
100-41-4	Ethylbenzene	106.17	2.1	J	9.9	1.7
75-09-2	Methylene Chloride	84.93	3.4	U	25	3.4
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	9.9	2.0
179601-23-1	m,p-Xylene	106.17	3.8	U	25	3.8
91-20-3	Naphthalene	128.17	5.0	U	25	5.0
127-18-4	Tetrachloroethene	165.83	0.49	U	9.9	0.49
108-88-3	Toluene	92.14	2.6	J	9.9	1.7
156-60-5	trans-1,2-Dichloroethene	96.94	2.5	U	9.9	2.5
71-55-6	1,1,1-Trichloroethane	133.41	1.3	U	9.9	1.3
79-01-6	Trichloroethene	131.39	0.45	U	9.9	0.45
108-67-8	1,3,5-Trimethylbenzene	120.20	2.0	U	9.9	2.0
95-63-6	1,2,4-Trimethylbenzene	120.20	2.8	U	9.9	2.8
75-01-4	Vinyl chloride	62.50	0.89	U	9.9	0.89
95-47-6	Xylene, o-	106.17	2.0	U	9.9	2.0

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-16 Lab Sample ID: 200-39823-10

Matrix: Air Lab File ID: 200-26579-021.D

Analysis Method: TO-15 Date Collected: 08/23/2017 11:15

Sample wt/vol: 21(mL) Date Analyzed: 08/26/2017 02:37

Soil Aliquot Vol: Dilution Factor: 49.5

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	4.4	U	32	4.4
56-23-5	Carbon tetrachloride	153.81	3.4	U	62	3.4
108-90-7	Chlorobenzene	112.56	5.7	U	46	5.7
75-00-3	Chloroethane	64.52	17	U	65	17
74-87-3	Chloromethane	50.49	16	U	51	16
156-59-2	cis-1,2-Dichloroethene	96.94	5.7	U	39	5.7
541-73-1	1,3-Dichlorobenzene	147.00	15	U	60	15
95-50-1	1,2-Dichlorobenzene	147.00	13	U	60	13
75-34-3	1,1-Dichloroethane	98.96	11	J	40	3.4
107-06-2	1,2-Dichloroethane	98.96	6.8	U	40	6.8
75-35-4	1,1-Dichloroethene	96.94	6.9	U	39	6.9
78-87-5	1,2-Dichloropropane	112.99	8.0	U	46	8.0
100-41-4	Ethylbenzene	106.17	9.3	J	43	7.3
75-09-2	Methylene Chloride	84.93	12	U	86	12
1634-04-4	Methyl tert-butyl ether	88.15	7.3	U	36	7.3
179601-23-1	m,p-Xylene	106.17	17	U	110	17
91-20-3	Naphthalene	128.17	26	U	130	26
127-18-4	Tetrachloroethene	165.83	3.3	U	67	3.3
108-88-3	Toluene	92.14	9.9	J	37	6.5
156-60-5	trans-1,2-Dichloroethene	96.94	9.8	U	39	9.8
71-55-6	1,1,1-Trichloroethane	133.41	7.0	U	54	7.0
79-01-6	Trichloroethene	131.39	2.4	U	53	2.4
108-67-8	1,3,5-Trimethylbenzene	120.20	9.7	U	49	9.7
95-63-6	1,2,4-Trimethylbenzene	120.20	14	U	49	14
75-01-4	Vinyl chloride	62.50	2.3	U	25	2.3
95-47-6	Xylene, o-	106.17	8.6	U	43	8.6

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D
Lims ID: 200-39823-A-10
Client ID: SV-16
Sample Type: Client
Inject. Date: 26-Aug-2017 02:37:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 200.000 mL Dil. Factor: 49.5000
Sample Info: 200-0026579-021
Misc. Info.: 39823-10
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 12:06:21 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 12:06:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64	4.497	4.503	-0.006	85	1354	0.1022	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63	8.028	7.991	0.037	95	3023	0.0542	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.499	9.467	0.032	80	349106	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.388	11.372	0.016	94	1729417	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.432	14.426	0.006	94	3792	0.0529	
68 Tetrachloroethene	166		15.486				ND	
* 74 Chlorobenzene-d5	117	17.337	17.337	-0.001	87	1588706	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.561	17.545	0.011	91	6738	0.0433	M
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	4160	0.0683	
79 o-Xylene	106	18.669	18.669	0.006	51	977	0.0160	M
90 1,3,5-Trimethylbenzene	105		20.466				ND	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	87	2063	0.0148	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

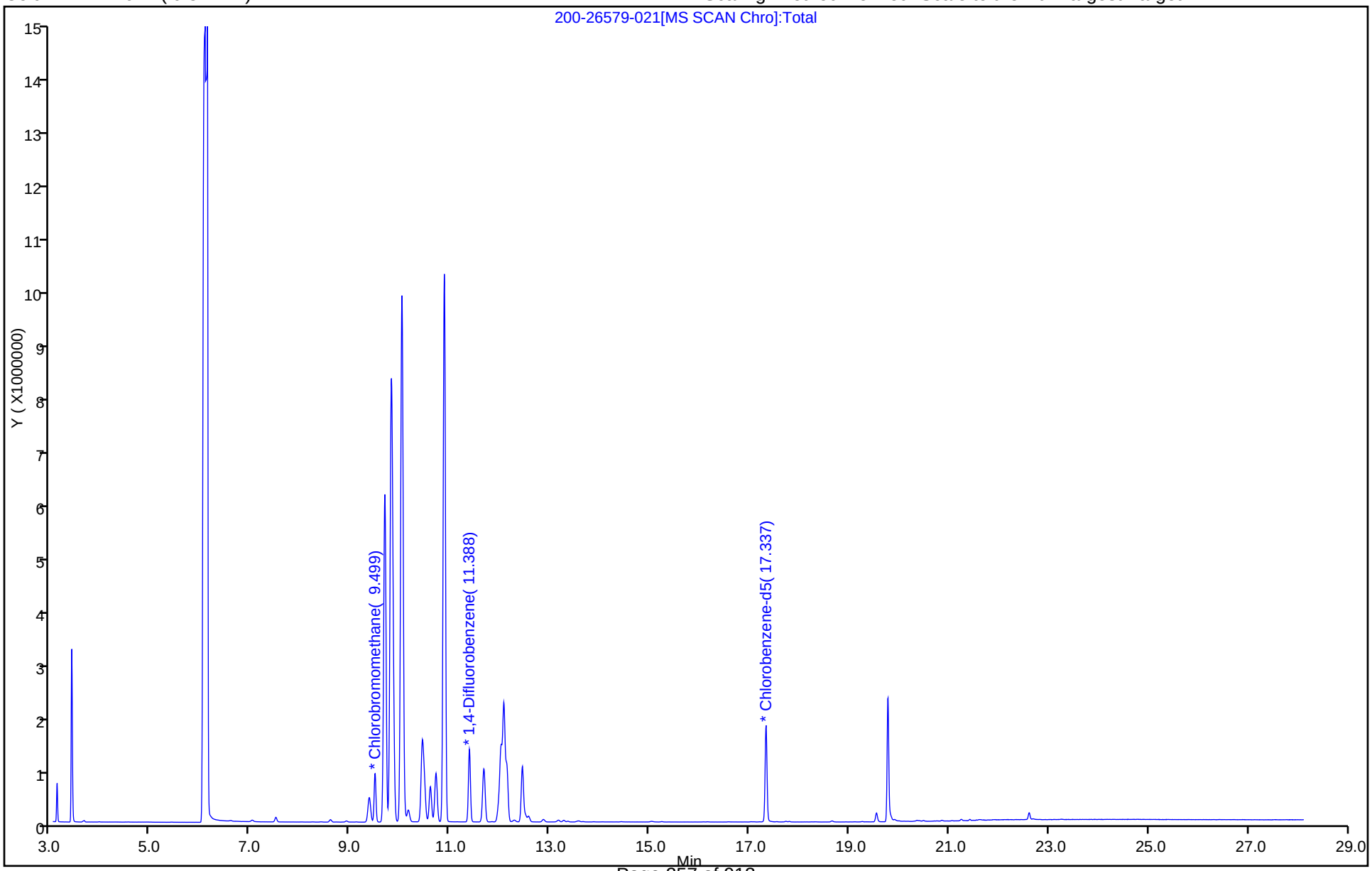
Report Date: 28-Aug-2017 12:06:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D

Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10	Worklist Smp#:	21
Client ID:	SV-16				
Purge Vol:	200.000 mL	Dil. Factor:	49.5000	ALS Bottle#:	20
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



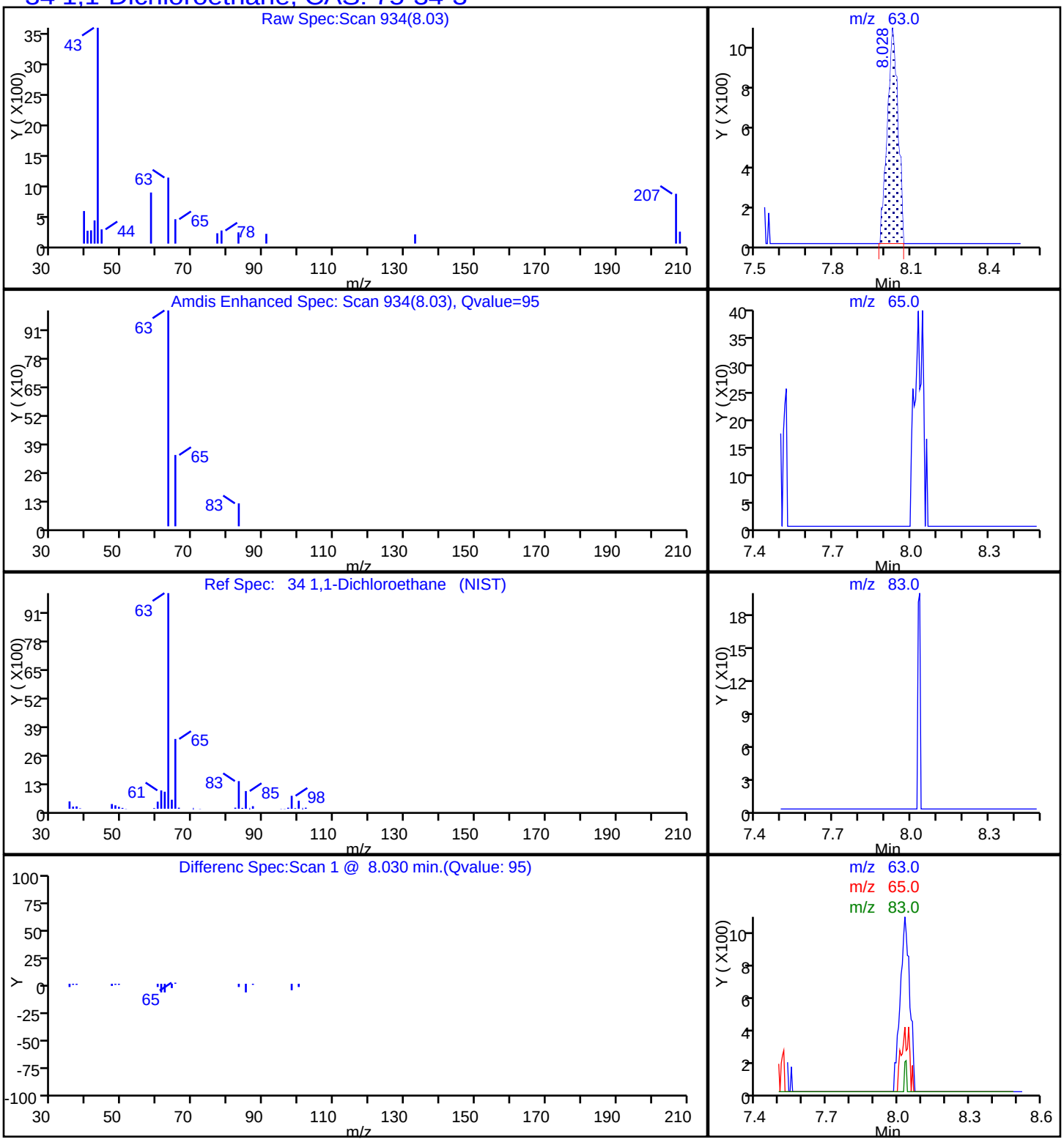
Report Date: 28-Aug-2017 12:06:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D

Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10		
Client ID:	SV-16				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	49.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

34 1,1-Dichloroethane, CAS: 75-34-3



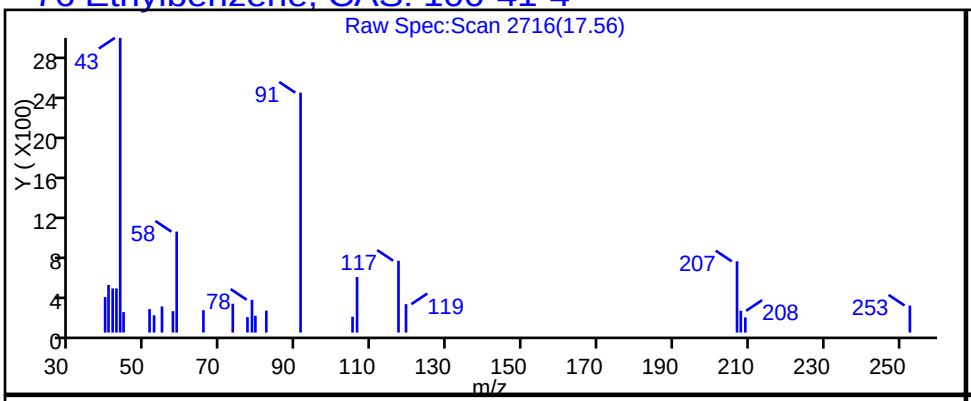
Report Date: 28-Aug-2017 12:06:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

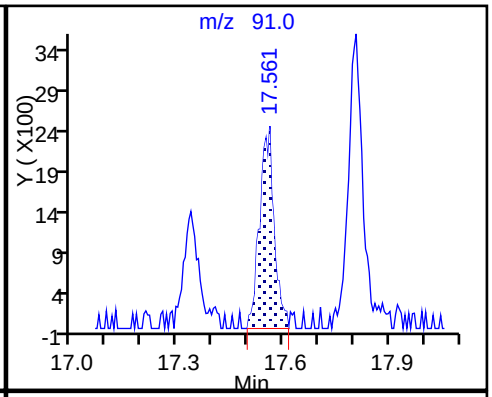
TestAmerica Burlington

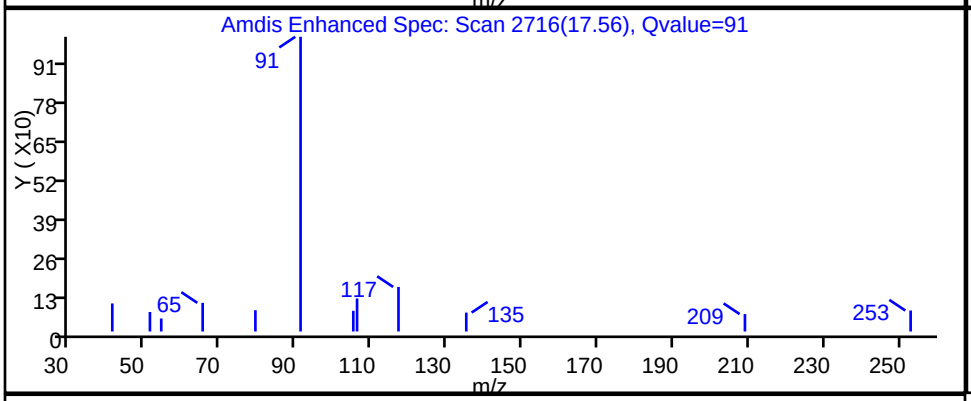
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D

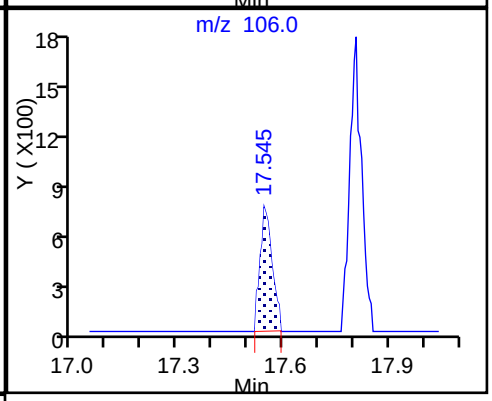
Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10		
Client ID:	SV-16				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	49.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

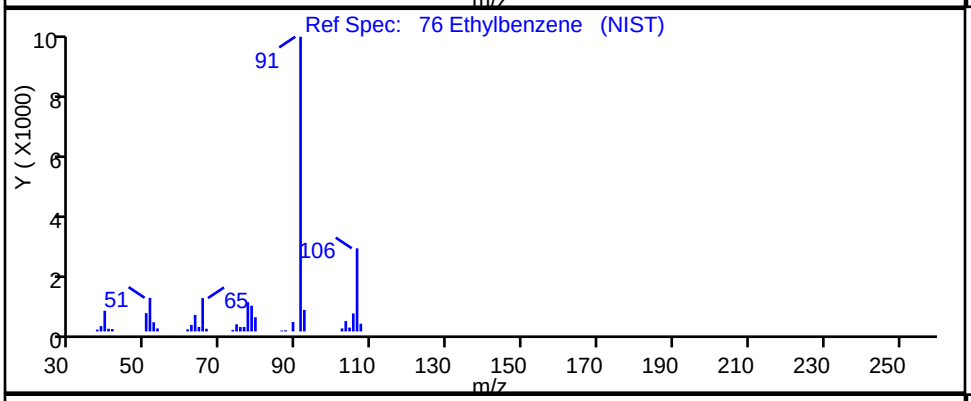
76 Ethylbenzene, CAS: 100-41-4

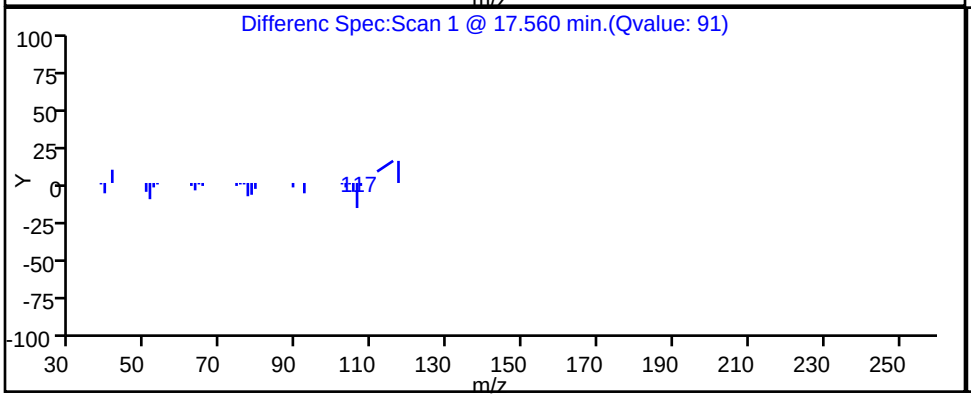


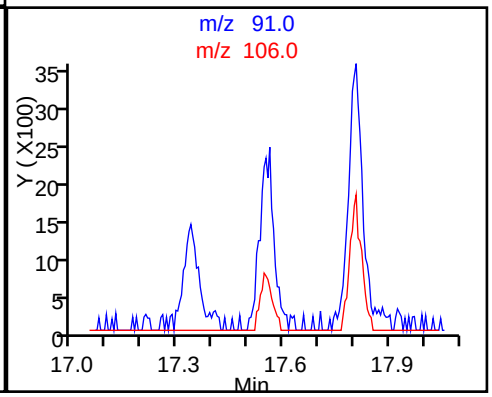












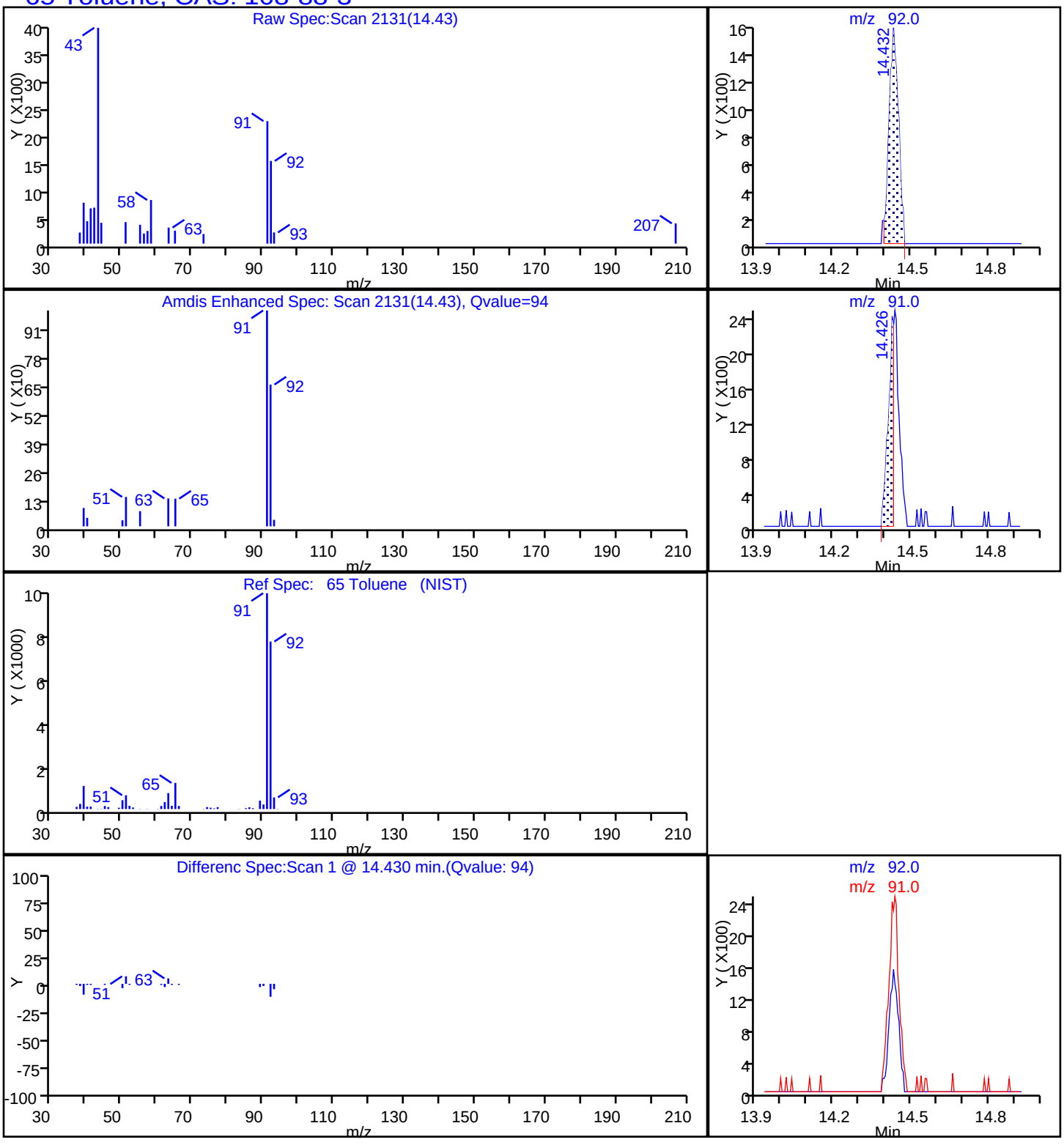
Report Date: 28-Aug-2017 12:06:21 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D

Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10		
Client ID:	SV-16				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	49.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

TestAmerica Burlington

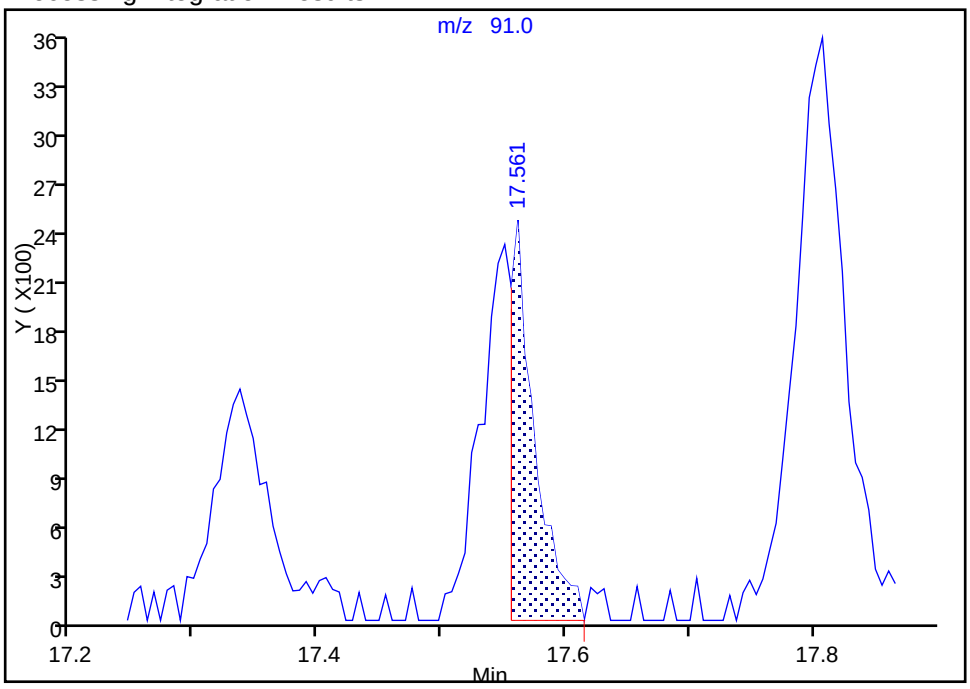
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D				
Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10		
Client ID:	SV-16				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	49.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 1

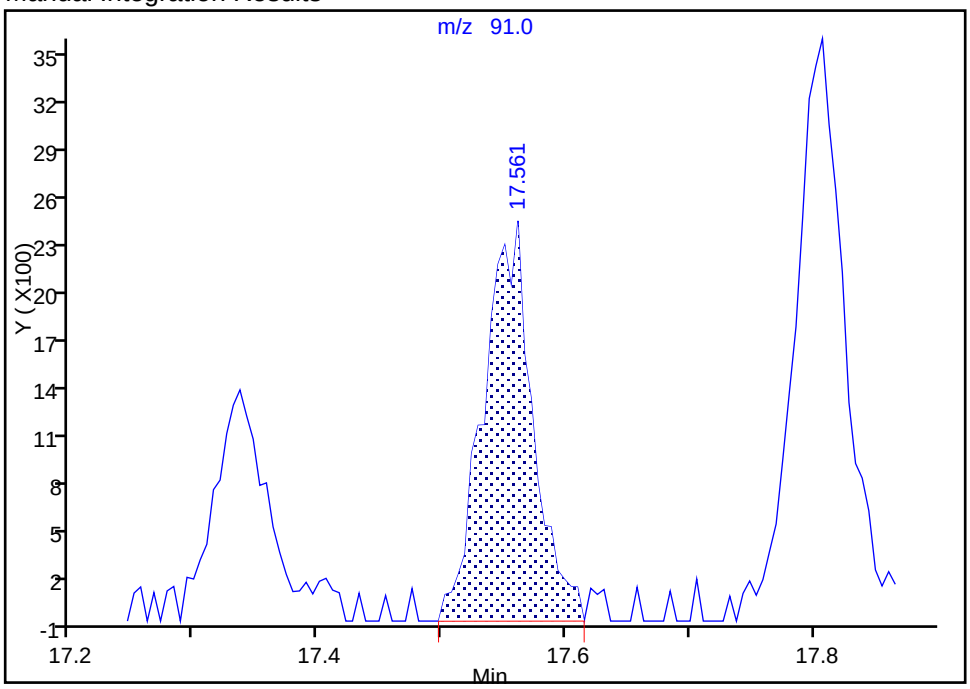
Processing Integration Results

RT: 17.56
Area: 3315
Amount: 0.021290
Amount Units: ppb v/v



Manual Integration Results

RT: 17.56
Area: 6738
Amount: 0.043275
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:02:44

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

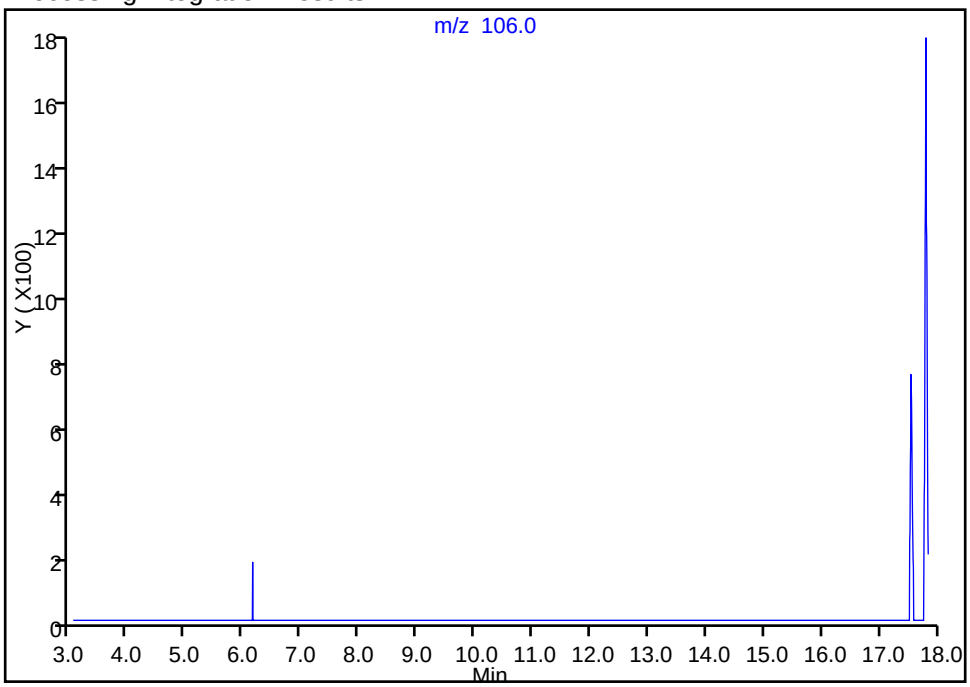
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D				
Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10		
Client ID:	SV-16				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	49.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 2

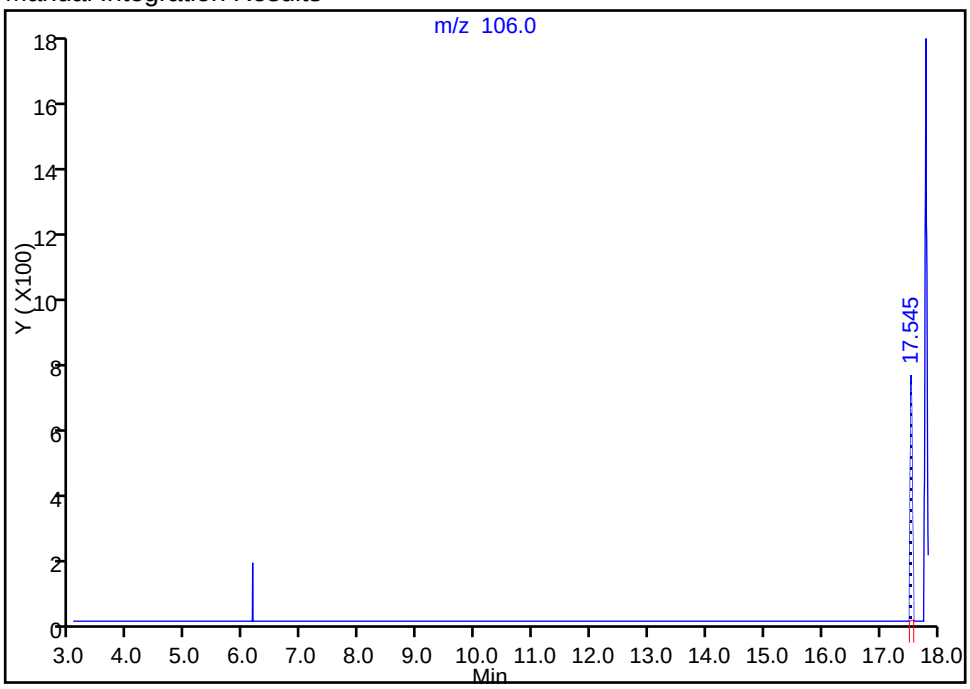
Processing Integration Results

RT: 17.55
Area: 0
Amount: 0.021290
Amount Units: ppb v/v



Manual Integration Results

RT: 17.55
Area: 1777
Amount: 0.043275
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:02:54

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

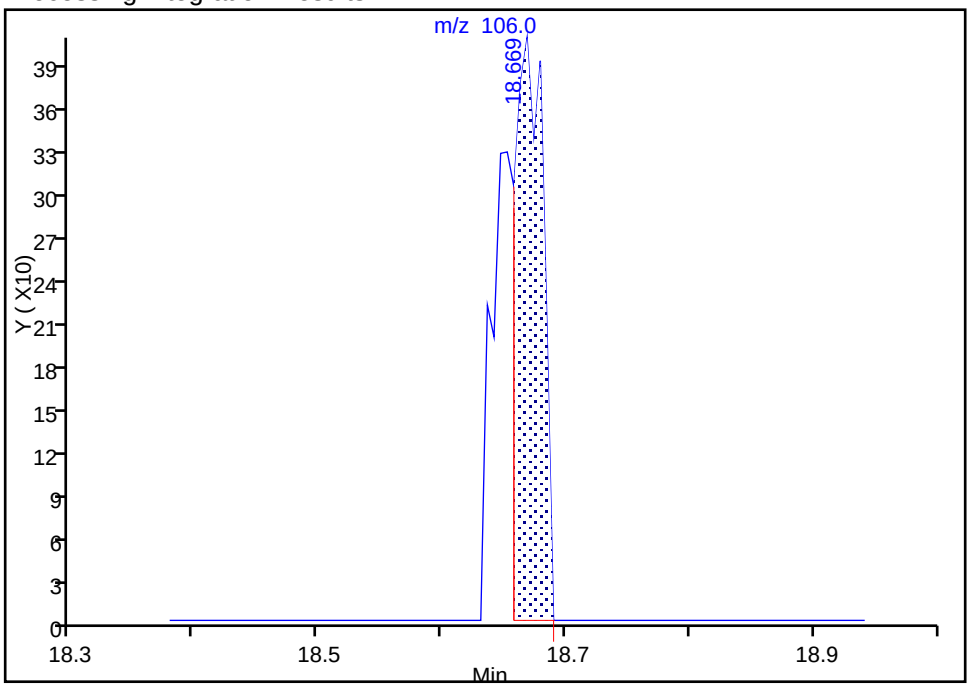
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-021.D				
Injection Date:	26-Aug-2017 02:37:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-10	Lab Sample ID:	200-39823-10		
Client ID:	SV-16				
Operator ID:	pad	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	200.000 mL	Dil. Factor:	49.5000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6

Signal: 1

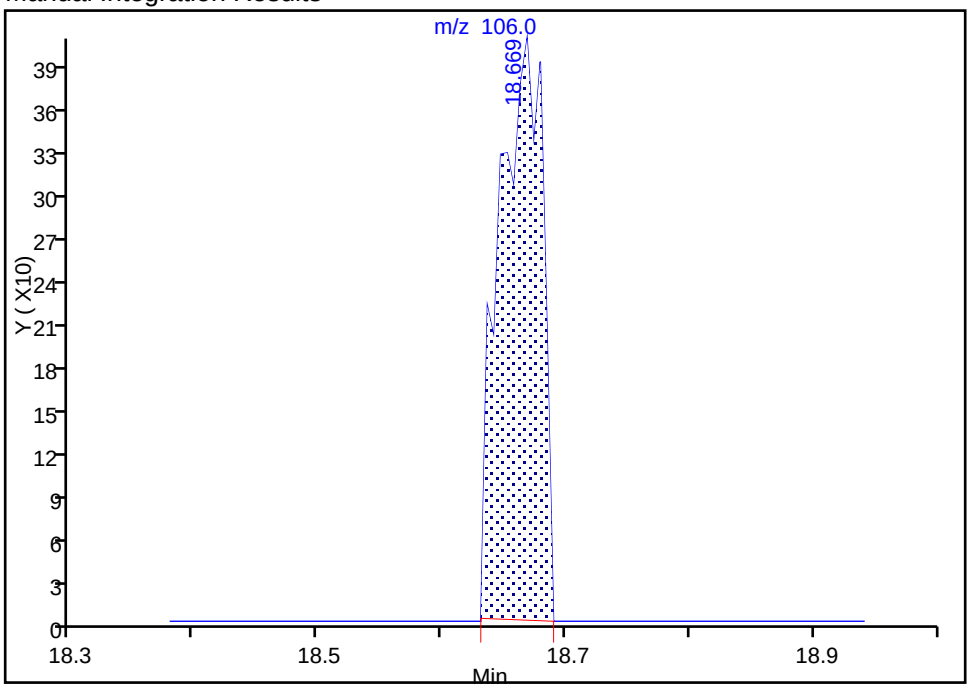
Processing Integration Results

RT: 18.67
Area: 640
Amount: 0.010468
Amount Units: ppb v/v



Manual Integration Results

RT: 18.67
Area: 977
Amount: 0.015980
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:03:16

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-18 Lab Sample ID: 200-39823-11

Matrix: Air Lab File ID: 200-26579-022.D

Analysis Method: TO-15 Date Collected: 08/23/2017 12:11

Sample wt/vol: 35(mL) Date Analyzed: 08/26/2017 03:28

Soil Aliquot Vol: Dilution Factor: 60.1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.7	U	12	1.7
56-23-5	Carbon tetrachloride	153.81	0.66	U	12	0.66
108-90-7	Chlorobenzene	112.56	1.5	U	12	1.5
75-00-3	Chloroethane	64.52	7.8	U	30	7.8
74-87-3	Chloromethane	50.49	9.6	U	30	9.6
156-59-2	cis-1,2-Dichloroethene	96.94	1.7	U	12	1.7
541-73-1	1,3-Dichlorobenzene	147.00	3.0	U	12	3.0
95-50-1	1,2-Dichlorobenzene	147.00	2.7	U	12	2.7
75-34-3	1,1-Dichloroethane	98.96	1.0	U	12	1.0
107-06-2	1,2-Dichloroethane	98.96	2.0	U	12	2.0
75-35-4	1,1-Dichloroethene	96.94	2.1	U	12	2.1
78-87-5	1,2-Dichloropropane	112.99	2.1	U	12	2.1
100-41-4	Ethylbenzene	106.17	2.0	U	12	2.0
75-09-2	Methylene Chloride	84.93	4.1	U	30	4.1
1634-04-4	Methyl tert-butyl ether	88.15	2.5	U	12	2.5
179601-23-1	m,p-Xylene	106.17	4.6	U	30	4.6
91-20-3	Naphthalene	128.17	6.0	U	30	6.0
127-18-4	Tetrachloroethene	165.83	0.59	U	12	0.59
108-88-3	Toluene	92.14	4.4	J	12	2.1
156-60-5	trans-1,2-Dichloroethene	96.94	3.0	U	12	3.0
71-55-6	1,1,1-Trichloroethane	133.41	1.6	U	12	1.6
79-01-6	Trichloroethene	131.39	0.55	U	12	0.55
108-67-8	1,3,5-Trimethylbenzene	120.20	2.4	U	12	2.4
95-63-6	1,2,4-Trimethylbenzene	120.20	3.4	U	12	3.4
75-01-4	Vinyl chloride	62.50	1.1	U	12	1.1
95-47-6	Xylene, o-	106.17	2.4	U	12	2.4

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-18 Lab Sample ID: 200-39823-11

Matrix: Air Lab File ID: 200-26579-022.D

Analysis Method: TO-15 Date Collected: 08/23/2017 12:11

Sample wt/vol: 35(mL) Date Analyzed: 08/26/2017 03:28

Soil Aliquot Vol: Dilution Factor: 60.1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	5.4	U	38	5.4
56-23-5	Carbon tetrachloride	153.81	4.2	U	76	4.2
108-90-7	Chlorobenzene	112.56	6.9	U	55	6.9
75-00-3	Chloroethane	64.52	21	U	79	21
74-87-3	Chloromethane	50.49	20	U	62	20
156-59-2	cis-1,2-Dichloroethene	96.94	6.9	U	48	6.9
541-73-1	1,3-Dichlorobenzene	147.00	18	U	72	18
95-50-1	1,2-Dichlorobenzene	147.00	16	U	72	16
75-34-3	1,1-Dichloroethane	98.96	4.1	U	49	4.1
107-06-2	1,2-Dichloroethane	98.96	8.3	U	49	8.3
75-35-4	1,1-Dichloroethene	96.94	8.3	U	48	8.3
78-87-5	1,2-Dichloropropane	112.99	9.7	U	56	9.7
100-41-4	Ethylbenzene	106.17	8.9	U	52	8.9
75-09-2	Methylene Chloride	84.93	14	U	100	14
1634-04-4	Methyl tert-butyl ether	88.15	8.9	U	43	8.9
179601-23-1	m,p-Xylene	106.17	20	U	130	20
91-20-3	Naphthalene	128.17	32	U	160	32
127-18-4	Tetrachloroethene	165.83	4.0	U	82	4.0
108-88-3	Toluene	92.14	17	J	45	7.9
156-60-5	trans-1,2-Dichloroethene	96.94	12	U	48	12
71-55-6	1,1,1-Trichloroethane	133.41	8.5	U	66	8.5
79-01-6	Trichloroethene	131.39	2.9	U	65	2.9
108-67-8	1,3,5-Trimethylbenzene	120.20	12	U	59	12
95-63-6	1,2,4-Trimethylbenzene	120.20	17	U	59	17
75-01-4	Vinyl chloride	62.50	2.8	U	31	2.8
95-47-6	Xylene, o-	106.17	10	U	52	10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-022.D
Lims ID: 200-39823-A-11
Client ID: SV-18
Sample Type: Client
Inject. Date: 26-Aug-2017 03:28:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 60.1000
Sample Info: 200-0026579-022
Misc. Info.: 39823-11
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 12:08:36 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 12:08:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63		7.991				ND	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.478	9.467	0.011	80	329665	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1482511	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.437	14.426	0.011	93	4750	0.0729	
68 Tetrachloroethene	166		15.486				ND	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1444665	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.567	17.567	0.017	92	4146	0.0293	M
78 m-Xylene & p-Xylene	106	17.813	17.807	0.006	0	2168	0.0391	
79 o-Xylene	106		18.663				ND	
90 1,3,5-Trimethylbenzene	105		20.466				ND	
93 1,2,4-Trimethylbenzene	105		21.071				ND	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

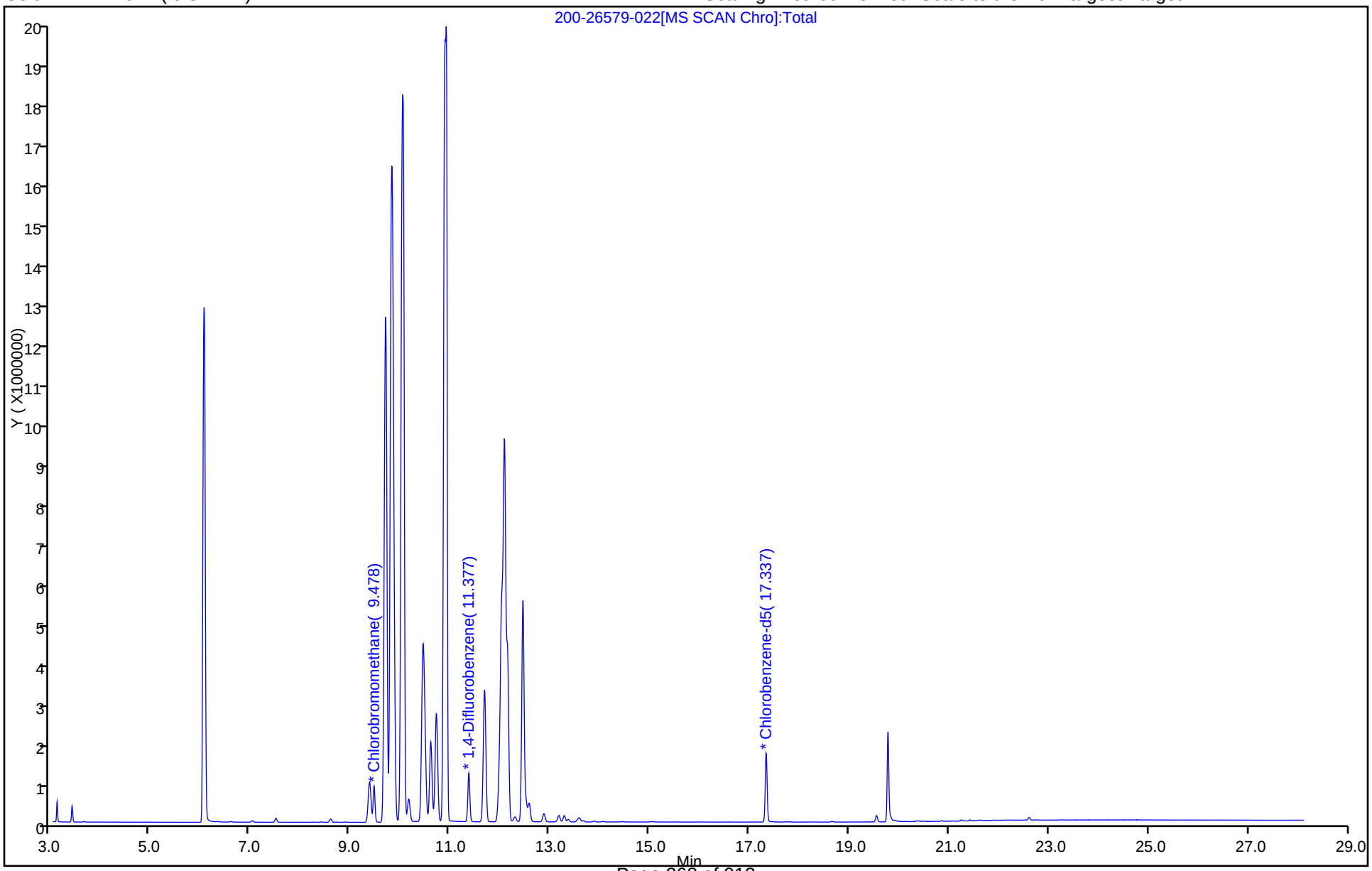
Report Date: 28-Aug-2017 12:08:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-022.D

Injection Date:	26-Aug-2017 03:28:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-11	Lab Sample ID:	200-39823-11	Worklist Smp#:	22
Client ID:	SV-18				
Purge Vol:	200.000 mL	Dil. Factor:	60.1000	ALS Bottle#:	21
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



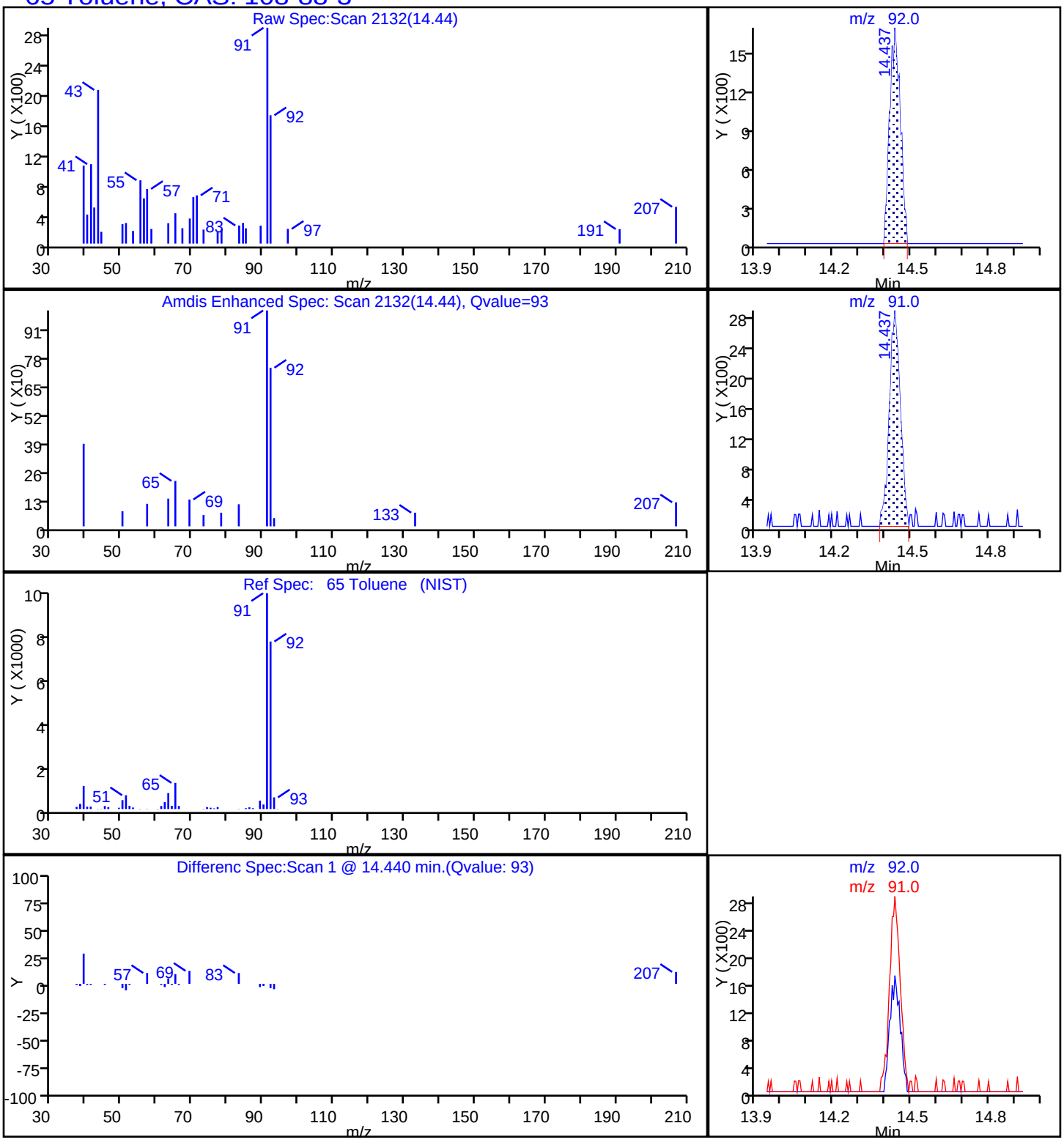
Report Date: 28-Aug-2017 12:08:37 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-022.D

Injection Date:	26-Aug-2017 03:28:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-11	Lab Sample ID:	200-39823-11		
Client ID:	SV-18				
Operator ID:	pad	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	60.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

TestAmerica Burlington

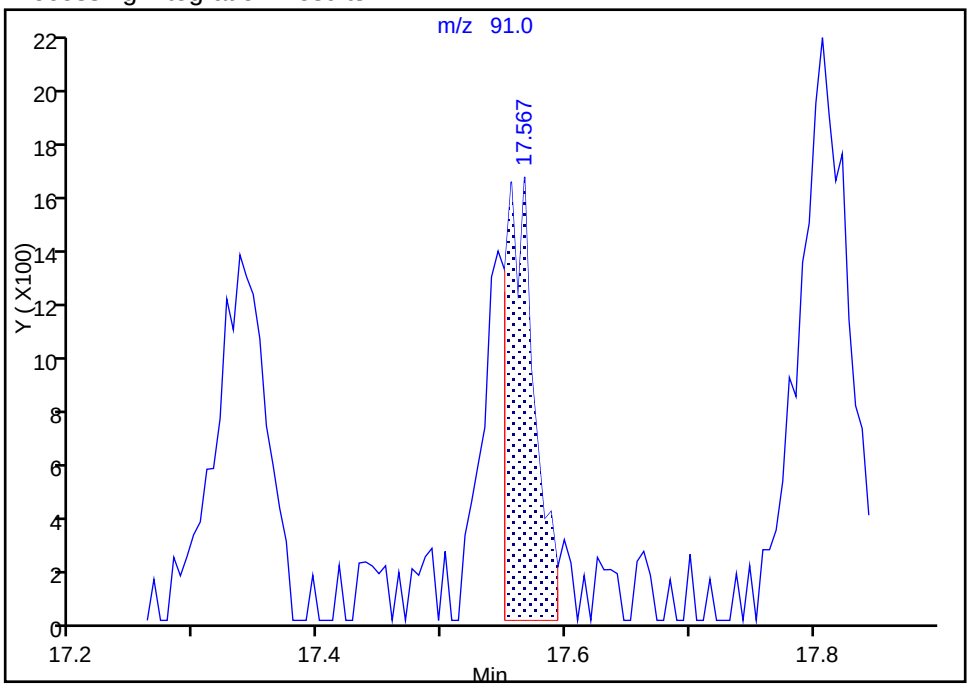
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-022.D				
Injection Date:	26-Aug-2017 03:28:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-11	Lab Sample ID:	200-39823-11		
Client ID:	SV-18				
Operator ID:	pad	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	60.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 1

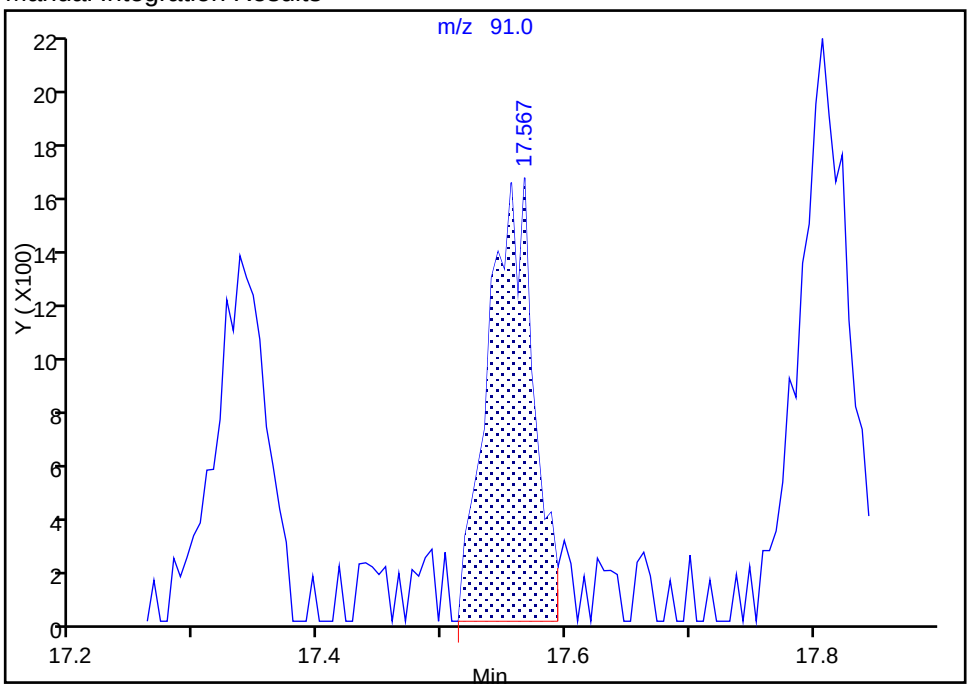
Processing Integration Results

RT: 17.57
Area: 2650
Amount: 0.018716
Amount Units: ppb v/v



Manual Integration Results

RT: 17.57
Area: 4146
Amount: 0.029282
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:08:15

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-17 Lab Sample ID: 200-39823-12

Matrix: Air Lab File ID: 200-26579-023.D

Analysis Method: TO-15 Date Collected: 08/23/2017 12:36

Sample wt/vol: 20(mL) Date Analyzed: 08/26/2017 04:18

Soil Aliquot Vol: Dilution Factor: 48.1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.3	U	9.6	1.3
56-23-5	Carbon tetrachloride	153.81	0.53	U	9.6	0.53
108-90-7	Chlorobenzene	112.56	1.2	U	9.6	1.2
75-00-3	Chloroethane	64.52	6.3	U	24	6.3
74-87-3	Chloromethane	50.49	7.7	U	24	7.7
156-59-2	cis-1,2-Dichloroethene	96.94	1.4	U	9.6	1.4
541-73-1	1,3-Dichlorobenzene	147.00	2.4	U	9.6	2.4
95-50-1	1,2-Dichlorobenzene	147.00	2.2	U	9.6	2.2
75-34-3	1,1-Dichloroethane	98.96	1.0	J	9.6	0.82
107-06-2	1,2-Dichloroethane	98.96	1.6	U	9.6	1.6
75-35-4	1,1-Dichloroethene	96.94	1.7	U	9.6	1.7
78-87-5	1,2-Dichloropropane	112.99	1.7	U	9.6	1.7
100-41-4	Ethylbenzene	106.17	1.6	U	9.6	1.6
75-09-2	Methylene Chloride	84.93	3.3	U	24	3.3
1634-04-4	Methyl tert-butyl ether	88.15	2.0	U	9.6	2.0
179601-23-1	m,p-Xylene	106.17	3.7	U	24	3.7
91-20-3	Naphthalene	128.17	4.8	U	24	4.8
127-18-4	Tetrachloroethene	165.83	0.47	U	9.6	0.47
108-88-3	Toluene	92.14	1.7	U	9.6	1.7
156-60-5	trans-1,2-Dichloroethene	96.94	2.4	U	9.6	2.4
71-55-6	1,1,1-Trichloroethane	133.41	1.3	U	9.6	1.3
79-01-6	Trichloroethene	131.39	0.44	U	9.6	0.44
108-67-8	1,3,5-Trimethylbenzene	120.20	1.9	U	9.6	1.9
95-63-6	1,2,4-Trimethylbenzene	120.20	2.7	U	9.6	2.7
75-01-4	Vinyl chloride	62.50	0.87	U	9.6	0.87
95-47-6	Xylene, o-	106.17	1.9	U	9.6	1.9

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: SV-17 Lab Sample ID: 200-39823-12

Matrix: Air Lab File ID: 200-26579-023.D

Analysis Method: TO-15 Date Collected: 08/23/2017 12:36

Sample wt/vol: 20(mL) Date Analyzed: 08/26/2017 04:18

Soil Aliquot Vol: Dilution Factor: 48.1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	4.3	U	31	4.3
56-23-5	Carbon tetrachloride	153.81	3.3	U	61	3.3
108-90-7	Chlorobenzene	112.56	5.5	U	44	5.5
75-00-3	Chloroethane	64.52	17	U	63	17
74-87-3	Chloromethane	50.49	16	U	50	16
156-59-2	cis-1,2-Dichloroethene	96.94	5.5	U	38	5.5
541-73-1	1,3-Dichlorobenzene	147.00	14	U	58	14
95-50-1	1,2-Dichlorobenzene	147.00	13	U	58	13
75-34-3	1,1-Dichloroethane	98.96	4.2	J	39	3.3
107-06-2	1,2-Dichloroethane	98.96	6.6	U	39	6.6
75-35-4	1,1-Dichloroethene	96.94	6.7	U	38	6.7
78-87-5	1,2-Dichloropropane	112.99	7.8	U	44	7.8
100-41-4	Ethylbenzene	106.17	7.1	U	42	7.1
75-09-2	Methylene Chloride	84.93	11	U	84	11
1634-04-4	Methyl tert-butyl ether	88.15	7.1	U	35	7.1
179601-23-1	m,p-Xylene	106.17	16	U	100	16
91-20-3	Naphthalene	128.17	25	U	130	25
127-18-4	Tetrachloroethene	165.83	3.2	U	65	3.2
108-88-3	Toluene	92.14	6.3	U	36	6.3
156-60-5	trans-1,2-Dichloroethene	96.94	9.5	U	38	9.5
71-55-6	1,1,1-Trichloroethane	133.41	6.8	U	52	6.8
79-01-6	Trichloroethene	131.39	2.4	U	52	2.4
108-67-8	1,3,5-Trimethylbenzene	120.20	9.5	U	47	9.5
95-63-6	1,2,4-Trimethylbenzene	120.20	13	U	47	13
75-01-4	Vinyl chloride	62.50	2.2	U	25	2.2
95-47-6	Xylene, o-	106.17	8.4	U	42	8.4

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D
Lims ID: 200-39823-A-12
Client ID: SV-17
Sample Type: Client
Inject. Date: 26-Aug-2017 04:18:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 48.1000
Sample Info: 200-0026579-023
Misc. Info.: 39823-12
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 12:20:01 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 12:20:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50		3.513				ND	
7 Vinyl chloride	62		3.705				ND	
11 Chloroethane	64		4.503				ND	
21 1,1-Dichloroethene	96		5.840				ND	
27 Methylene Chloride	49		6.787				ND	
29 Methyl tert-butyl ether	73		7.161				ND	
31 trans-1,2-Dichloroethene	61		7.177				ND	
34 1,1-Dichloroethane	63	8.007	7.991	0.016	88	1193	0.0216	
37 cis-1,2-Dichloroethene	96		9.023				ND	
* 40 Chlorobromomethane	128	9.472	9.467	0.005	80	345344	10.0	
44 1,1,1-Trichloroethane	97		9.852				ND	
45 Carbon tetrachloride	117		10.088				ND	
47 Benzene	78		10.553				ND	
48 1,2-Dichloroethane	62		10.740				ND	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1701813	10.0	
53 Trichloroethene	95		11.832				ND	
54 1,2-Dichloropropane	63		12.393				ND	
65 Toluene	92	14.432	14.432	0.006	89	1771	0.0248	M
68 Tetrachloroethene	166		15.486				ND	
* 74 Chlorobenzene-d5	117	17.336	17.337	-0.001	87	1581252	10.0	
75 Chlorobenzene	112		17.395				ND	
76 Ethylbenzene	91	17.550	17.561	0.000	47	2962	0.0191	M
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	1790	0.0295	M
79 o-Xylene	106		18.663				ND	
90 1,3,5-Trimethylbenzene	105		20.466				ND	
93 1,2,4-Trimethylbenzene	105		21.071				ND	
96 1,3-Dichlorobenzene	146		21.536				ND	
101 1,2-Dichlorobenzene	146		22.210				ND	
105 Naphthalene	128		25.147				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

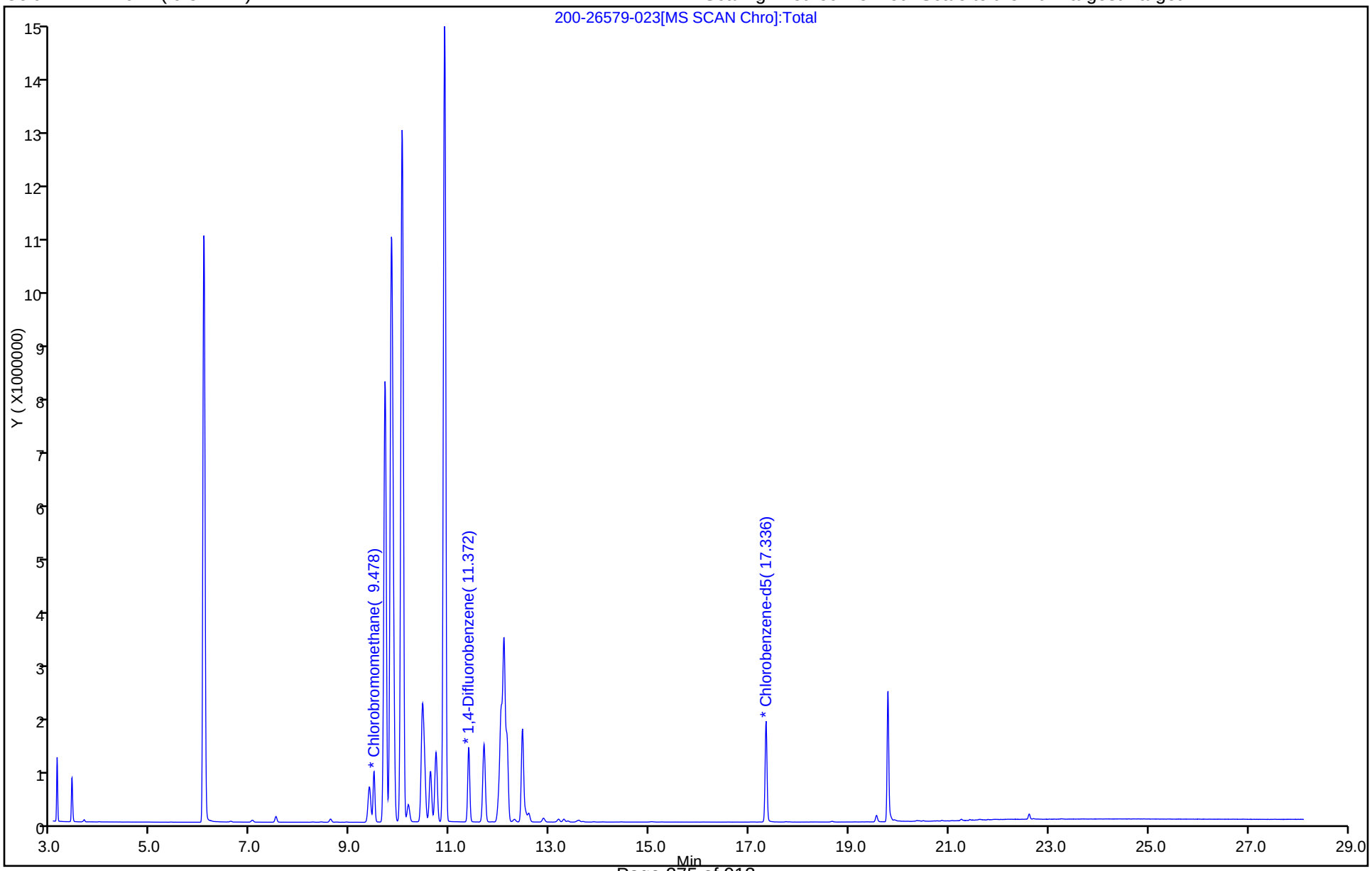
Report Date: 28-Aug-2017 12:20:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D

Injection Date:	26-Aug-2017 04:18:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39823-A-12	Lab Sample ID:	200-39823-12	Worklist Smp#:	23
Client ID:	SV-17				
Purge Vol:	200.000 mL	Dil. Factor:	48.1000	ALS Bottle#:	22
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



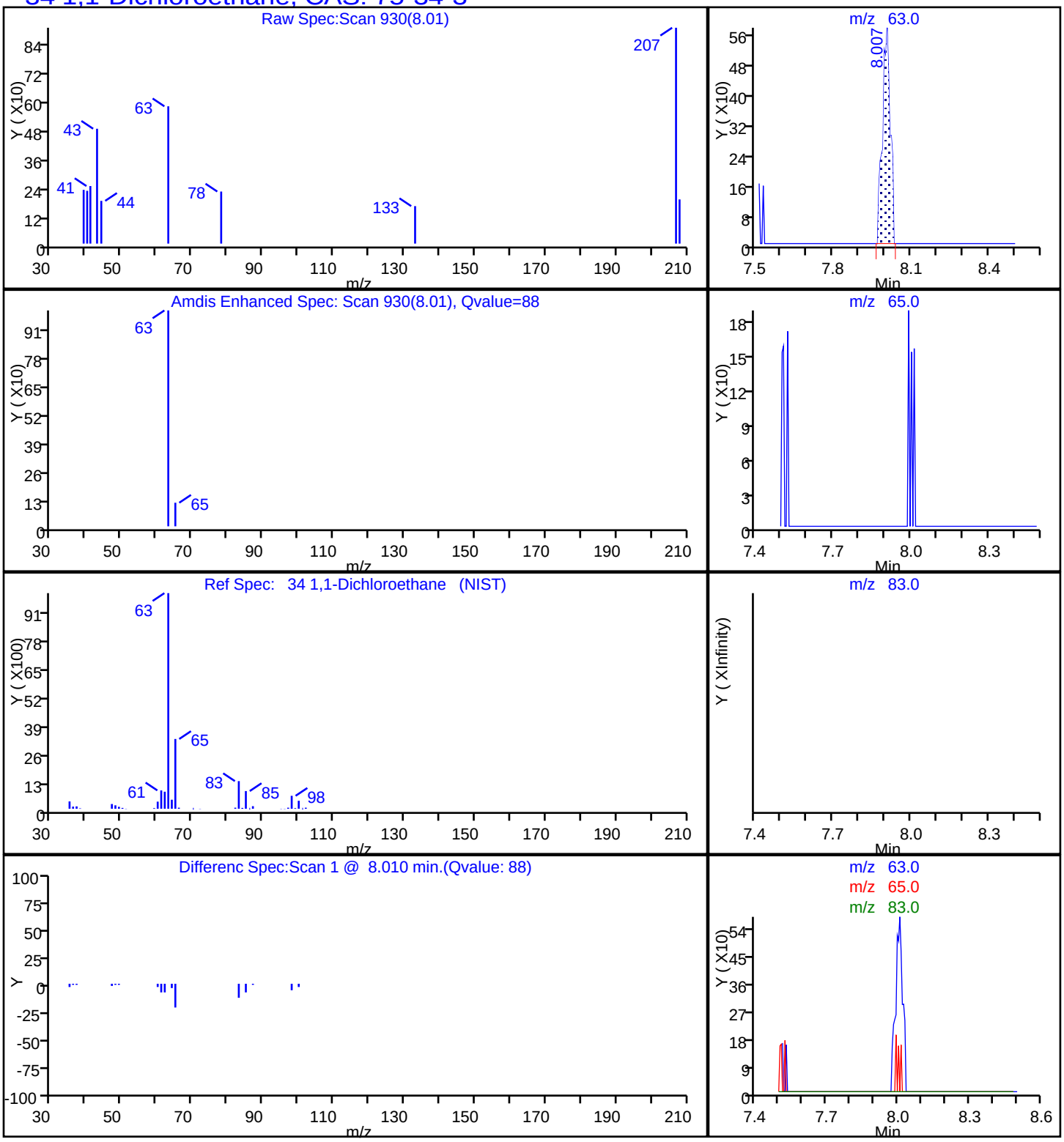
Report Date: 28-Aug-2017 12:20:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D

Injection Date:	26-Aug-2017 04:18:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-12	Lab Sample ID:	200-39823-12		
Client ID:	SV-17				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	48.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

34 1,1-Dichloroethane, CAS: 75-34-3



Manual Integration/User Assign Peak Report

TestAmerica Burlington

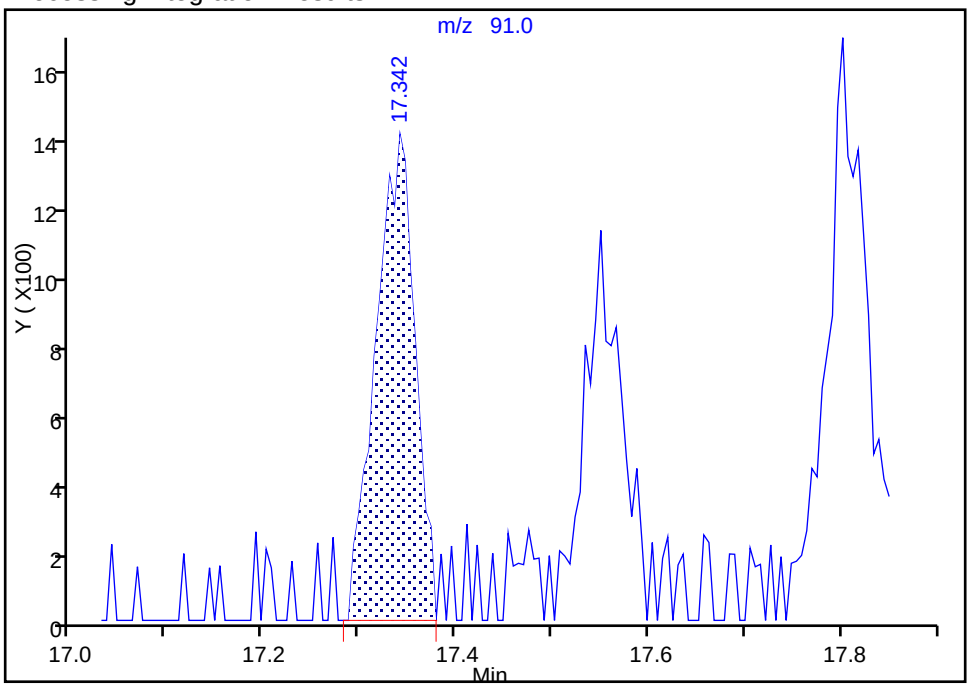
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D				
Injection Date:	26-Aug-2017 04:18:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-12	Lab Sample ID:	200-39823-12		
Client ID:	SV-17				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	48.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 1

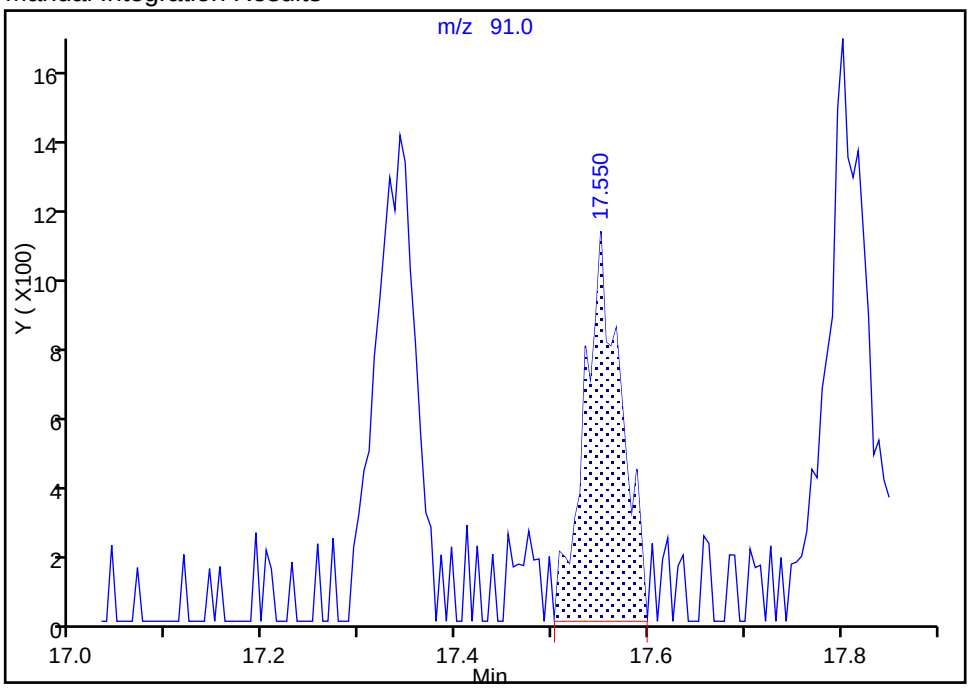
Processing Integration Results

RT: 17.34
Area: 3974
Amount: 0.025643
Amount Units: ppb v/v



Manual Integration Results

RT: 17.55
Area: 2962
Amount: 0.019113
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:18:44

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

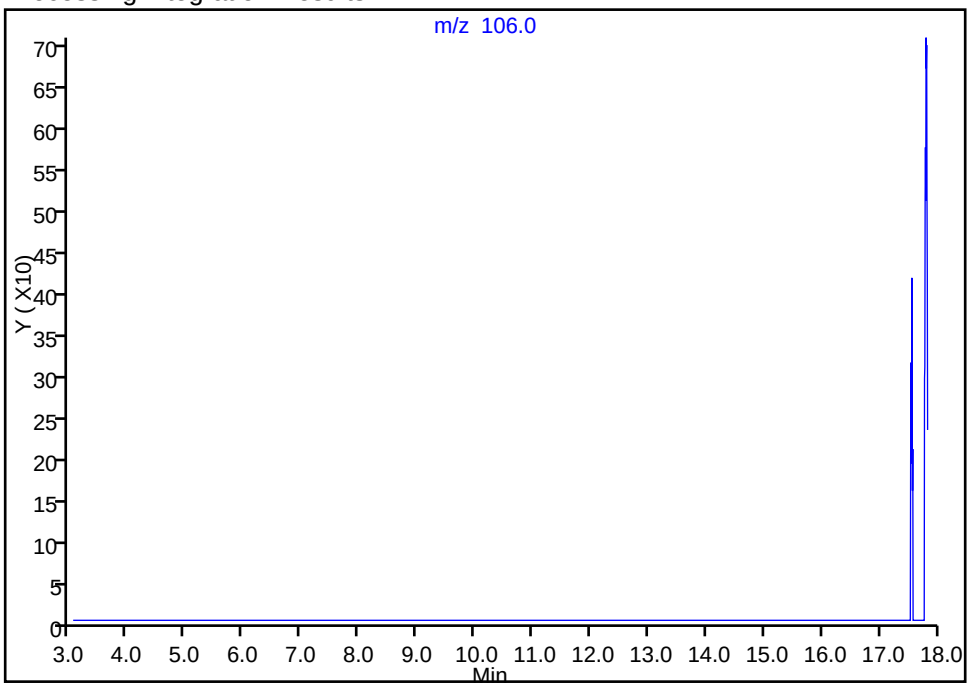
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D				
Injection Date:	26-Aug-2017 04:18:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-12	Lab Sample ID:	200-39823-12		
Client ID:	SV-17				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	48.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 2

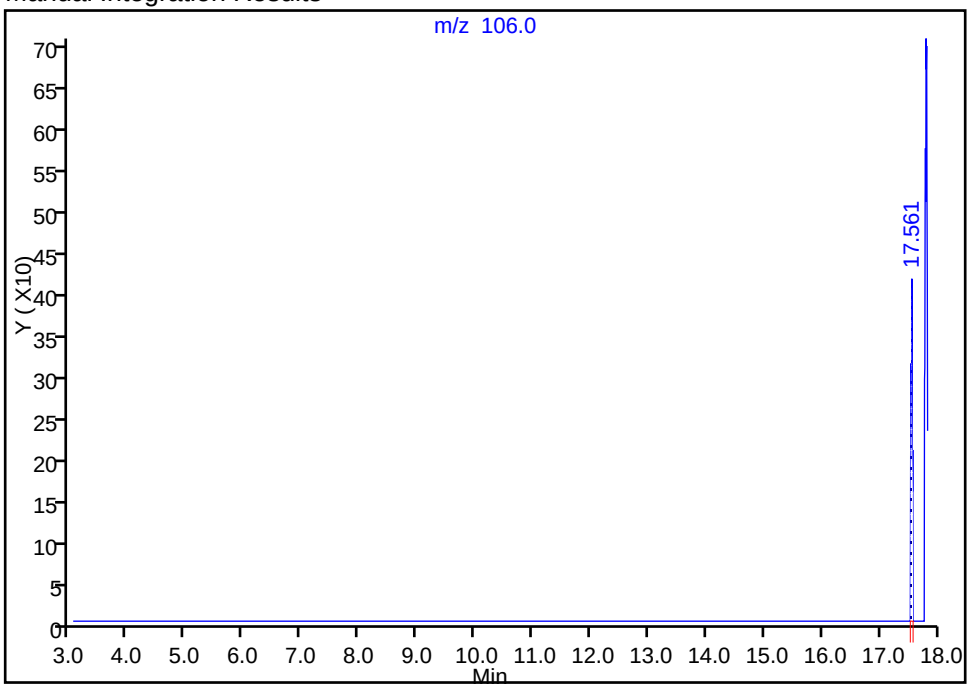
Processing Integration Results

RT: 17.55
Area: 0
Amount: 0.025643
Amount Units: ppb v/v



Manual Integration Results

RT: 17.56
Area: 615
Amount: 0.019113
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:19:00

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

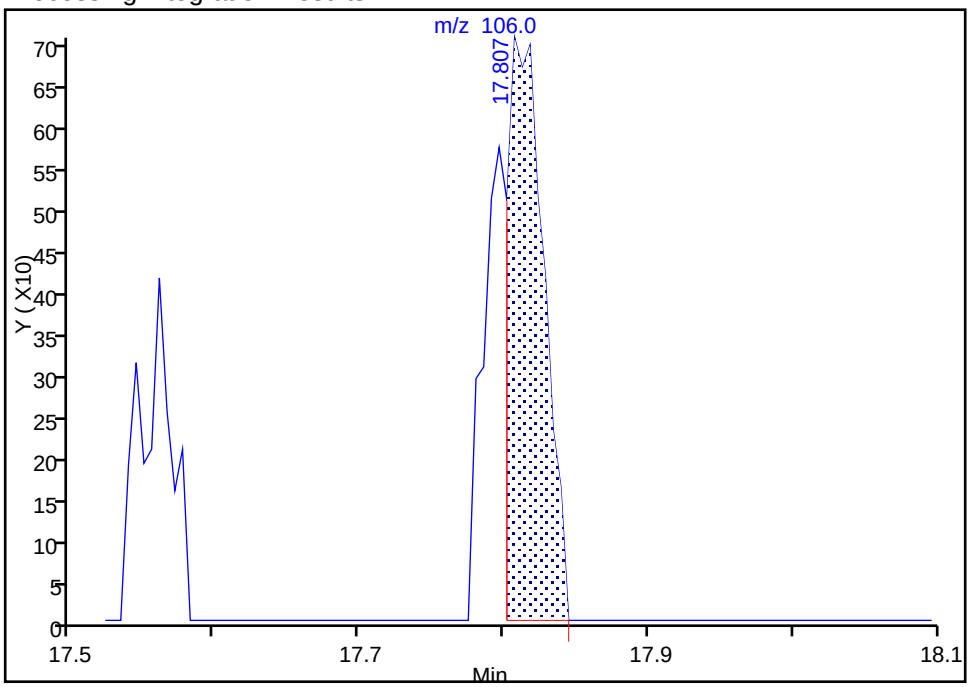
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D				
Injection Date:	26-Aug-2017 04:18:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-12	Lab Sample ID:	200-39823-12		
Client ID:	SV-17				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	48.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

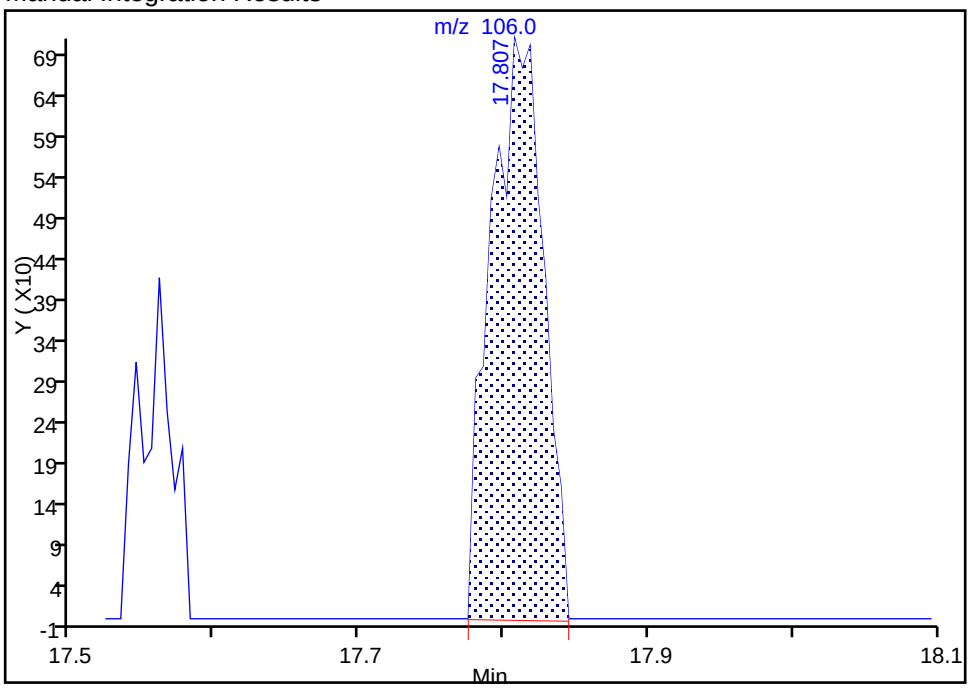
Processing Integration Results

RT: 17.81
Area: 1244
Amount: 0.020510
Amount Units: ppb v/v



Manual Integration Results

RT: 17.81
Area: 1790
Amount: 0.029513
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:19:09

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

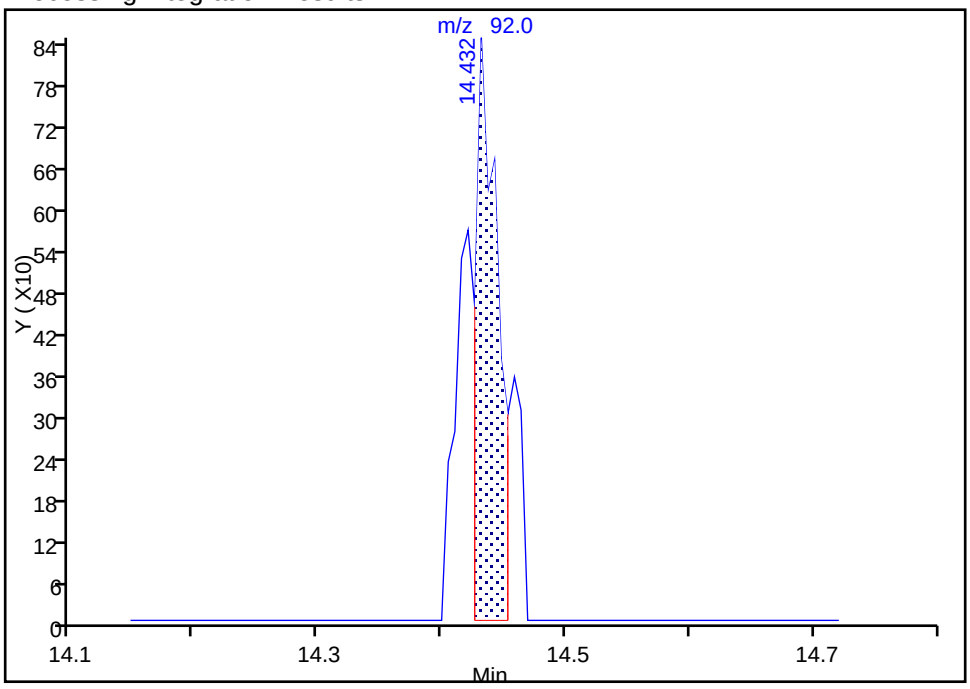
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-023.D				
Injection Date:	26-Aug-2017 04:18:30	Instrument ID:	CHG.i		
Lims ID:	200-39823-A-12	Lab Sample ID:	200-39823-12		
Client ID:	SV-17				
Operator ID:	pad	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	48.1000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

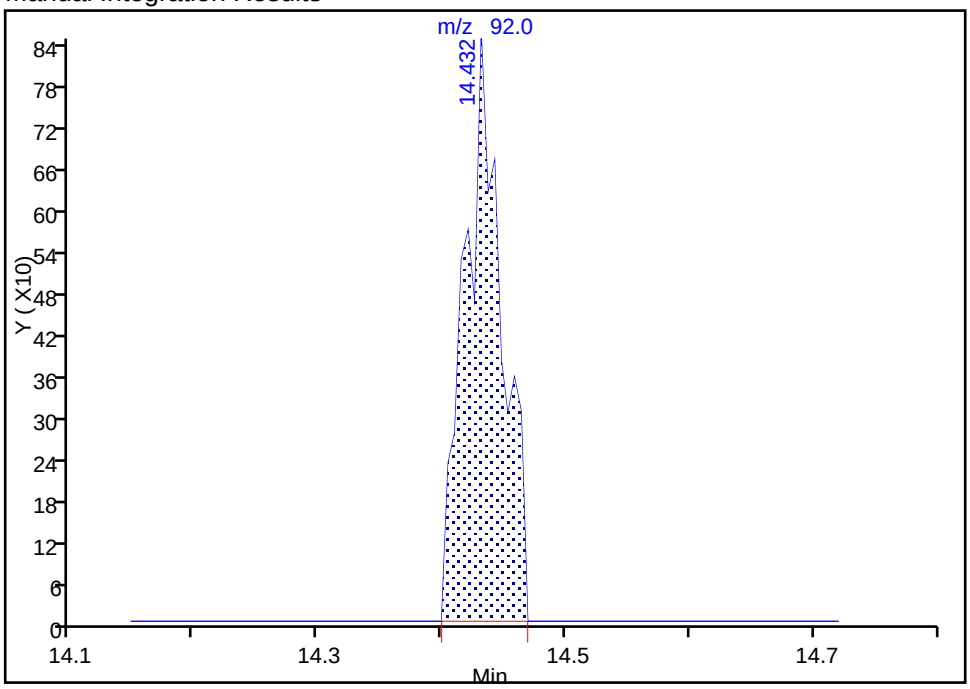
Processing Integration Results

RT: 14.43
Area: 1048
Amount: 0.014698
Amount Units: ppb v/v



Manual Integration Results

RT: 14.43
Area: 1771
Amount: 0.024839
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 12:18:24

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-120200/3	200-26567-003.D
Level 2	IC 200-120200/4	200-26567-004.D
Level 3	IC 200-120200/5	200-26567-005.D
Level 4	IC 200-120200/6	200-26567-006.D
Level 5	ICIS 200-120200/7	200-26567-007.D
Level 6	IC 200-120200/8	200-26567-008.D
Level 7	IC 200-120200/9	200-26567-009.D
Level 8	IC 200-120200/10	200-26567-010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.6344	+++++ 0.6299	+++++ 0.5876	0.5974	0.6157	Ave		0.6130				3.3		30.0			
Dichlorodifluoromethane	+++++ 3.3268	+++++ 3.1847	3.5572 2.7302	3.4415	3.3650	Ave		3.2676				8.9		30.0			
Freon 22	+++++ 1.7407	+++++ 1.6882	1.7676 1.4870	1.7316	1.7120	Ave		1.6879				6.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.6278	2.6479 2.5465	2.8399 2.2169	2.6878	2.6385	Ave		2.6008				7.4		30.0			
Chloromethane	+++++ 0.7736	+++++ 0.7734	0.8657 0.7123	0.7486	0.7516	Ave		0.7709				6.7		30.0			
n-Butane	+++++ 1.1410	+++++ 1.1471	1.1854 1.0524	1.0871	1.1265	Ave		1.1232				4.2		30.0			
Vinyl chloride	0.7672 0.9122	0.9384 0.9137	0.9151 0.8344	0.8798	0.8860	Ave		0.8809				6.3		30.0			
1,3-Butadiene	0.6364 0.6044	0.5471 0.6130	0.5980 0.5577	0.5625	0.5781	Ave		0.5872				5.3		30.0			
Bromomethane	+++++ 0.9861	1.0019 0.9824	1.0402 0.8864	0.9868	0.9863	Ave		0.9814				4.7		30.0			
Chloroethane	+++++ 0.3888	+++++ 0.3880	0.4049 0.3544	0.3667	0.3738	Ave		0.3794				4.8		30.0			
Isopentane	+++++ 0.7550	0.9664 0.7451	0.7627 0.6708	0.7163	0.7350	Ave		0.7645				12.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.9496	0.9746 0.9375	0.9810 0.8468	0.9578	0.9497	Ave		0.9424				4.8		30.0			
Trichlorofluoromethane	+++++ 2.8884	3.0988 2.7781	3.1961 2.4265	3.0410	2.9248	Ave		2.9076				8.7		30.0			
n-Pentane	+++++ 1.0957	+++++ 1.0839	1.0919 0.9932	1.0233	1.0642	Ave		1.0587				3.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.2833	+++++ 0.2471	0.3303 0.2465	0.2815	0.2814	Ave		0.2783				11.1		30.0			
Ethyl ether	+++++ 0.4455	0.3434 0.4241	0.4413 0.4138	0.4064	0.4201	Ave		0.4135				8.2		30.0			
Freon TF	+++++ 1.8481	1.9093 1.8156	1.9749 1.6391	1.8729	1.8396	Ave		1.8428				5.7		30.0			
Acrolein	+++++ 0.1667	+++++ 0.1631	+++++ 0.1607	0.1572	0.1280	Ave		0.1552				10.0		30.0			
1,1-Dichloroethene	+++++ 0.8016	0.8367 0.7816	0.8884 0.7316	0.7742	0.7737	Ave		0.7983				6.4		30.0			
Acetone	+++++ 1.1118	+++++ 1.0213	+++++ 1.0208	1.1030	1.1694	Ave		1.0853				5.9		30.0			
Carbon disulfide	+++++ 2.2756	+++++ 2.2788	2.3035 2.1067	2.1905	2.2310	Ave		2.2310				3.3		30.0			
Isopropyl alcohol	+++++ 1.1012	+++++ 1.0618	+++++ 1.0562	0.9860	1.0064	Ave		1.0423				4.4		30.0			
3-Chloropropene	+++++ 0.7826	0.8037 0.7746	0.7617 0.7256	0.7098	0.8239	Ave		0.7688				5.3		30.0			
Acetonitrile	+++++ 0.3951	+++++ 0.3714	+++++ 0.3793	0.3690	0.3413	Ave		0.3712				5.3		30.0			
Methylene Chloride	+++++ 0.9421	+++++ 0.9330	0.9741 0.8586	0.8976	0.9121	Ave		0.9196				4.3		30.0			
tert-Butyl alcohol	+++++ 1.6471	+++++ 1.6068	+++++ 1.5518	1.4815	1.4938	Ave		1.5562				4.6		30.0			
Methyl tert-butyl ether	+++++ 2.2598	2.1321 2.1027	2.1848 2.0926	2.1680	2.1767	Ave		2.1595				2.6		30.0			
trans-1,2-Dichloroethene	+++++ 1.2544	1.1530 1.2503	1.2713 1.1435	1.2090	1.2141	Ave		1.2137				4.1		30.0			
Acrylonitrile	+++++ 0.4174	+++++ 0.3983	0.3561 0.4047	0.3753	0.3886	Ave		0.3901				5.6		30.0			
n-Hexane	+++++ 1.0242	0.9402 1.0313	0.9410 0.9601	0.9409	0.9850	Ave		0.9747				4.1		30.0			
1,1-Dichloroethane	1.5848 1.6523	1.5202 1.6522	1.6358 1.5343	1.5824	1.6130	Ave		1.5969				3.2		30.0			
Vinyl acetate	+++++ 1.6797	+++++ 1.5836	+++++ 1.5773	1.5080	1.5713	Ave		1.5840				3.9		30.0			
cis-1,2-Dichloroethene	+++++ 0.9862	0.9678 0.9728	0.9789 0.9100	0.9342	0.9528	Ave		0.9575				2.8		30.0			
Methyl Ethyl Ketone	+++++ 0.3407	+++++ 0.3113	0.3439 0.3224	0.3200	0.3272	Ave		0.3276				3.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0472	+++++ 0.0427	+++++ 0.0444	0.0469	0.0461	Ave		0.0455				4.1		30.0			
Tetrahydrofuran	+++++ 0.1513	+++++ 0.1314	+++++ 0.1406	0.1372	0.1390	Ave		0.1399				5.2		30.0			
Chloroform	+++++ 2.3333	2.3239 2.3070	2.4439 2.1307	2.2754	2.2868	Ave		2.3002				4.0		30.0			
Cyclohexane	+++++ 0.2366	0.2124 0.2167	0.2135 0.2167	0.2193	0.2212	Ave		0.2195				3.7		30.0			
1,1,1-Trichloroethane	+++++ 0.5453	0.5478 0.4913	0.5656 0.4772	0.5387	0.5222	Ave		0.5269				6.1		30.0			
Carbon tetrachloride	0.4874 0.5966	0.5224 0.5378	0.5695 0.5224	0.5804	0.5637	Ave		0.5475				6.6		30.0			
2,2,4-Trimethylpentane	+++++ 0.8136	0.6733 0.7593	0.6882 0.7613	0.7183	0.7447	Ave		0.7370				6.5		30.0			
Benzene	+++++ 0.5801	0.5826 0.5416	0.5604 0.5443	0.5383	0.5352	Ave		0.5546				3.6		30.0			
1,2-Dichloroethane	+++++ 0.3793	0.3523 0.3523	0.3563 0.3465	0.3592	0.3528	Ave		0.3570				3.0		30.0			
n-Heptane	+++++ 0.2928	0.2441 0.2740	0.2490 0.2695	0.2596	0.2713	Ave		0.2657				6.2		30.0			
n-Butanol	+++++ 0.0878	+++++ 0.0799	+++++ 0.0870	0.0690	0.0745	Ave		0.0796				10.1		30.0			
Trichloroethene	0.3757 0.3352	0.3015 0.3094	0.2989 0.3088	0.3061	0.3100	Ave		0.3182				8.1		30.0			
1,2-Dichloropropane	+++++ 0.2129	0.1965 0.1986	0.2025 0.2009	0.1907	0.1929	Ave		0.1993				3.7		30.0			
Methyl methacrylate	+++++ 0.1738	+++++ 0.1474	0.1286 0.1692	0.1450	0.1541	Ave		0.1530				10.9		30.0			
1,4-Dioxane	+++++ 0.1158	+++++ 0.1016	+++++ 0.1101	0.1015	0.1001	Ave		0.1058				6.5		30.0			
Dibromomethane	+++++ 0.2790	0.2592 0.2512	0.2705 0.2427	0.2677	0.2624	Ave		0.2618				4.7		30.0			
Bromodichloromethane	+++++ 0.6037	0.4780 0.5535	0.5060 0.5594	0.5494	0.5615	Ave		0.5445				7.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.3719	0.2754 0.3547	0.3021 0.3553	0.3249	0.3355	Ave		0.3314				10.2		30.0			
Methyl isobutyl ketone	+++++ 0.3862	+++++ 0.3356	0.2993 0.3584	0.3266	0.3398	Ave		0.3410				8.6		30.0			
Toluene	+++++ 0.4692	0.4376 0.4558	0.4418 0.4691	0.4328	0.4501	Ave		0.4509				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.4253	0.3437 0.3930	0.3590 0.3927	0.3792	0.3966	Ave		0.3842				7.0		30.0			
trans-1,3-Dichloropropene	+++++ 0.4072	0.3050 0.3678	0.3293 0.3882	0.3535	0.3707	Ave		0.3603				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.2541	0.2338 0.2477	0.2460 0.2533	0.2395	0.2468	Ave		0.2459				2.9		30.0			
Tetrachloroethene	0.4396 0.4275	0.4469 0.4158	0.4402 0.3915	0.4273	0.4317	Ave		0.4275				4.1		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.3942	+++++ 0.3795	0.3534 0.3951	0.3361	0.3657	Ave		0.3707				6.3		30.0			
Dibromochloromethane	+++++ 0.6301	0.4550 0.6376	0.5178 0.6067	0.5872	0.6297	Ave		0.5806				11.9		30.0			
1,2-Dibromoethane	+++++ 0.4935	0.3877 0.4901	0.4225 0.4910	0.4580	0.4792	Ave		0.4603				8.9		30.0			
Chlorobenzene	+++++ 0.6608	0.5933 0.6578	0.6306 0.6548	0.6248	0.6412	Ave		0.6376				3.8		30.0			
Ethylbenzene	+++++ 1.0307	0.8948 0.9935	0.9521 1.0344	0.9617	0.9932	Ave		0.9801				5.0		30.0			
n-Nonane	+++++ 0.4179	0.3053 0.4106	0.3566 0.4245	0.3737	0.4022	Ave		0.3844				11.1		30.0			
m,p-Xylene	+++++ 0.4057	0.3528 0.3864	0.3694 0.3997	0.3796	0.3913	Ave		0.3836				4.7		30.0			
Xylene, o-	+++++ 0.4072	0.3444 0.3895	0.3625 0.4103	0.3840	0.3961	Ave		0.3848				6.2		30.0			
Styrene	+++++ 0.6091	0.4091 0.5855	0.4592 0.6326	0.5446	0.5768	Ave		0.5453				15.0		30.0			
Bromoform	+++++ 0.5102	0.3305 0.4958	0.3972 0.4659	0.4875	0.5330	Ave		0.4600				15.5		30.0			
Cumene	+++++ 1.1571	0.9959 1.0957	1.0535 1.1458	1.1023	1.1271	Ave		1.0968				5.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.6183	0.5149 0.5874	0.5752 0.6216	0.5796	0.5967	Ave		0.5848				6.1		30.0			
n-Propylbenzene	+++++ 1.3976	1.1189 1.3107	1.2387 1.3836	1.3065	1.3524	Ave		1.3012				7.4		30.0			
1,2,3-Trichloropropane	+++++ 0.4939	+++++ 0.4600	0.4893 0.4956	0.4718	0.4801	Ave		0.4818				2.9		30.0			
n-Decane	+++++ 0.5184	+++++ 0.4851	0.3879 0.4967	0.4645	0.4918	Ave		0.4741				9.6		30.0			
2-Chlorotoluene	+++++ 1.0233	0.8540 0.9579	0.9460 0.8994	0.9680	0.9970	Ave		0.9494				6.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Ethyltoluene	+++++ 1.1432	0.8255 1.0439	1.0160 0.9995	1.0772	1.1176	Ave		1.0318				10.2		30.0			
1,3,5-Trimethylbenzene	+++++ 0.9571	0.7560 0.8932	0.8652 0.9617	0.8918	0.9229	Ave		0.8926				7.8		30.0			
Alpha Methyl Styrene	+++++ 0.4742	0.2673 0.4460	0.3401 0.4854	0.4215	0.4456	Ave		0.4114				19.3		30.0			
tert-Butylbenzene	+++++ 0.8752	0.7376 0.8176	0.8113 0.8672	0.8350	0.8549	Ave		0.8284				5.6		30.0			
1,2,4-Trimethylbenzene	+++++ 0.9562	0.6688 0.8894	0.8379 0.9602	0.8907	0.9188	Ave		0.8746				11.4		30.0			
sec-Butylbenzene	+++++ 1.3391	0.9892 1.2526	1.1623 1.3275	1.2560	1.2981	Ave		1.2321				9.9		30.0			
4-Isopropyltoluene	+++++ 1.1272	0.7632 1.0254	0.9802 1.0469	1.0601	1.0980	Ave		1.0144				11.9		30.0			
1,3-Dichlorobenzene	+++++ 0.6552	0.4943 0.6116	0.5922 0.5913	0.6308	0.6453	Ave		0.6030				8.9		30.0			
1,4-Dichlorobenzene	+++++ 0.6571	0.5227 0.6113	0.5602 0.6301	0.6134	0.6366	Ave		0.6045				7.8		30.0			
Benzyl chloride	+++++ 0.8628	0.4954 0.7963	0.5863 0.8988	0.7643	0.8261	Ave		0.7471				20.0		30.0			
n-Butylbenzene	+++++ 1.0553	0.5918 0.9605	0.7276 1.0477	0.9645	1.0149	Ave		0.9089				19.6		30.0			
n-Undecane	+++++ 0.4987	+++++ 0.4361	+++++ 0.5170	0.4120	0.4501	Ave		0.4628				9.5		30.0			
1,2-Dichlorobenzene	+++++ 0.6011	0.4541 0.5639	0.5742 0.5839	0.5753	0.5907	Ave		0.5633				8.8		30.0			
n-Dodecane	+++++ 0.3748	+++++ 0.3535	+++++ 0.3559	0.2671	0.2711	Ave		0.3245				15.8		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3655	+++++ 0.3184	0.2677 0.3547	0.2968	0.3328	Ave		0.3227				11.3		30.0			
Hexachlorobutadiene	+++++ 0.3197	0.2479 0.2596	0.3003 0.2661	0.3183	0.3223	Ave		0.2906				11.0		30.0			
Naphthalene	+++++ 0.8152	+++++ 0.7122	0.5870 0.8264	0.5812	0.6908	Ave		0.7021				15.1		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3078	+++++ 0.2793	0.2508 0.2981	0.2515	0.2745	Ave		0.2770				8.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-120200/3	200-26567-003.D
Level 2	IC 200-120200/4	200-26567-004.D
Level 3	IC 200-120200/5	200-26567-005.D
Level 4	IC 200-120200/6	200-26567-006.D
Level 5	ICIS 200-120200/7	200-26567-007.D
Level 6	IC 200-120200/8	200-26567-008.D
Level 7	IC 200-120200/9	200-26567-009.D
Level 8	IC 200-120200/10	200-26567-010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 318413	+++++ 429320	+++++ 846398	96529	204261	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1669879	+++++ 2170675	58470 3932478	556083	1116439	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 873743	+++++ 1150682	29054 2141764	279791	568023	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1319004	17366 1735663	46680 3193175	434298	875396	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 388302	+++++ 527124	14230 1025894	120964	249354	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 572731	+++++ 781858	19484 1515765	175652	373759	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1003 457854	6154 622766	15042 1201873	142166	293970	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	832 303368	3588 417826	9830 803341	90896	191812	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 494972	6571 669574	17098 1276699	159444	327237	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 195135	+++++ 264473	6655 510457	59255	124020	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 378989	6338 507873	12536 966223	115745	243846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 476647	6392 638982	16124 1219741	154762	315077	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1449807	20323 1893488	52534 3494940	491363	970379	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 549971	+++++ 738761	17947 1430598	165349	353082	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 189990	+++++ 336859	54364 887585	91016	140088	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 223599	2252 289093	7253 596023	65660	139380	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 927656	12522 1237457	32462 2360882	302624	610354	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 83693	+++++ 111188	+++++ 231440	25404	42473	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 402363	5487 532758	14603 1053718	125102	256696	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 558059	+++++ 696081	+++++ 1470276	178227	387983	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1142211	+++++ 1553207	37863 3034442	353948	740207	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 552732	+++++ 723694	+++++ 1521277	159326	333914	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 392813	5271 527952	12520 1045181	114687	273353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 198319	+++++ 253135	+++++ 546271	59620	113226	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 472857	+++++ 635916	16011 1236647	145037	302629	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 826772	+++++ 1095202	+++++ 2235082	239387	495609	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1134269	13983 1433167	35911 3014003	350307	722197	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 629635	7562 852201	20897 1647056	195349	402812	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 209509	+++++ 271506	5853 582910	60640	128918	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 514080	6166 702925	15468 1382831	152025	326795	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2072 829345	9970 1126108	26888 2209898	255679	535146	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 843137	+++++ 1079367	+++++ 2271795	243673	521311	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 494997	6347 663024	16090 1310675	150945	316111	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 171026	+++++ 212149	5652 464396	51700	108565	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 23692	+++++ 29121	+++++ 63943	7582	15282	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 359139	+++++ 461283	+++++ 984630	106160	225444	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1171181	15241 1572414	40171 3069009	367670	758722	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 561646	6618 760639	16943 1517548	169730	358791	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1294353	17072 1724703	44886 3341780	416916	846886	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2913 1416222	16278 1887824	45197 3658366	449148	914163	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 1931330	20982 2665639	54622 5330963	555926	1207701	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1376972	18155 1901329	44472 3811204	416605	867972	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 900253	10979 1236866	28277 2426069	278021	572097	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 695006	7606 961696	19761 1887235	200901	439938	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 208444	+++++ 280513	+++++ 608973	53429	120853	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2245 795681	9394 1086295	23723 2162658	236869	502784	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 505343	6122 697004	16074 1406807	147565	312866	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 412549	+++++ 517429	10205 1184517	112219	249929	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 274778	+++++ 356531	+++++ 770776	78547	162316	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 662201	8076 881859	21466 1699372	207154	425600	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1432968	14897 1943205	40159 3916954	425202	910597	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 882718	8581 1245174	23975 2487642	251437	543994	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl isobutyl ketone	DFBZ	Ave	+++++ 916819	+++++ 1178169	23752 2509413	252769	551010	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1063144	12503 1414384	31793 2957857	309691	657608	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1009428	10710 1379651	28494 2749637	293475	643118	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 966646	9504 1291208	26134 2718568	273603	601227	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 575726	6679 768548	17706 1597134	171385	360513	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2466 968799	12766 1290207	31677 2468876	305713	630742	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 893391	+++++ 1177634	25434 2491376	240518	534247	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1427874	12998 1978697	37267 3825881	420188	919881	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1118237	11076 1520774	30402 3096427	327685	700044	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1497476	16949 2041458	45383 4129160	447067	936738	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2335748	25563 3083123	68518 6522901	688135	1450929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 947062	8722 1274130	25662 2676976	267377	587614	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1838872	20159 2397944	53175 5041172	543256	1143278	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 922659	9838 1208819	26086 2587276	274729	578700	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1380362	11687 1816829	33045 3989101	389696	842621	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1156184	9443 1538577	28582 2937528	348850	778645	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2622022	28453 3400142	75819 7225103	788748	1646576	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1401039	14710 1822914	41393 3919501	414718	871749	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3167051	31967 4067363	89141 8724880	934833	1975724	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1119166	+++++ 1427529	35215 3124848	337601	701359	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1174789	+++++ 1505496	27913 3132121	332351	718478	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2318806	24398 2972639	68083 5671346	692648	1456579	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2590565	23584 3239579	73114 6302358	770728	1632719	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2168853	21598 2771908	62266 6064522	638123	1348359	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1074486	7636 1383963	24479 3060659	301572	650998	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1983230	21071 2537227	58389 5468604	597436	1248975	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39823-1 Analy Batch No.: 120200

SDG No.: 200-39823-1

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2017 17:24 Calibration End Date: 08/24/2017 23:17 Calibration ID: 37851

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2166805	19108 2759918	60301 6054983	637289	1342362	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3034588	28260 3887221	83645 8371004	898667	1896378	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2554335	21804 3182139	70538 6601195	758516	1604065	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1484728	14122 1897878	42620 3728730	451325	942748	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1488970	14933 1897158	40315 3972982	438909	929986	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1955205	14154 2471142	42190 5667505	546893	1206812	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2391466	16907 2980804	52359 6606238	690095	1482637	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1130141	+++++ 1353187	+++++ 3259747	294788	657510	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1362201	12974 1749833	41324 3681870	411612	862947	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 849268	+++++ 1096994	+++++ 2243948	191087	396085	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 828230	+++++ 988031	19262 2236666	212396	486232	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 724529	7082 805663	21612 1677775	227716	470837	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1847211	+++++ 2210190	42243 5211160	415868	1009201	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 697543	+++++ 866603	18047 1879876	179959	401000	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-003.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Aug-2017 17:24:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-003
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:41 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 09:20:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.122	0.006	75	2938	0.0401	0.1470	
2 Dichlorodifluoromethane	85	3.187	3.176	0.011	98	4313	0.0401	0.0405	
3 Chlorodifluoromethane	51	3.224	3.219	0.005	93	2933	0.0401	0.0533	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	92	3616	0.0401	0.0426	
5 Chloromethane	50	3.518	3.513	0.005	94	1765	0.0401	0.0702	
6 Butane	43	3.673	3.668	0.005	95	1903	0.0401	0.0519	
7 Vinyl chloride	62	3.711	3.705	0.006	95	1003	0.0401	0.0349	
8 Butadiene	54	3.764	3.764	0.000	75	832	0.0401	0.0434	
10 Bromomethane	94	4.326	4.321	0.005	10	1451	0.0401	0.0453	
11 Chloroethane	64	4.508	4.503	0.005	1	463	0.0401	0.0374	
12 2-Methylbutane	43	4.540	4.551	-0.011	86	861	0.0401	0.0345	
13 Vinyl bromide	106	4.824	4.824	0.000	83	1354	0.0401	0.0441	
14 Trichlorofluoromethane	101	4.904	4.893	0.011	97	4127	0.0401	0.0435	
16 Pentane	43	5.006	5.000	0.006	42	2797	0.0401	0.0810	
17 Ethanol	45	5.412	5.369	0.043	70	1298	0.0802	0.1430	
18 Ethyl ether	59		5.439				ND	ND	
20 1,1,2-Trichloro-1,2,2-trif	101	5.771	5.781	-0.010	95	2488	0.0401	0.0414	
19 Acrolein	56		5.792				ND	ND	
21 1,1-Dichloroethene	96	5.851	5.840	0.011	35	1520	0.0401	0.0584	
22 Acetone	43	6.102	6.070	0.032	99	5212	0.0401	0.1473	
23 Carbon disulfide	76	6.215	6.209	0.006	96	3113	0.0401	0.0428	
24 Isopropyl alcohol	45	6.359	6.300	0.059	31	971	0.0401	0.0286	
25 3-Chloro-1-propene	41	6.530	6.525	0.005	16	1070	0.0401	0.0427	
26 Acetonitrile	41	6.530	6.675	-0.145	62	1564	0.0401	0.1292	
27 Methylene Chloride	49	6.787	6.787	0.000	92	2059	0.0401	0.0687	
28 2-Methyl-2-propanol	59	7.060	7.001	0.059	84	1112	0.0401	0.0219	
29 Methyl tert-butyl ether	73	7.204	7.161	0.043	82	2091	0.0401	0.0297	
31 trans-1,2-Dichloroethene	61	7.172	7.177	-0.005	89	1384	0.0401	0.0350	
32 Acrylonitrile	53		7.354				ND	ND	
33 Hexane	57	7.509	7.509	0.000	80	1266	0.0401	0.0398	
34 1,1-Dichloroethane	63	7.991	7.996	-0.005	85	2072	0.0401	0.0398	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.071	8.055	0.016	35	1030	0.0401	0.0199	
37 cis-1,2-Dichloroethene	96	9.018	9.023	-0.005	84	729	0.0401	0.0233	
38 2-Butanone (MEK)	72		9.098				ND	ND	
39 Ethyl acetate	88		9.119				ND	ND	
* 40 Chlorobromomethane	128	9.462	9.467	-0.005	81	326129	10.0	10.0	
41 Tetrahydrofuran	42	9.585	9.505	0.080	29	98	0.0401	0.004699	
42 Chloroform	83	9.580	9.579	0.001	93	3127	0.0401	0.0417	
S 30 1,2-Dichloroethene, Total	61				0		0.0802	0.0583	
43 Cyclohexane	84	9.826	9.815	0.011	42	597	0.0401	0.0182	
44 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	93	3145	0.0401	0.0400	
45 Carbon tetrachloride	117	10.072	10.088	-0.016	91	2913	0.0401	0.0357	
46 Isooctane	57		10.494				ND	ND	
47 Benzene	78	10.553	10.553	0.000	95	3806	0.0401	0.0460	
48 1,2-Dichloroethane	62		10.735				ND	ND	
49 n-Heptane	43	10.858	10.869	-0.011	68	1112	0.0401	0.0281	
* 50 1,4-Difluorobenzene	114	11.366	11.372	-0.006	94	1490799	10.0	10.0	
52 n-Butanol	56		11.800				ND	ND	
53 Trichloroethene	95	11.837	11.832	0.005	52	2245	0.0401	0.0473	M
54 1,2-Dichloropropane	63		12.393				ND	ND	
A 51 GRO	1	12.447	(4.541-20.353)		0	819854	0.0401	0	
55 Methyl methacrylate	69		12.565				ND	ND	
57 Dibromomethane	174	12.640	12.645	-0.005	95	2009	0.0401	0.0515	
56 1,4-Dioxane	88	12.714	12.645	0.069	1	304	0.0401	0.0193	
58 Dichlorobromomethane	83	12.923	12.928	-0.005	92	2623	0.0401	0.0323	
60 cis-1,3-Dichloropropene	75	13.854	13.849	0.005	67	608	0.0401	0.0123	
61 4-Methyl-2-pentanone (MIBK	43	14.212	14.170	0.042	2	1091	0.0401	0.0215	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	903320	0.0401	0	
65 Toluene	92	14.421	14.426	-0.005	91	1921	0.0401	0.0304	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	14137	NC	NC	
64 n-Octane	43	14.475	14.469	0.005	85	2031	0.0401	0.0355	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	13100	NC	NC	
66 trans-1,3-Dichloropropene	75	15.042	15.036	0.006	41	1576	0.0401	0.0293	
67 1,1,2-Trichloroethane	83		15.405				ND	ND	
68 Tetrachloroethene	166	15.491	15.491	0.000	86	2466	0.0401	0.0412	M
69 2-Hexanone	43	15.914	15.887	0.027	83	1508	0.0401	0.0291	
71 Chlorodibromomethane	129	16.165	16.165	0.000	13	1445	0.0401	0.0178	
72 Ethylene Dibromide	107	16.449	16.438	0.011	59	711	0.0401	0.0110	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1399435	10.0	10.0	
75 Chlorobenzene	112	17.385	17.395	-0.010	87	2926	0.0401	0.0328	
76 Ethylbenzene	91	17.551	17.551	0.000	94	4587	0.0401	0.0334	
77 n-Nonane	57	17.690	17.679	0.011	79	1496	0.0401	0.0278	
78 m-Xylene & p-Xylene	106	17.802	17.807	-0.005	0	1500	0.0802	0.0279	
79 o-Xylene	106	18.669	18.663	0.006	92	1343	0.0401	0.0249	
80 Styrene	104	18.722	18.722	0.000	81	1880	0.0401	0.0246	
81 Bromoform	173	19.166	19.166	0.000	77	1016	0.0401	0.0158	
82 Isopropylbenzene	105	19.396	19.391	0.005	95	3890	0.0401	0.0253	
S 73 Xylenes, Total	106				0		0.1203	0.0529	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	89	999961	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.086	20.092	-0.006	72	1889	0.0401	0.0231	
85 N-Propylbenzene	91	20.145	20.150	-0.005	97	4550	0.0401	0.0250	
86 1,2,3-Trichloropropane	75	20.193	20.188	0.005	37	1519	0.0401	0.0225	
87 n-Decane	57	20.348	20.343	0.005	61	1550	0.0401	0.0234	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.348	20.354	-0.006	92	4376	0.0401	0.0329	
88 4-Ethyltoluene	105	20.354	20.354	0.000	82	3721	0.0401	0.0258	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	90	3599	0.0401	0.0288	
91 Alpha Methyl Styrene	118	20.841	20.846	-0.005	88	1318	0.0401	0.0229	
92 tert-Butylbenzene	119	20.969	20.969	0.000	94	3167	0.0401	0.0273	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	94	3069	0.0401	0.0251	
94 sec-Butylbenzene	105	21.306	21.306	0.000	95	4230	0.0401	0.0245	
95 4-Isopropyltoluene	119	21.515	21.520	-0.005	93	3560	0.0401	0.0251	
96 1,3-Dichlorobenzene	146	21.541	21.536	0.005	93	3141	0.0401	0.0372	
97 1,4-Dichlorobenzene	146	21.675	21.680	-0.005	92	3295	0.0401	0.0390	
98 Benzyl chloride	91	22.103	21.884	0.219	85	3762	0.0401	0.0360	
100 n-Butylbenzene	91	22.103	22.098	0.005	96	3721	0.0401	0.0293	
99 Undecane	57	22.125	22.125	0.001	33	2013	0.0401	0.0311	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	2693	0.0401	0.0342	
102 Dodecane	57	23.692	23.697	-0.005	1	2028	0.0401	0.0447	
103 1,2,4-Trichlorobenzene	180	24.666	24.671	-0.005	72	2384	0.0401	0.0528	
104 Hexachlorobutadiene	225	24.858	24.853	0.005	77	1935	0.0401	0.0476	
105 Naphthalene	128	25.153	25.152	0.000	95	4504	0.0401	0.0458	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	57	2623	0.0401	0.0677	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated

Reagents:

ATTO15CAL1w_00176	Amount Added: 40.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

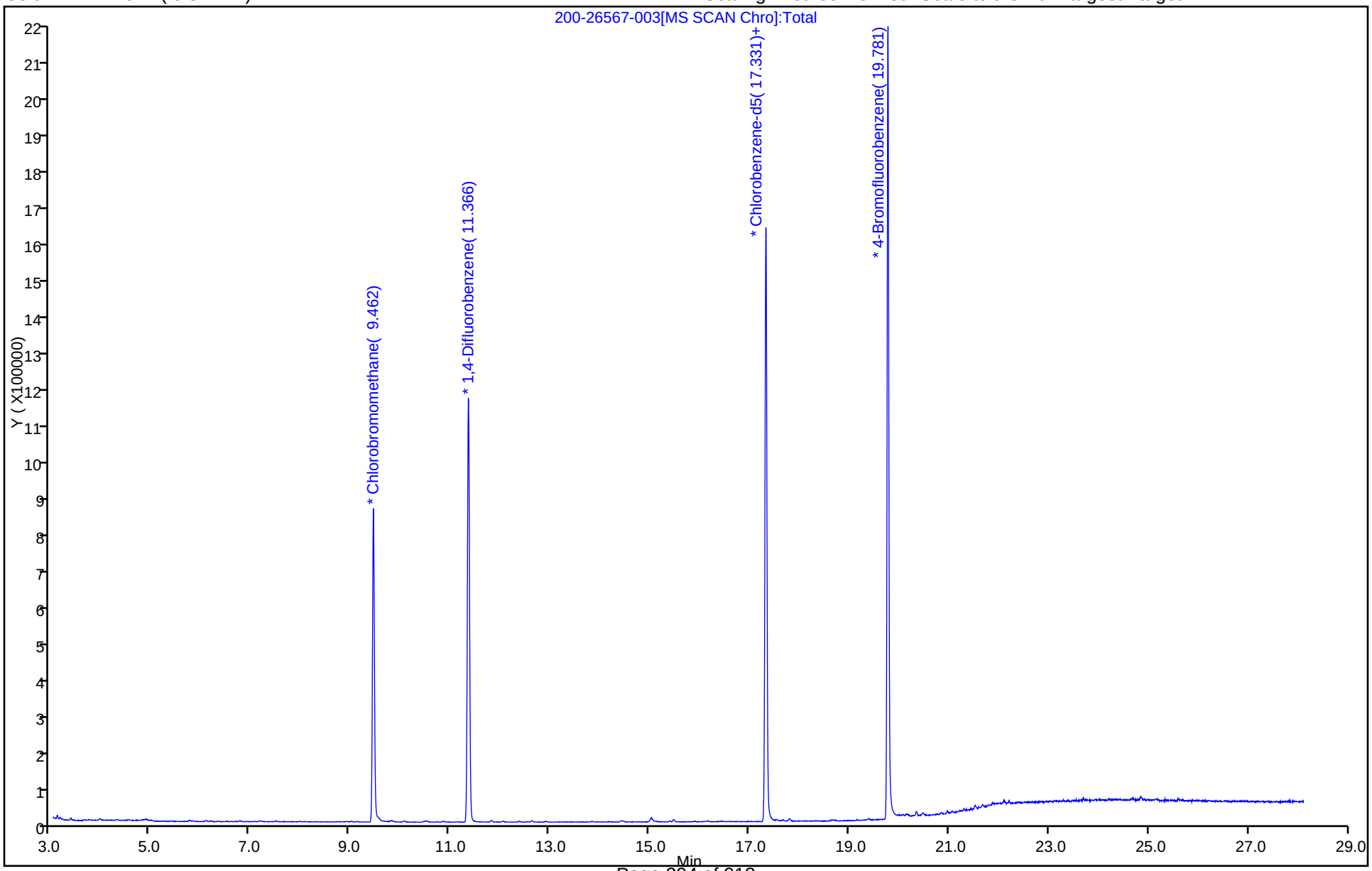
Report Date: 25-Aug-2017 10:17:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-003.D

Injection Date:	24-Aug-2017 17:24:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

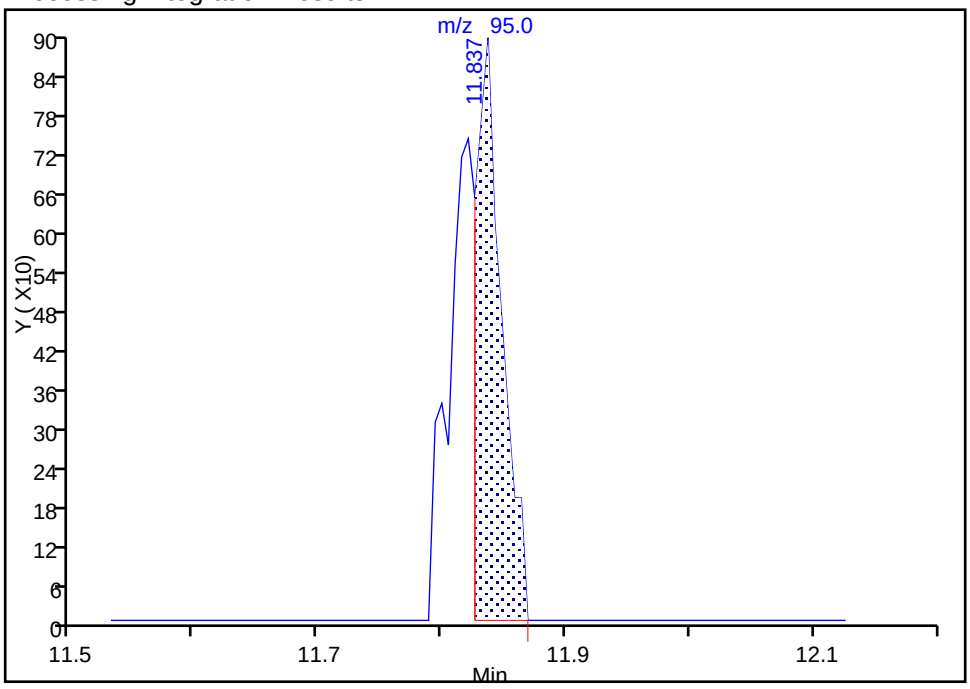
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-003.D				
Injection Date:	24-Aug-2017 17:24:30	Instrument ID:	CHG.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

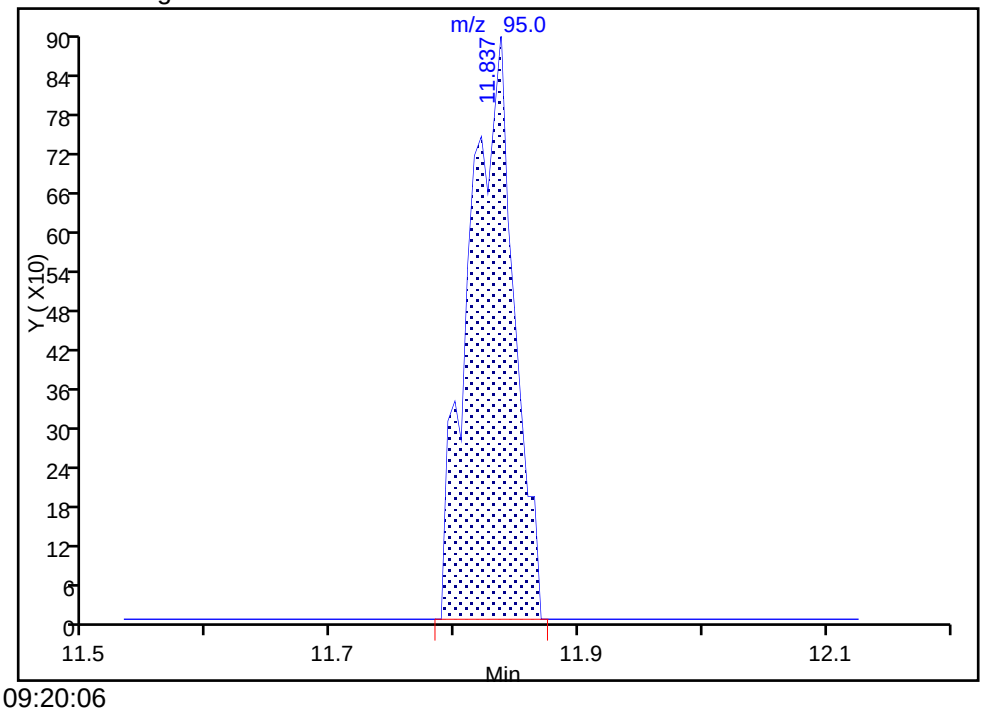
Processing Integration Results

RT: 11.84
Area: 1314
Amount: 0.029505
Amount Units: ppb v/v



Manual Integration Results

RT: 11.84
Area: 2245
Amount: 0.047326
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:20:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

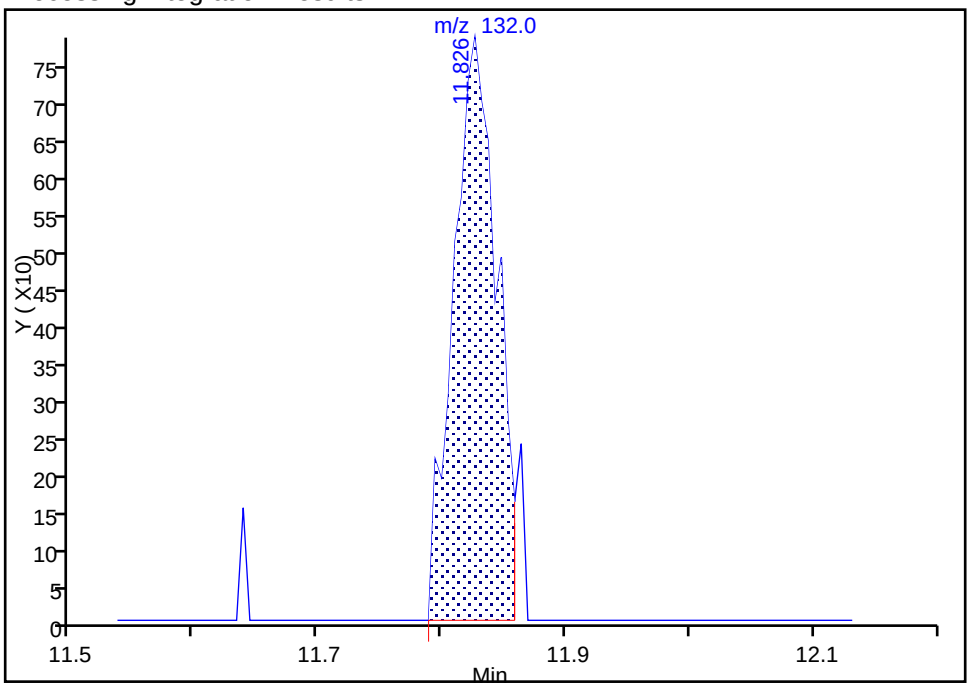
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-003.D
Injection Date: 24-Aug-2017 17:24:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

53 Trichloroethene, CAS: 79-01-6

Signal: 3

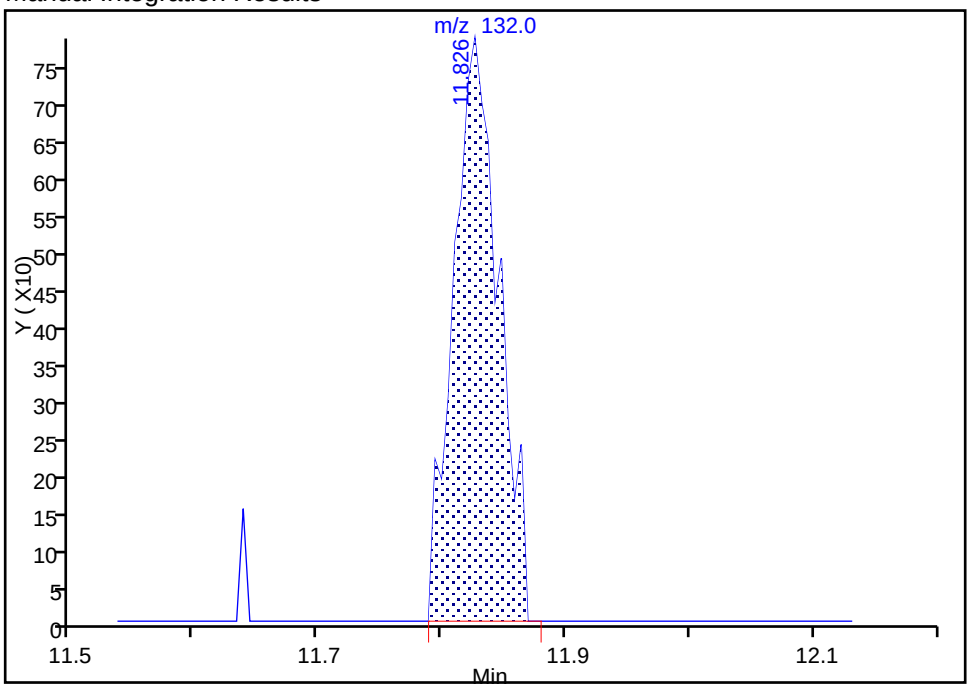
Processing Integration Results

RT: 11.83
Area: 1913
Amount: 0.029505
Amount Units: ppb v/v



Manual Integration Results

RT: 11.83
Area: 1990
Amount: 0.047326
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:20:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

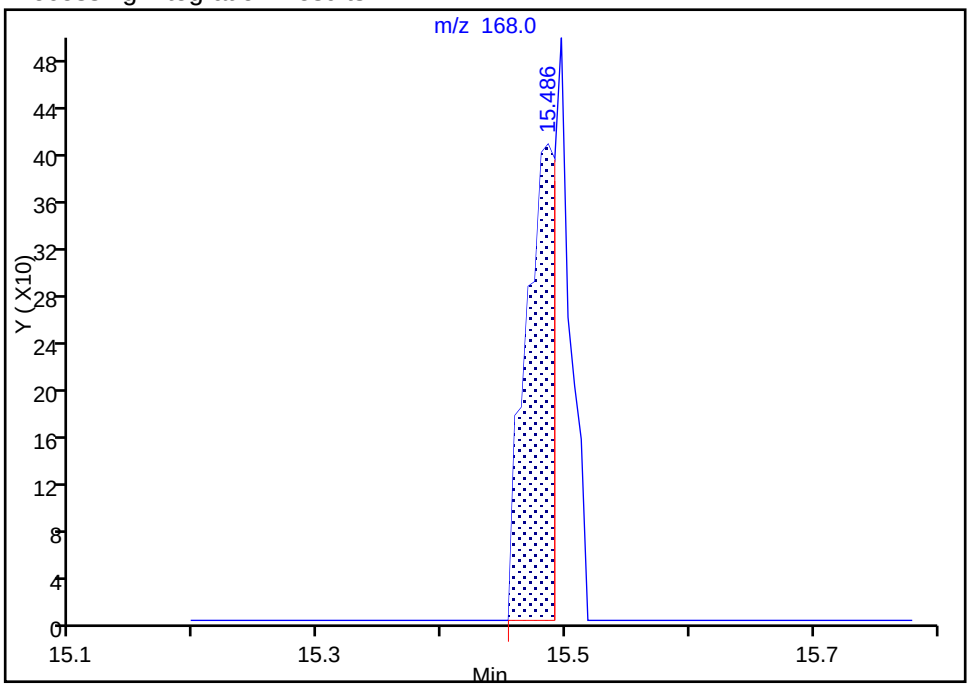
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-003.D
Injection Date: 24-Aug-2017 17:24:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 2

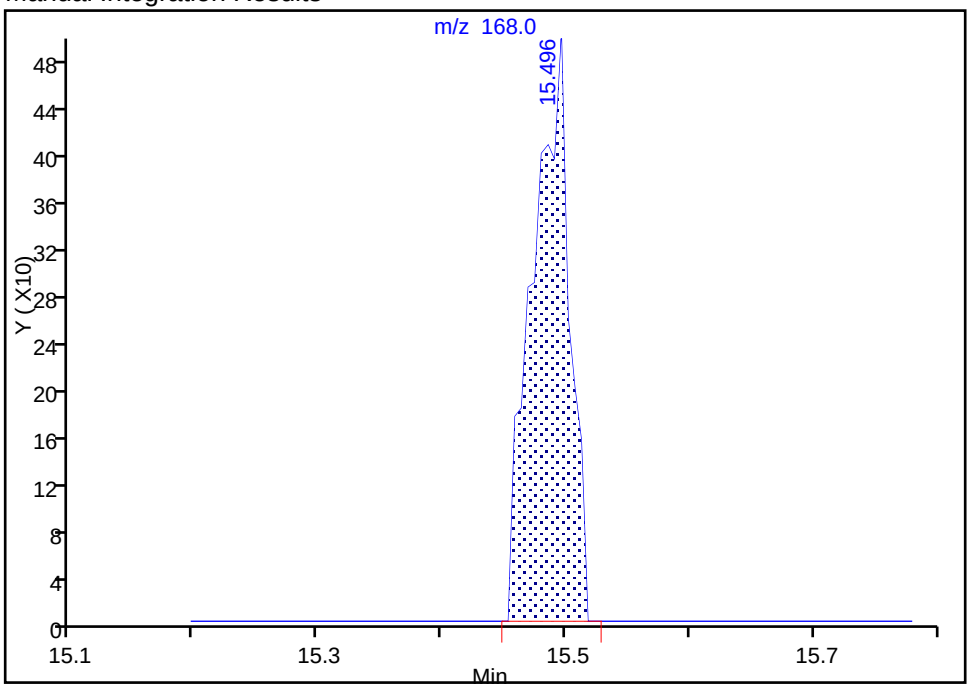
Processing Integration Results

RT: 15.49
Area: 676
Amount: 0.041215
Amount Units: ppb v/v



Manual Integration Results

RT: 15.50
Area: 1029
Amount: 0.041215
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:20:21
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

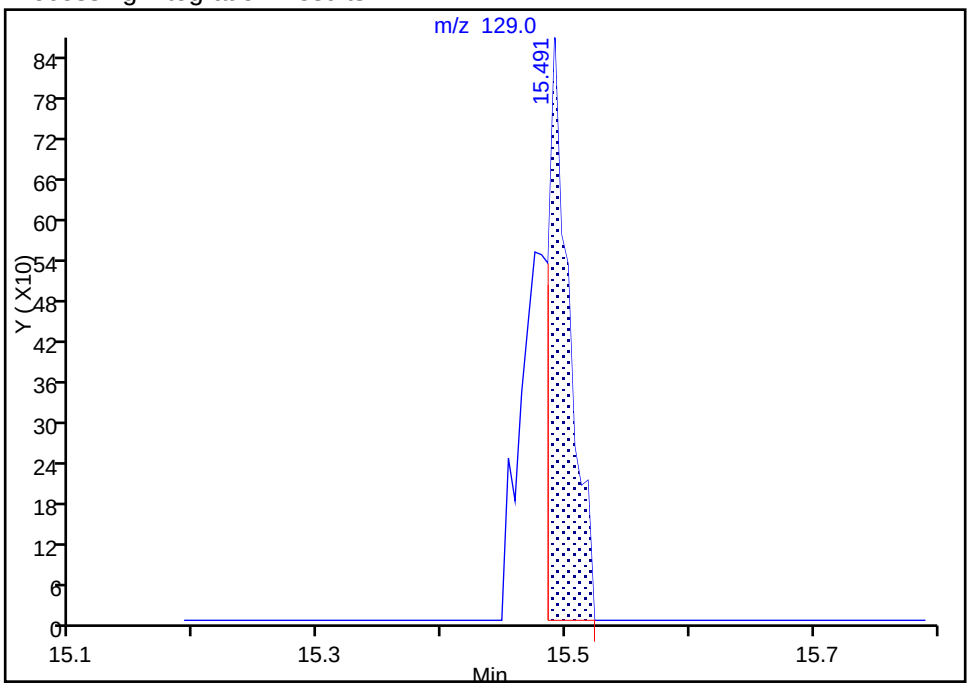
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-003.D
Injection Date: 24-Aug-2017 17:24:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 3

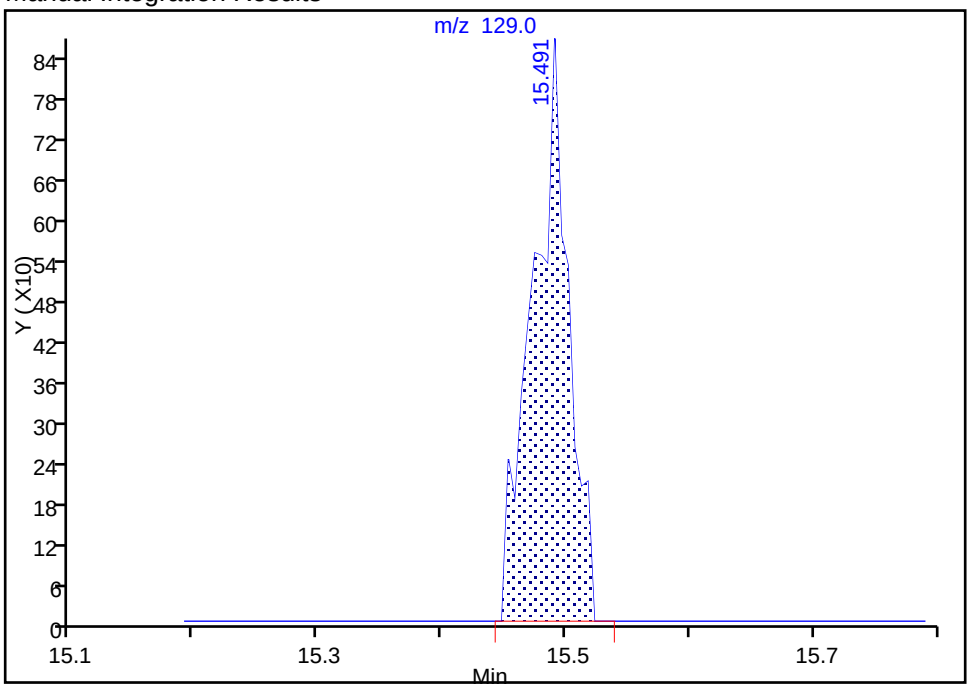
Processing Integration Results

RT: 15.49
Area: 1017
Amount: 0.041215
Amount Units: ppb v/v



Manual Integration Results

RT: 15.49
Area: 1754
Amount: 0.041215
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:20:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-004.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Aug-2017 18:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-004
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:44 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 08:48:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.122	0.006	88	5546	0.2004	0.2765	
2 Dichlorodifluoromethane	85	3.181	3.176	0.005	99	23441	0.2004	0.2193	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	12204	0.2004	0.2210	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	92	17366	0.2004	0.2041	
5 Chloromethane	50	3.513	3.513	0.000	99	5461	0.2004	0.2165	
6 Butane	43	3.668	3.668	0.000	94	7301	0.2004	0.1987	
7 Vinyl chloride	62	3.716	3.705	0.011	97	6154	0.2004	0.2135	
8 Butadiene	54	3.770	3.764	0.006	95	3588	0.2004	0.1868	
10 Bromomethane	94	4.326	4.321	0.005	97	6571	0.2004	0.2046	
11 Chloroethane	64	4.508	4.503	0.005	94	2369	0.2004	0.1908	
12 2-Methylbutane	43	4.556	4.551	0.005	91	6338	0.2004	0.2534	
13 Vinyl bromide	106	4.818	4.824	-0.006	96	6392	0.2004	0.2073	
14 Trichlorofluoromethane	101	4.898	4.893	0.005	98	20323	0.2004	0.2136	
16 Pentane	43	4.995	5.000	-0.005	97	8043	0.2004	0.2322	
17 Ethanol	45	5.391	5.369	0.022	96	3616	0.4009	0.3971	
18 Ethyl ether	59	5.466	5.439	0.027	92	2252	0.2004	0.1665	
20 1,1,2-Trichloro-1,2,2-trif	101	5.781	5.781	0.000	96	12522	0.2004	0.2077	
19 Acrolein	56	5.803	5.792	0.011	54	1240	0.2004	0.2443	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	97	5487	0.2004	0.2101	
22 Acetone	43	6.091	6.070	0.021	99	17505	0.2004	0.4930	
23 Carbon disulfide	76	6.209	6.209	0.000	99	14690	0.2004	0.2012	
24 Isopropyl alcohol	45	6.327	6.300	0.027	97	5733	0.2004	0.1681	
25 3-Chloro-1-propene	41	6.519	6.525	-0.006	92	5271	0.2004	0.2095	
26 Acetonitrile	41	6.696	6.675	0.021	90	3136	0.2004	0.2582	
27 Methylene Chloride	49	6.787	6.787	0.000	95	6556	0.2004	0.2179	
28 2-Methyl-2-propanol	59	7.033	7.001	0.032	97	7514	0.2004	0.1476	
29 Methyl tert-butyl ether	73	7.204	7.161	0.043	96	13983	0.2004	0.1979	
31 trans-1,2-Dichloroethene	61	7.172	7.177	-0.005	96	7562	0.2004	0.1904	
32 Acrylonitrile	53	7.354	7.354	0.000	95	2136	0.2004	0.1674	M
33 Hexane	57	7.509	7.509	0.000	88	6166	0.2004	0.1934	
34 1,1-Dichloroethane	63	7.991	7.996	-0.005	99	9970	0.2004	0.1908	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.065	8.055	0.010	99	7647	0.2004	0.1475	
37 cis-1,2-Dichloroethene	96	9.018	9.023	-0.005	94	6347	0.2004	0.2026	
38 2-Butanone (MEK)	72	9.119	9.098	0.021	96	2336	0.2004	0.2180	
39 Ethyl acetate	88		9.119				ND	ND	
* 40 Chlorobromomethane	128	9.462	9.467	-0.005	81	327195	10.0	10.0	
41 Tetrahydrofuran	42	9.537	9.505	0.032	89	4806	0.2004	0.2210	
42 Chloroform	83	9.569	9.579	-0.010	96	15241	0.2004	0.2025	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.3930	
43 Cyclohexane	84	9.815	9.815	0.000	90	6618	0.2004	0.1939	
44 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	95	17072	0.2004	0.2084	
45 Carbon tetrachloride	117	10.082	10.088	-0.006	96	16278	0.2004	0.1912	
46 Isooctane	57	10.494	10.494	0.000	97	20982	0.2004	0.1831	
47 Benzene	78	10.548	10.553	-0.005	96	18155	0.2004	0.2105	
48 1,2-Dichloroethane	62	10.735	10.735	0.000	98	10979	0.2004	0.1978	
49 n-Heptane	43	10.869	10.869	0.000	90	7606	0.2004	0.1841	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1554715	10.0	10.0	
52 n-Butanol	56	11.842	11.800	0.042	38	2907	0.2004	0.2348	
53 Trichloroethene	95	11.821	11.832	-0.011	94	9394	0.2004	0.1899	
54 1,2-Dichloropropane	63	12.404	12.393	0.011	61	6122	0.2004	0.1976	M
A 51 GRO	1	12.447	(4.541-20.353)		0	2713126	0.2004	0	
55 Methyl methacrylate	69	12.570	12.565	0.005	89	3527	0.2004	0.1483	
56 1,4-Dioxane	88	12.698	12.645	0.053	67	3135	0.2004	0.1906	
57 Dibromomethane	174	12.645	12.645	0.000	91	8076	0.2004	0.1984	
58 Dichlorobromomethane	83	12.928	12.928	0.000	98	14897	0.2004	0.1760	
60 cis-1,3-Dichloropropene	75	13.849	13.849	-0.001	97	8581	0.2004	0.1666	
61 4-Methyl-2-pentanone (MIBK	43	14.196	14.170	0.026	95	7678	0.2004	0.1448	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	3397473	0.2004	0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	61635	NC	NC	
65 Toluene	92	14.426	14.426	0.000	95	12503	0.2004	0.1945	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	38844	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	84	10710	0.2004	0.1793	
66 trans-1,3-Dichloropropene	75	15.031	15.036	-0.005	73	9504	0.2004	0.1697	
67 1,1,2-Trichloroethane	83	15.400	15.405	-0.005	96	6679	0.2004	0.1906	
68 Tetrachloroethene	166	15.486	15.491	-0.005	93	12766	0.2004	0.2095	
69 2-Hexanone	43	15.903	15.887	0.016	91	8675	0.2004	0.1642	
71 Chlorodibromomethane	129	16.154	16.165	-0.011	96	12998	0.2004	0.1571	
72 Ethylene Dibromide	107	16.427	16.438	-0.011	99	11076	0.2004	0.1688	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1425307	10.0	10.0	
75 Chlorobenzene	112	17.395	17.395	0.000	91	16949	0.2004	0.1865	
76 Ethylbenzene	91	17.551	17.551	-0.001	98	25563	0.2004	0.1830	
77 n-Nonane	57	17.684	17.679	0.005	83	8722	0.2004	0.1592	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	20159	0.4009	0.3687	
79 o-Xylene	106	18.663	18.663	0.000	99	9838	0.2004	0.1794	
80 Styrene	104	18.727	18.722	0.005	96	11687	0.2004	0.1504	
81 Bromoform	173	19.171	19.166	0.005	89	9443	0.2004	0.1440	M
82 Isopropylbenzene	105	19.385	19.391	-0.006	97	28453	0.2004	0.1820	
S 73 Xylenes, Total	106				0		0.6013	0.5481	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	89	1034885	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	96	14710	0.2004	0.1765	
85 N-Propylbenzene	91	20.150	20.150	0.000	98	31967	0.2004	0.1724	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	96	11239	0.2004	0.1637	
87 n-Decane	57	20.338	20.343	-0.005	95	8895	0.2004	0.1316	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.354	20.354	0.000	85	23584	0.2004	0.1604	
89 2-Chlorotoluene	91	20.354	20.354	0.000	96	24398	0.2004	0.1803	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	21598	0.2004	0.1698	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	87	7636	0.2004	0.1302	
92 tert-Butylbenzene	119	20.974	20.969	0.005	89	21071	0.2004	0.1785	
93 1,2,4-Trimethylbenzene	105	21.076	21.071	0.005	97	19108	0.2004	0.1533	
94 sec-Butylbenzene	105	21.306	21.306	0.000	97	28260	0.2004	0.1609	
95 4-Isopropyltoluene	119	21.515	21.520	-0.005	96	21804	0.2004	0.1508	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	14122	0.2004	0.1643	
97 1,4-Dichlorobenzene	146	21.680	21.680	0.000	93	14933	0.2004	0.1733	
98 Benzyl chloride	91	21.884	21.884	0.000	98	14154	0.2004	0.1329	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	16907	0.2004	0.1305	
99 Undecane	57	22.124	22.125	0.000	91	8383	0.2004	0.1271	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	95	12974	0.2004	0.1616	
102 Dodecane	57	23.697	23.697	0.000	91	6634	0.2004	0.1435	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	93	6509	0.2004	0.1415	
104 Hexachlorobutadiene	225	24.858	24.853	0.005	87	7082	0.2004	0.1710	
105 Naphthalene	128	25.147	25.152	-0.005	98	13232	0.2004	0.1322	
106 1,2,3-Trichlorobenzene	180	25.613	25.607	0.005	93	5853	0.2004	0.1483	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00176	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

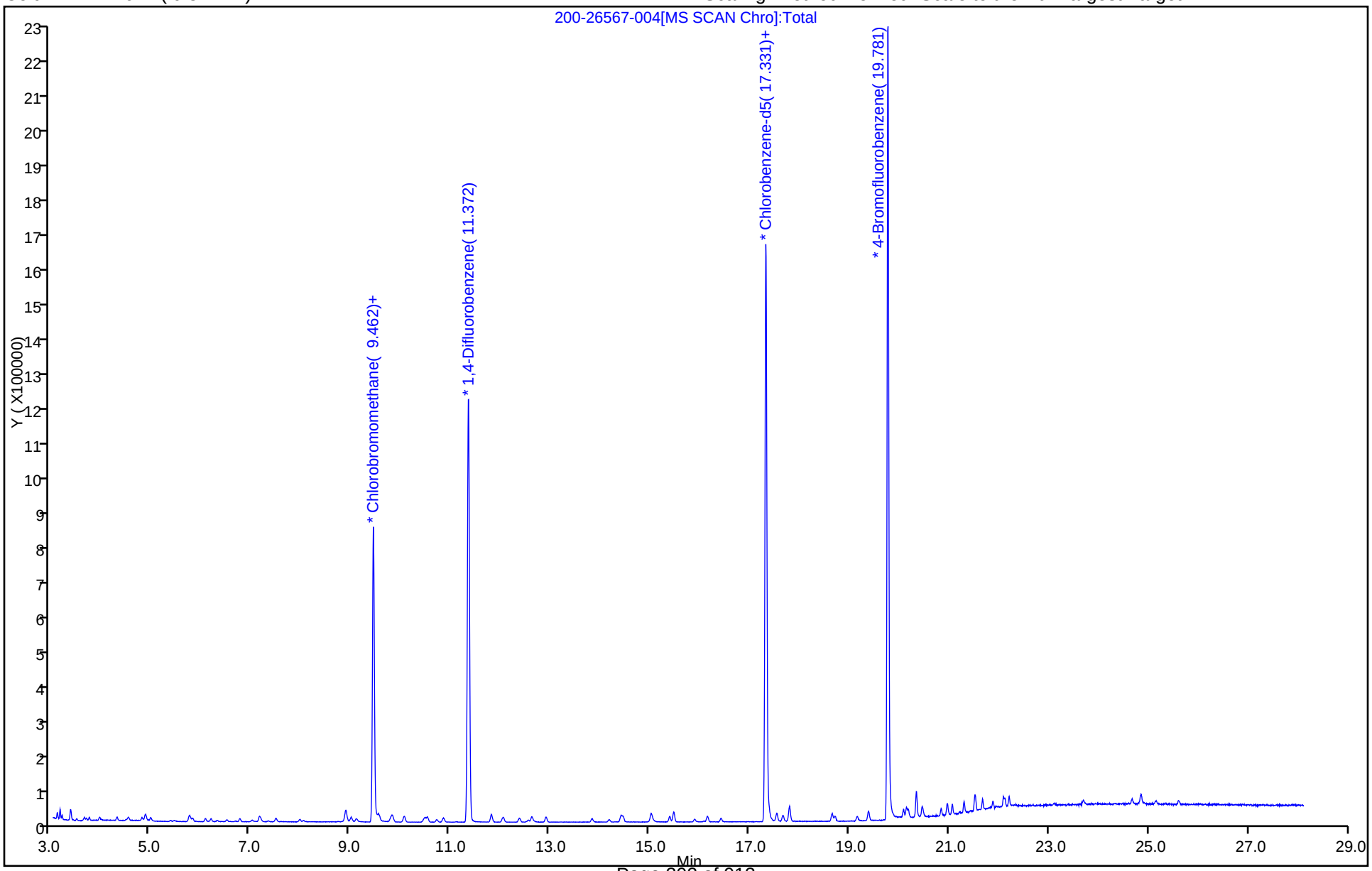
Report Date: 25-Aug-2017 10:17:44 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-004.D

Injection Date:	24-Aug-2017 18:14:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

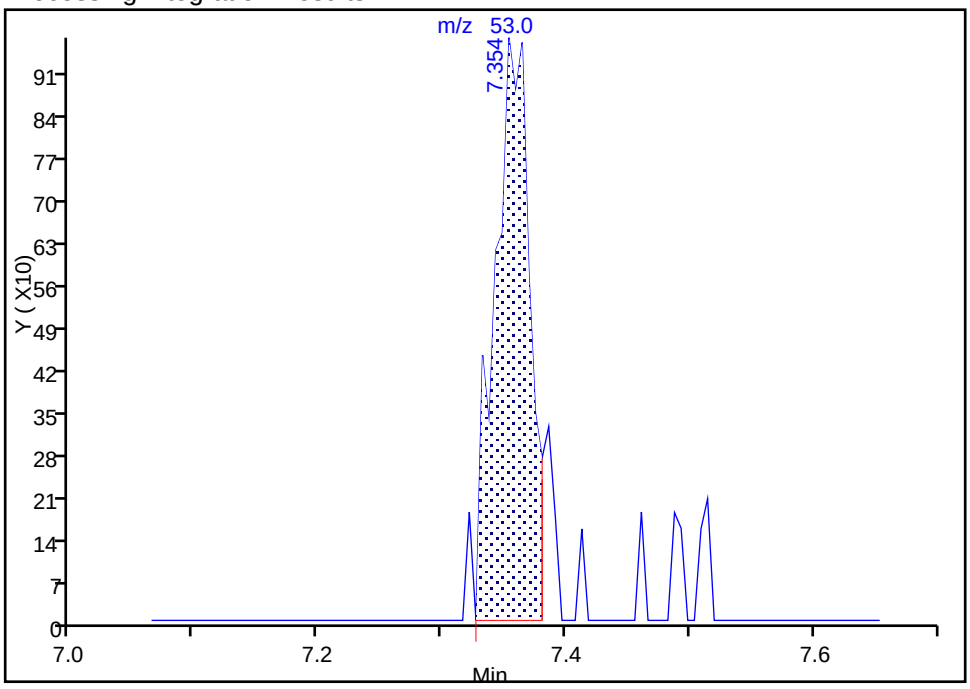
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-004.D
Injection Date: 24-Aug-2017 18:14:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

32 Acrylonitrile, CAS: 107-13-1

Signal: 1

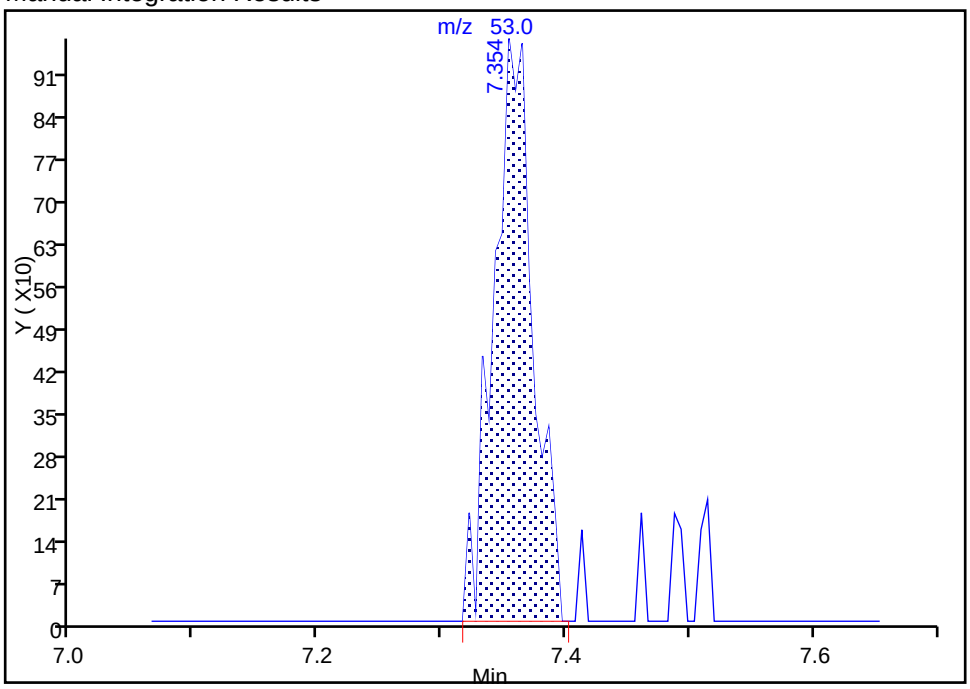
Processing Integration Results

RT: 7.35
Area: 1920
Amount: 0.150439
Amount Units: ppb v/v



Manual Integration Results

RT: 7.35
Area: 2136
Amount: 0.167363
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:21:14
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Burlington

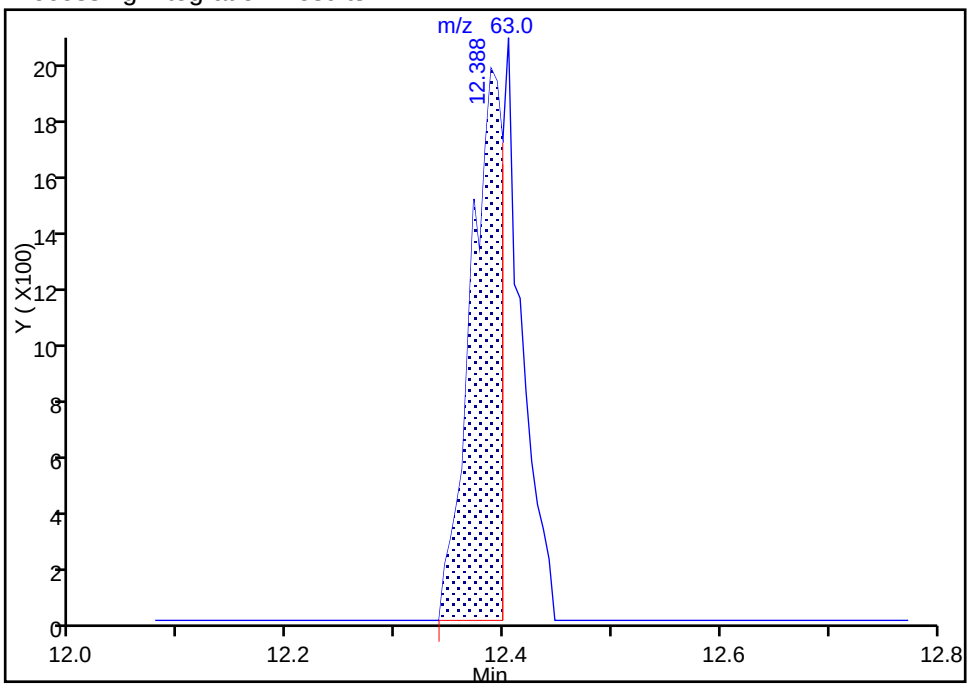
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-004.D
Injection Date: 24-Aug-2017 18:14:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

54 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

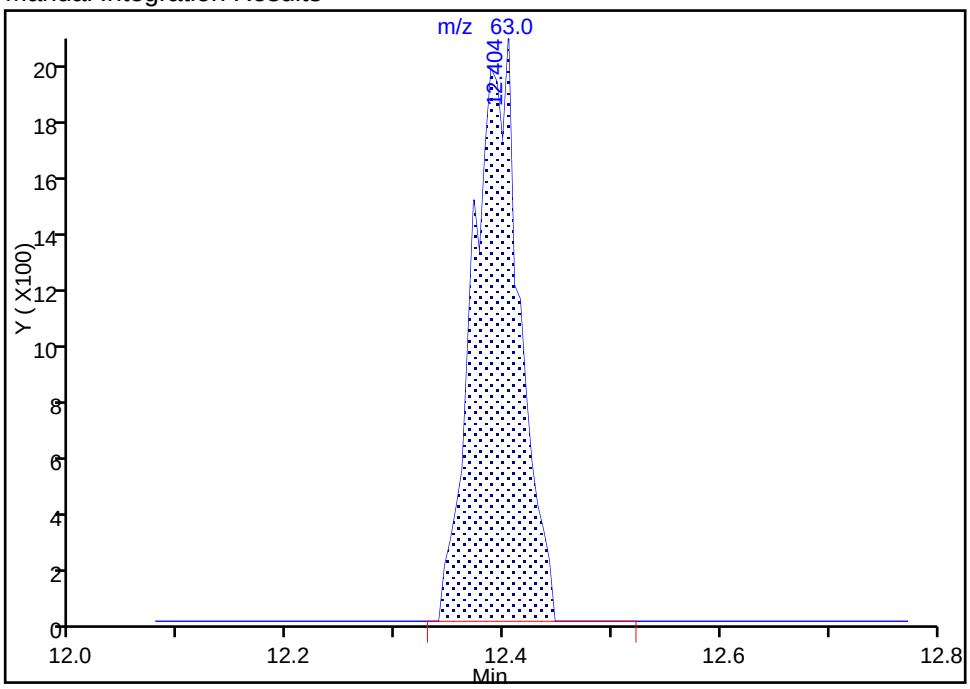
Processing Integration Results

RT: 12.39
Area: 3975
Amount: 0.134968
Amount Units: ppb v/v



Manual Integration Results

RT: 12.40
Area: 6122
Amount: 0.197600
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:22:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

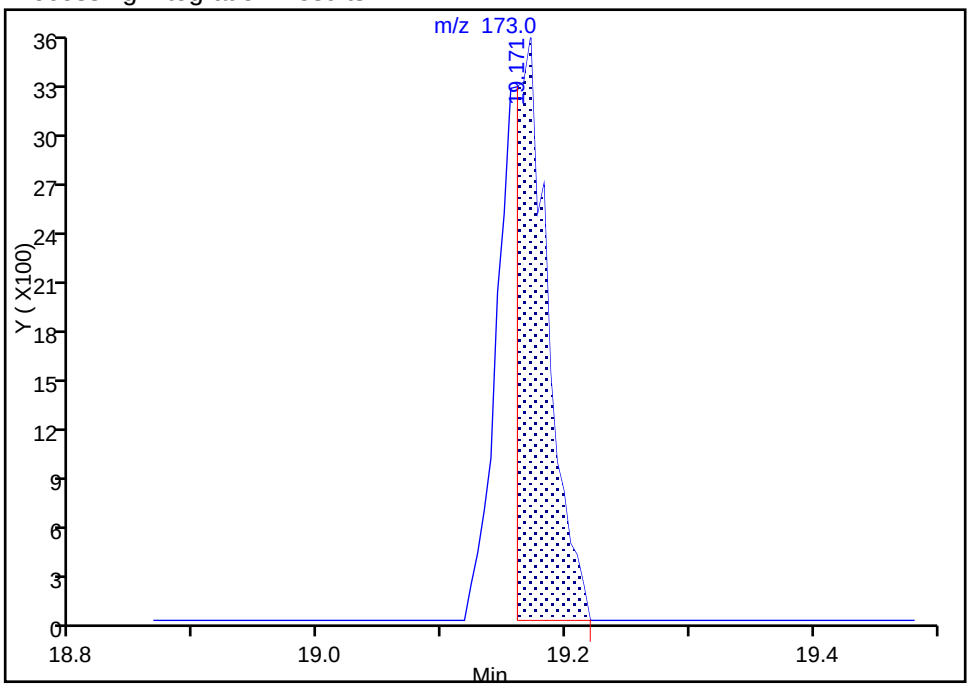
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-004.D
Injection Date: 24-Aug-2017 18:14:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

81 Bromoform, CAS: 75-25-2

Signal: 1

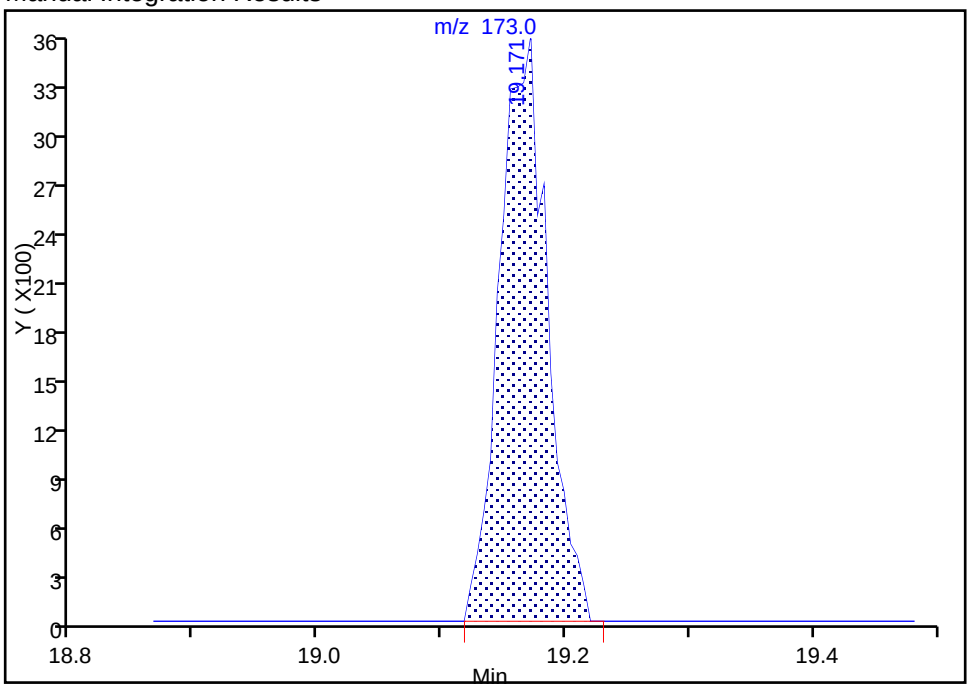
Processing Integration Results

RT: 19.17
Area: 6244
Amount: 0.098663
Amount Units: ppb v/v



Manual Integration Results

RT: 19.17
Area: 9443
Amount: 0.144023
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 08:48:15
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-005.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Aug-2017 19:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-005
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:46 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 09:26:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.128	3.122	0.006	90	11187	0.5005	0.5556	
2 Dichlorodifluoromethane	85	3.181	3.176	0.005	99	58470	0.5005	0.5448	
3 Chlorodifluoromethane	51	3.224	3.219	0.005	97	29054	0.5005	0.5241	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.395	3.390	0.005	92	46680	0.5005	0.5465	
5 Chloromethane	50	3.518	3.513	0.005	99	14230	0.5005	0.5620	
6 Butane	43	3.668	3.668	0.000	94	19484	0.5005	0.5281	
7 Vinyl chloride	62	3.711	3.705	0.006	97	15042	0.5005	0.5199	
8 Butadiene	54	3.764	3.764	0.000	94	9830	0.5005	0.5097	
10 Bromomethane	94	4.321	4.321	0.000	97	17098	0.5005	0.5304	
11 Chloroethane	64	4.508	4.503	0.005	97	6655	0.5005	0.5340	
12 2-Methylbutane	43	4.551	4.551	0.000	87	12536	0.5005	0.4993	
13 Vinyl bromide	106	4.824	4.824	0.000	97	16124	0.5005	0.5209	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	99	52534	0.5005	0.5501	
16 Pentane	43	5.000	5.000	0.000	96	17947	0.5005	0.5161	
17 Ethanol	45	5.380	5.369	0.011	95	54364	5.01	5.95	
18 Ethyl ether	59	5.460	5.439	0.021	94	7253	0.5005	0.5340	
20 1,1,2-Trichloro-1,2,2-trif	101	5.776	5.781	-0.005	94	32462	0.5005	0.5363	
19 Acrolein	56	5.808	5.792	0.016	89	2966	0.5005	0.5820	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	98	14603	0.5005	0.5570	
22 Acetone	43	6.092	6.070	0.022	100	29351	0.5005	0.8234	
23 Carbon disulfide	76	6.209	6.209	0.000	100	37863	0.5005	0.5167	
24 Isopropyl alcohol	45	6.327	6.300	0.027	98	18247	0.5005	0.5330	
25 3-Chloro-1-propene	41	6.520	6.525	-0.005	90	12520	0.5005	0.4958	
26 Acetonitrile	41	6.691	6.675	0.016	97	7090	0.5005	0.5815	
27 Methylene Chloride	49	6.787	6.787	0.000	92	16011	0.5005	0.5301	
28 2-Methyl-2-propanol	59	7.038	7.001	0.037	96	24807	0.5005	0.4853	
29 Methyl tert-butyl ether	73	7.183	7.161	0.022	95	35911	0.5005	0.5063	
31 trans-1,2-Dichloroethene	61	7.178	7.177	0.001	94	20897	0.5005	0.5242	
32 Acrylonitrile	53	7.349	7.354	-0.005	92	5853	0.5005	0.4569	
33 Hexane	57	7.509	7.509	0.000	87	15468	0.5005	0.4832	
34 1,1-Dichloroethane	63	7.996	7.996	0.000	98	26888	0.5005	0.5127	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.055	8.055	0.000	99	22561	0.5005	0.4337	
37 cis-1,2-Dichloroethene	96	9.023	9.023	0.000	94	16090	0.5005	0.5116	
38 2-Butanone (MEK)	72	9.103	9.098	0.005	97	5652	0.5005	0.5253	
39 Ethyl acetate	88	9.109	9.119	-0.010	96	485	0.5005	0.3248	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	82	328445	10.0	10.0	
41 Tetrahydrofuran	42	9.531	9.505	0.026	84	11594	0.5005	0.5226	
42 Chloroform	83	9.574	9.579	-0.005	96	40171	0.5005	0.5317	
S 30 1,2-Dichloroethene, Total	61				0		1.00	1.04	
43 Cyclohexane	84	9.820	9.815	0.005	93	16943	0.5005	0.4868	
44 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	95	44886	0.5005	0.5372	M
45 Carbon tetrachloride	117	10.077	10.088	-0.011	98	45197	0.5005	0.5205	
46 Isooctane	57	10.489	10.494	-0.005	96	54622	0.5005	0.4674	
47 Benzene	78	10.553	10.553	0.000	96	44472	0.5005	0.5056	
48 1,2-Dichloroethane	62	10.735	10.735	0.000	99	28277	0.5005	0.4995	
49 n-Heptane	43	10.864	10.869	-0.005	86	19761	0.5005	0.4689	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1585848	10.0	10.0	
52 n-Butanol	56	11.837	11.800	0.037	39	7040	0.5005	0.5574	
53 Trichloroethene	95	11.826	11.832	-0.006	94	23723	0.5005	0.4701	
54 1,2-Dichloropropane	63	12.394	12.393	0.001	79	16074	0.5005	0.5086	
A 51 GRO	1	12.447	(4.541-20.353)		0	6551994	0.5005	0	
55 Methyl methacrylate	69	12.575	12.565	0.010	90	10205	0.5005	0.4206	
57 Dibromomethane	174	12.645	12.645	0.000	92	21466	0.5005	0.5170	
56 1,4-Dioxane	88	12.682	12.645	0.037	96	9982	0.5005	0.5950	
58 Dichlorobromomethane	83	12.923	12.928	-0.005	99	40159	0.5005	0.4651	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.000	97	23975	0.5005	0.4562	M
61 4-Methyl-2-pentanone (MIBK	43	14.186	14.170	0.016	96	23752	0.5005	0.4392	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	9354045	0.5005	0	
65 Toluene	92	14.426	14.426	0.000	94	31793	0.5005	0.4903	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	134483	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	87	28494	0.5005	0.4677	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	132027	NC	NC	
66 trans-1,3-Dichloropropene	75	15.036	15.036	0.000	98	26134	0.5005	0.4574	
67 1,1,2-Trichloroethane	83	15.400	15.405	-0.005	97	17706	0.5005	0.5008	
68 Tetrachloroethene	166	15.486	15.491	-0.005	92	31677	0.5005	0.5152	
69 2-Hexanone	43	15.903	15.887	0.016	93	25434	0.5005	0.4771	
71 Chlorodibromomethane	129	16.160	16.165	-0.005	97	37267	0.5005	0.4464	
72 Ethylene Dibromide	107	16.438	16.438	0.000	98	30402	0.5005	0.4593	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1438016	10.0	10.0	
75 Chlorobenzene	112	17.396	17.395	0.001	96	45383	0.5005	0.4950	
76 Ethylbenzene	91	17.551	17.551	0.000	99	68518	0.5005	0.4862	
77 n-Nonane	57	17.679	17.679	0.000	85	25662	0.5005	0.4642	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	53175	1.00	0.9640	
79 o-Xylene	106	18.663	18.663	0.000	97	26086	0.5005	0.4714	
80 Styrene	104	18.717	18.722	-0.005	98	33045	0.5005	0.4214	
81 Bromoform	173	19.161	19.166	-0.005	92	28582	0.5005	0.4321	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	75819	0.5005	0.4807	
S 73 Xylenes, Total	106				0		1.50	1.44	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	94	1058589	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	97	41393	0.5005	0.4922	
85 N-Propylbenzene	91	20.151	20.150	0.001	99	89141	0.5005	0.4764	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	97	35215	0.5005	0.5083	
87 n-Decane	57	20.343	20.343	0.000	94	27913	0.5005	0.4094	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.354	20.354	0.000	96	68083	0.5005	0.4987	
88 4-Ethyltoluene	105	20.354	20.354	0.000	86	73114	0.5005	0.4928	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	93	62266	0.5005	0.4851	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	86	24479	0.5005	0.4137	
92 tert-Butylbenzene	119	20.969	20.969	0.000	90	58389	0.5005	0.4901	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	99	60301	0.5005	0.4795	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	83645	0.5005	0.4721	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	70538	0.5005	0.4836	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	42620	0.5005	0.4915	
97 1,4-Dichlorobenzene	146	21.675	21.680	-0.005	92	40315	0.5005	0.4638	
98 Benzyl chloride	91	21.884	21.884	0.000	98	42190	0.5005	0.3927	
100 n-Butylbenzene	91	22.093	22.098	-0.005	97	52359	0.5005	0.4006	
99 Undecane	57	22.125	22.125	0.001	93	22027	0.5005	0.3310	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	41324	0.5005	0.5101	
102 Dodecane	57	23.697	23.697	0.000	92	16433	0.5005	0.3522	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	94	19262	0.5005	0.4152	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	88	21612	0.5005	0.5172	
105 Naphthalene	128	25.147	25.152	-0.005	99	42243	0.5005	0.4184	
106 1,2,3-Trichlorobenzene	180	25.613	25.607	0.006	94	18047	0.5005	0.4531	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL2w_00242	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

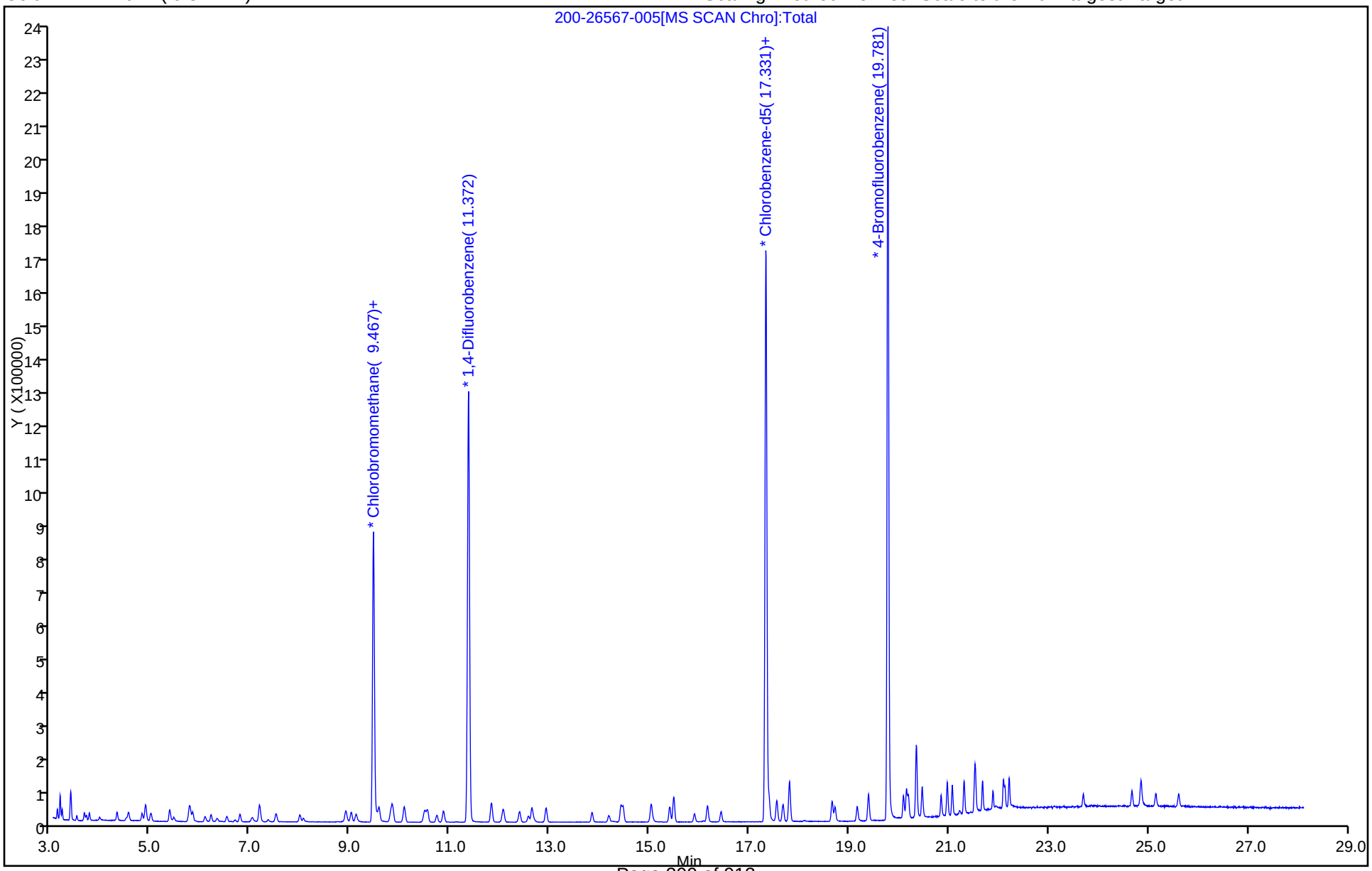
Report Date: 25-Aug-2017 10:17:47 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-005.D

Injection Date:	24-Aug-2017 19:05:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

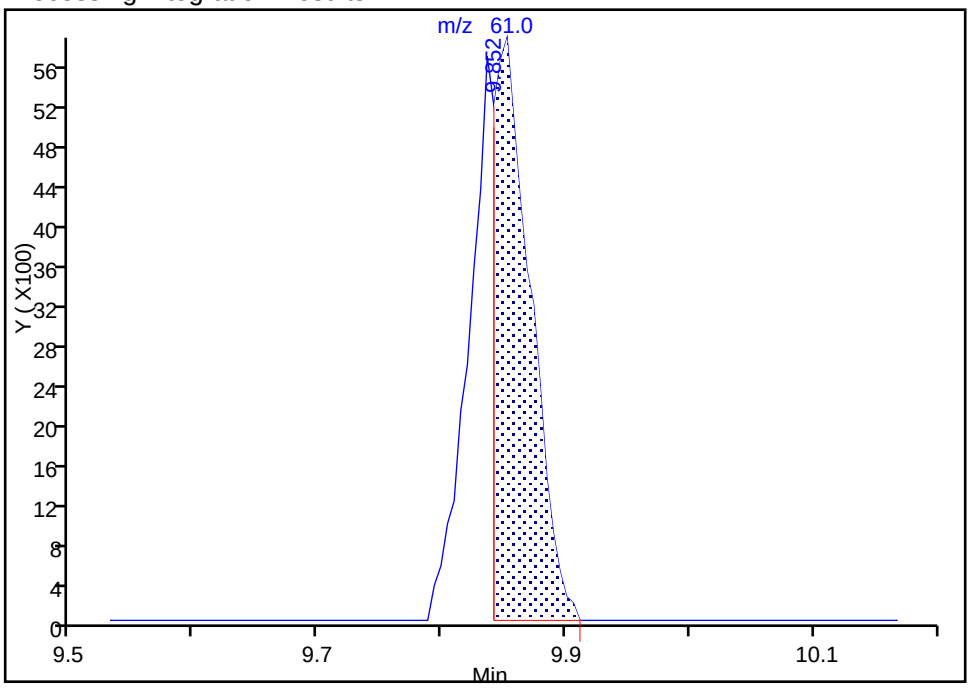
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-005.D
Injection Date: 24-Aug-2017 19:05:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 3

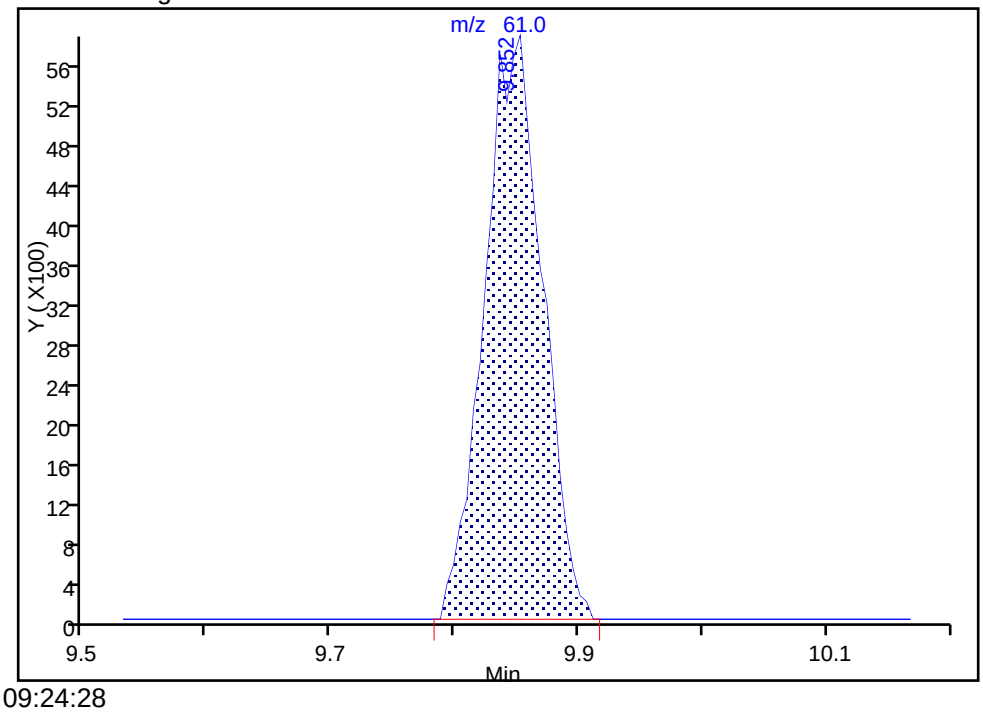
Processing Integration Results

RT: 9.85
Area: 12275
Amount: 0.537202
Amount Units: ppb v/v



Manual Integration Results

RT: 9.85
Area: 19126
Amount: 0.537202
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:24:28
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington

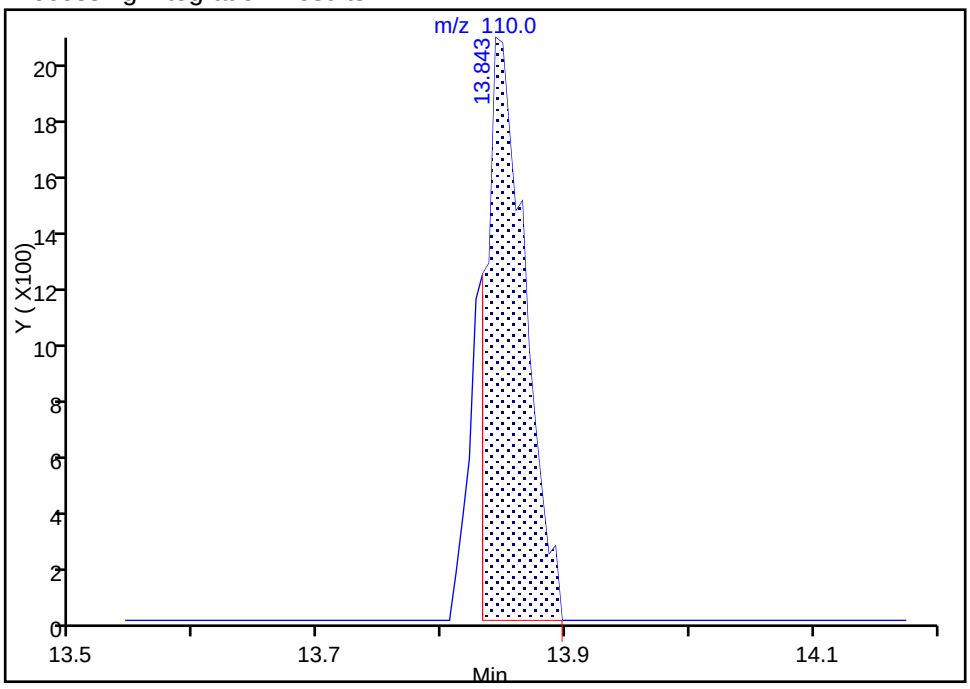
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-005.D
Injection Date: 24-Aug-2017 19:05:30 Instrument ID: CHG.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

60 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 2

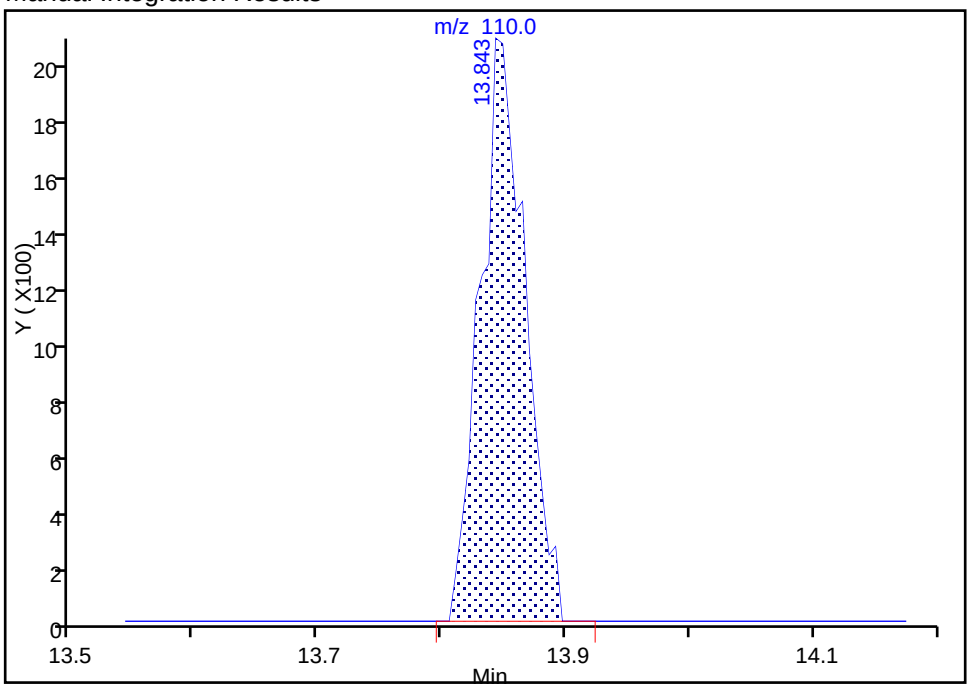
Processing Integration Results

RT: 13.84
Area: 4510
Amount: 0.456225
Amount Units: ppb v/v



Manual Integration Results

RT: 13.84
Area: 5241
Amount: 0.456225
Amount Units: ppb v/v



Reviewer: daiglep, 25-Aug-2017 09:24:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-006.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Aug-2017 19:55:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-006
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:49 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 09:27:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.122	0.000	94	96529	4.99	4.87	
2 Dichlorodifluoromethane	85	3.176	3.176	0.000	100	556083	4.99	5.26	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	279791	4.99	5.12	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	93	434298	4.99	5.16	
5 Chloromethane	50	3.513	3.513	0.000	99	120964	4.99	4.85	
6 Butane	43	3.668	3.668	0.000	94	175652	4.99	4.83	
7 Vinyl chloride	62	3.706	3.705	0.001	98	142166	4.99	4.99	
8 Butadiene	54	3.764	3.764	0.000	95	90896	4.99	4.78	
10 Bromomethane	94	4.321	4.321	0.000	98	159444	4.99	5.02	
11 Chloroethane	64	4.503	4.503	0.000	98	59255	4.99	4.83	
12 2-Methylbutane	43	4.545	4.551	-0.006	89	115745	4.99	4.68	
13 Vinyl bromide	106	4.824	4.824	0.000	98	154762	4.99	5.07	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	99	491363	4.99	5.22	
16 Pentane	43	5.000	5.000	0.000	97	165349	4.99	4.83	
17 Ethanol	45	5.369	5.369	0.000	95	91016	10.0	10.1	
18 Ethyl ether	59	5.444	5.439	0.005	97	65660	4.99	4.91	
20 1,1,2-Trichloro-1,2,2-trif	101	5.776	5.781	-0.005	94	302624	4.99	5.07	
19 Acrolein	56	5.792	5.792	0.000	95	25404	4.99	5.06	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	96	125102	4.99	4.84	
22 Acetone	43	6.070	6.070	0.000	100	178227	4.99	5.07	
23 Carbon disulfide	76	6.204	6.209	-0.005	100	353948	4.99	4.90	
24 Isopropyl alcohol	45	6.300	6.300	0.000	99	159326	4.99	4.72	
25 3-Chloro-1-propene	41	6.520	6.525	-0.005	92	114687	4.99	4.61	
26 Acetonitrile	41	6.680	6.675	0.005	95	59620	4.99	4.96	
27 Methylene Chloride	49	6.787	6.787	0.000	93	145037	4.99	4.87	
28 2-Methyl-2-propanol	59	7.001	7.001	0.000	95	239387	4.99	4.75	
29 Methyl tert-butyl ether	73	7.161	7.161	0.000	95	350307	4.99	5.01	
31 trans-1,2-Dichloroethene	61	7.178	7.177	0.001	98	195349	4.99	4.97	
32 Acrylonitrile	53	7.343	7.354	-0.011	92	60640	4.99	4.80	
33 Hexane	57	7.515	7.509	0.006	88	152025	4.99	4.82	
34 1,1-Dichloroethane	63	7.991	7.996	-0.005	99	255679	4.99	4.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.055	8.055	0.000	100	243673	4.99	4.75	
37 cis-1,2-Dichloroethene	96	9.018	9.023	-0.005	95	150945	4.99	4.87	
38 2-Butanone (MEK)	72	9.103	9.098	0.005	96	51700	4.99	4.88	
39 Ethyl acetate	88	9.119	9.119	0.000	96	7582	4.99	5.15	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	82	323645	10.0	10.0	
41 Tetrahydrofuran	42	9.510	9.505	0.005	84	106160	4.99	4.90	
42 Chloroform	83	9.580	9.579	0.001	97	367670	4.99	4.94	
S 30 1,2-Dichloroethene, Total	61				0		9.99	9.84	
43 Cyclohexane	84	9.815	9.815	0.000	93	169730	4.99	4.99	
44 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	95	416916	4.99	5.10	
45 Carbon tetrachloride	117	10.082	10.088	-0.006	98	449148	4.99	5.29	
46 Isooctane	57	10.494	10.494	0.000	97	555926	4.99	4.87	
47 Benzene	78	10.548	10.553	-0.005	97	416605	4.99	4.85	
48 1,2-Dichloroethane	62	10.735	10.735	0.000	99	278021	4.99	5.02	
49 n-Heptane	43	10.869	10.869	0.000	88	200901	4.99	4.88	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1550148	10.0	10.0	
52 n-Butanol	56	11.805	11.800	0.005	91	53429	4.99	4.33	
53 Trichloroethene	95	11.832	11.832	0.000	96	236869	4.99	4.80	
54 1,2-Dichloropropane	63	12.394	12.393	0.001	79	147565	4.99	4.78	
A 51 GRO	1	12.447	(4.541-20.353)		0	62093472	4.99	0	
55 Methyl methacrylate	69	12.565	12.565	0.000	89	112219	4.99	4.73	
56 1,4-Dioxane	88	12.645	12.645	0.000	46	78547	4.99	4.79	
57 Dibromomethane	174	12.645	12.645	0.000	93	207154	4.99	5.10	
58 Dichlorobromomethane	83	12.923	12.928	-0.005	98	425202	4.99	5.04	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.000	97	251437	4.99	4.89	
61 4-Methyl-2-pentanone (MIBK	43	14.175	14.170	0.005	97	252769	4.99	4.78	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	94672781	4.99	0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	1358953	NC	NC	
65 Toluene	92	14.426	14.426	0.000	94	309691	4.99	4.79	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	1329900	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	88	293475	4.99	4.93	
66 trans-1,3-Dichloropropene	75	15.036	15.036	0.000	97	273603	4.99	4.90	
67 1,1,2-Trichloroethane	83	15.405	15.405	0.000	98	171385	4.99	4.86	
68 Tetrachloroethene	166	15.486	15.491	-0.005	92	305713	4.99	4.99	
69 2-Hexanone	43	15.892	15.887	0.005	93	240518	4.99	4.53	
71 Chlorodibromomethane	129	16.165	16.165	0.000	97	420188	4.99	5.05	
72 Ethylene Dibromide	107	16.433	16.438	-0.005	98	327685	4.99	4.97	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1433174	10.0	10.0	
75 Chlorobenzene	112	17.395	17.395	0.000	94	447067	4.99	4.89	
76 Ethylbenzene	91	17.551	17.551	0.000	99	688135	4.99	4.90	
77 n-Nonane	57	17.674	17.679	-0.005	87	267377	4.99	4.85	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	543256	9.99	9.88	
79 o-Xylene	106	18.663	18.663	0.000	99	274729	4.99	4.98	
80 Styrene	104	18.722	18.722	0.000	99	389696	4.99	4.99	
81 Bromoform	173	19.166	19.166	0.000	93	348850	4.99	5.29	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	788748	4.99	5.02	
S 73 Xylenes, Total	106				0		15.0	14.9	
* 83 4-Bromofluorobenzene	95	19.776	19.781	-0.005	88	1082782	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	414718	4.99	4.95	
85 N-Propylbenzene	91	20.151	20.150	0.001	98	934833	4.99	5.01	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	97	337601	4.99	4.89	
87 n-Decane	57	20.343	20.343	0.000	95	332351	4.99	4.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.354	20.354	0.000	90	770728	4.99	5.21	
89 2-Chlorotoluene	91	20.354	20.354	0.000	94	692648	4.99	5.09	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	638123	4.99	4.99	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	88	301572	4.99	5.11	
92 tert-Butylbenzene	119	20.969	20.969	0.000	93	597436	4.99	5.03	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	637289	4.99	5.08	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	898667	4.99	5.09	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	758516	4.99	5.22	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	451325	4.99	5.22	
97 1,4-Dichlorobenzene	146	21.675	21.680	-0.005	93	438909	4.99	5.07	
98 Benzyl chloride	91	21.884	21.884	0.000	97	546893	4.99	5.11	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	690095	4.99	5.30	
99 Undecane	57	22.125	22.125	0.001	94	294788	4.99	4.44	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	411612	4.99	5.10	
102 Dodecane	57	23.697	23.697	0.000	94	191087	4.99	4.11	
103 1,2,4-Trichlorobenzene	180	24.676	24.671	0.005	93	212396	4.99	4.59	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	90	227716	4.99	5.47	
105 Naphthalene	128	25.153	25.152	0.001	99	415868	4.99	4.13	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	94	179959	4.99	4.53	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL3w_00186	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

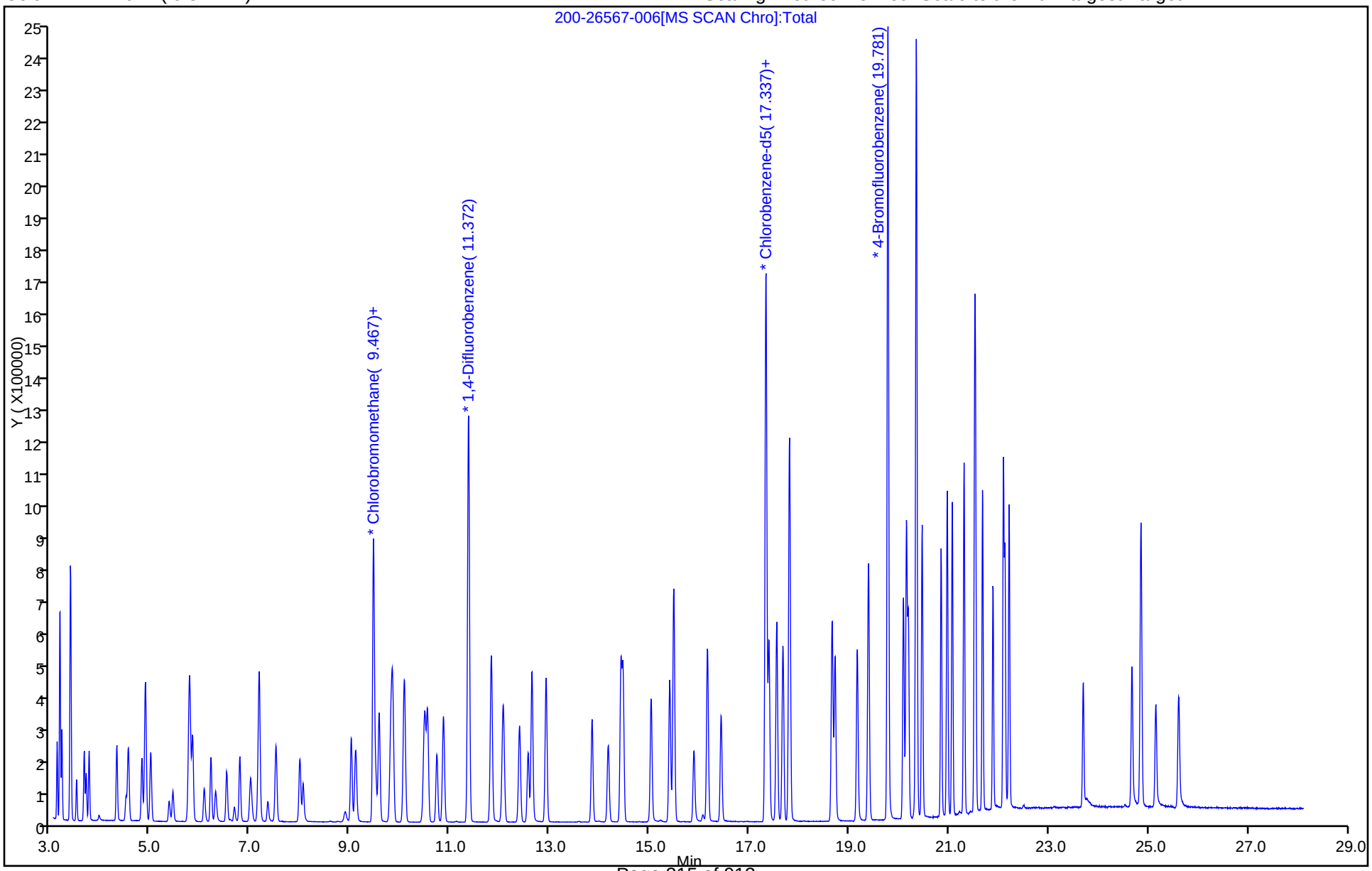
Report Date: 25-Aug-2017 10:17:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-006.D

Injection Date:	24-Aug-2017 19:55:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-007.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 24-Aug-2017 20:45:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-007
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:51 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 08:46:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.122	0.000	95	204261	10.0	10.0	
2 Dichlorodifluoromethane	85	3.176	3.176	0.000	100	1116439	10.0	10.3	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	568023	10.0	10.1	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	94	875396	10.0	10.1	
5 Chloromethane	50	3.513	3.513	0.000	99	249354	10.0	9.75	
6 Butane	43	3.668	3.668	0.000	94	373759	10.0	10.0	
7 Vinyl chloride	62	3.705	3.705	0.000	98	293970	10.0	10.1	
8 Butadiene	54	3.764	3.764	0.000	96	191812	10.0	9.84	
10 Bromomethane	94	4.321	4.321	0.000	98	327237	10.0	10.0	
11 Chloroethane	64	4.503	4.503	0.000	98	124020	10.0	9.85	
12 2-Methylbutane	43	4.551	4.551	0.000	89	243846	10.0	9.61	
13 Vinyl bromide	106	4.824	4.824	0.000	98	315077	10.0	10.1	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	98	970379	10.0	10.1	
16 Pentane	43	5.000	5.000	0.000	97	353082	10.0	10.1	
17 Ethanol	45	5.369	5.369	0.000	96	140088	15.0	15.2	
18 Ethyl ether	59	5.439	5.439	0.000	96	139380	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trif	101	5.781	5.781	0.000	94	610354	10.0	9.98	
19 Acrolein	56	5.792	5.792	0.000	96	42473	10.0	8.25	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	95	256696	10.0	9.69	
22 Acetone	43	6.070	6.070	0.000	100	387983	10.0	10.8	
23 Carbon disulfide	76	6.209	6.209	0.000	100	740207	10.0	10.0	
24 Isopropyl alcohol	45	6.300	6.300	0.000	99	333914	10.0	9.65	
25 3-Chloro-1-propene	41	6.525	6.525	0.000	92	273353	10.0	10.7	
26 Acetonitrile	41	6.675	6.675	0.000	96	113226	10.0	9.19	
27 Methylene Chloride	49	6.787	6.787	0.000	93	302629	10.0	9.92	
28 2-Methyl-2-propanol	59	7.001	7.001	0.000	96	495609	10.0	9.60	
29 Methyl tert-butyl ether	73	7.161	7.161	0.000	95	722197	10.0	10.1	
31 trans-1,2-Dichloroethene	61	7.177	7.177	0.000	97	402812	10.0	10.0	
32 Acrylonitrile	53	7.354	7.354	0.000	93	128918	10.0	9.96	
33 Hexane	57	7.509	7.509	0.000	89	326795	10.0	10.1	
34 1,1-Dichloroethane	63	7.996	7.996	0.000	99	535146	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.055	8.055	0.000	100	521311	10.0	9.92	
37 cis-1,2-Dichloroethene	96	9.023	9.023	0.000	95	316111	10.0	9.95	
38 2-Butanone (MEK)	72	9.098	9.098	0.000	96	108565	10.0	9.99	
39 Ethyl acetate	88	9.119	9.119	0.000	97	15282	10.0	10.1	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	83	331845	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.505	0.000	84	225444	10.0	9.94	
42 Chloroform	83	9.579	9.579	0.000	97	758722	10.0	9.94	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.0	
43 Cyclohexane	84	9.815	9.815	0.000	94	358791	10.0	10.1	
44 1,1,1-Trichloroethane	97	9.852	9.852	0.000	95	846886	10.0	9.91	
45 Carbon tetrachloride	117	10.088	10.088	0.000	98	914163	10.0	10.3	
46 Isooctane	57	10.494	10.494	0.000	97	1207701	10.0	10.1	
47 Benzene	78	10.553	10.553	0.000	97	867972	10.0	9.65	
48 1,2-Dichloroethane	62	10.735	10.735	0.000	99	572097	10.0	9.88	
49 n-Heptane	43	10.869	10.869	0.000	89	439938	10.0	10.2	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1621997	10.0	10.0	
52 n-Butanol	56	11.800	11.800	0.000	92	120853	10.0	9.35	
53 Trichloroethene	95	11.832	11.832	0.000	95	502784	10.0	9.74	
54 1,2-Dichloropropane	63	12.393	12.393	0.000	80	312866	10.0	9.68	
A 51 GRO	1	12.447	(4.541-20.353)		0	130333207	10.0	0	
55 Methyl methacrylate	69	12.565	12.565	0.000	90	249929	10.0	10.1	
57 Dibromomethane	174	12.645	12.645	0.000	92	425600	10.0	10.0	
56 1,4-Dioxane	88	12.645	12.645	0.000	46	162316	10.0	9.46	
58 Dichlorobromomethane	83	12.928	12.928	0.000	98	910597	10.0	10.3	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.000	97	543994	10.0	10.1	
61 4-Methyl-2-pentanone (MIBK	43	14.170	14.170	0.000	97	551010	10.0	9.96	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	200140599	10.0	0	
65 Toluene	92	14.426	14.426	0.000	94	657608	10.0	9.98	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	3107184	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	89	643118	10.0	10.3	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	2603102	NC	NC	
66 trans-1,3-Dichloropropene	75	15.036	15.036	0.000	98	601227	10.0	10.3	
67 1,1,2-Trichloroethane	83	15.405	15.405	0.000	98	360513	10.0	10.0	
68 Tetrachloroethene	166	15.491	15.491	0.000	92	630742	10.0	10.1	
69 2-Hexanone	43	15.887	15.887	0.000	93	534247	10.0	9.86	
71 Chlorodibromomethane	129	16.165	16.165	0.000	97	919881	10.0	10.8	
72 Ethylene Dibromide	107	16.438	16.438	0.000	99	700044	10.0	10.4	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1461208	10.0	10.0	
75 Chlorobenzene	112	17.395	17.395	0.000	94	936738	10.0	10.1	
76 Ethylbenzene	91	17.551	17.551	0.000	99	1450929	10.0	10.1	
77 n-Nonane	57	17.679	17.679	0.000	87	587614	10.0	10.5	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	1143278	20.0	20.4	
79 o-Xylene	106	18.663	18.663	0.000	99	578700	10.0	10.3	
80 Styrene	104	18.722	18.722	0.000	99	842621	10.0	10.6	
81 Bromoform	173	19.166	19.166	0.000	93	778645	10.0	11.6	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	1646576	10.0	10.3	
S 73 Xylenes, Total	106				0		30.0	30.7	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	87	1091958	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	871749	10.0	10.2	
85 N-Propylbenzene	91	20.150	20.150	0.000	98	1975724	10.0	10.4	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	97	701359	10.0	9.96	
87 n-Decane	57	20.343	20.343	0.000	95	718478	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.354	20.354	0.000	94	1456579	10.0	10.5	
88 4-Ethyltoluene	105	20.354	20.354	0.000	93	1632719	10.0	10.8	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	1348359	10.0	10.3	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	88	650998	10.0	10.8	
92 tert-Butylbenzene	119	20.969	20.969	0.000	90	1248975	10.0	10.3	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	1342362	10.0	10.5	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	1896378	10.0	10.5	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	1604065	10.0	10.8	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	942748	10.0	10.7	
97 1,4-Dichlorobenzene	146	21.680	21.680	0.000	93	929986	10.0	10.5	
98 Benzyl chloride	91	21.884	21.884	0.000	98	1206812	10.0	11.1	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	1482637	10.0	11.2	
99 Undecane	57	22.125	22.125	0.000	94	657510	10.0	9.72	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	862947	10.0	10.5	
102 Dodecane	57	23.697	23.697	0.000	94	396085	10.0	8.35	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	93	486232	10.0	10.3	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	93	470837	10.0	11.1	
105 Naphthalene	128	25.152	25.152	0.000	99	1009201	10.0	9.84	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	94	401000	10.0	9.91	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL4w_00635	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

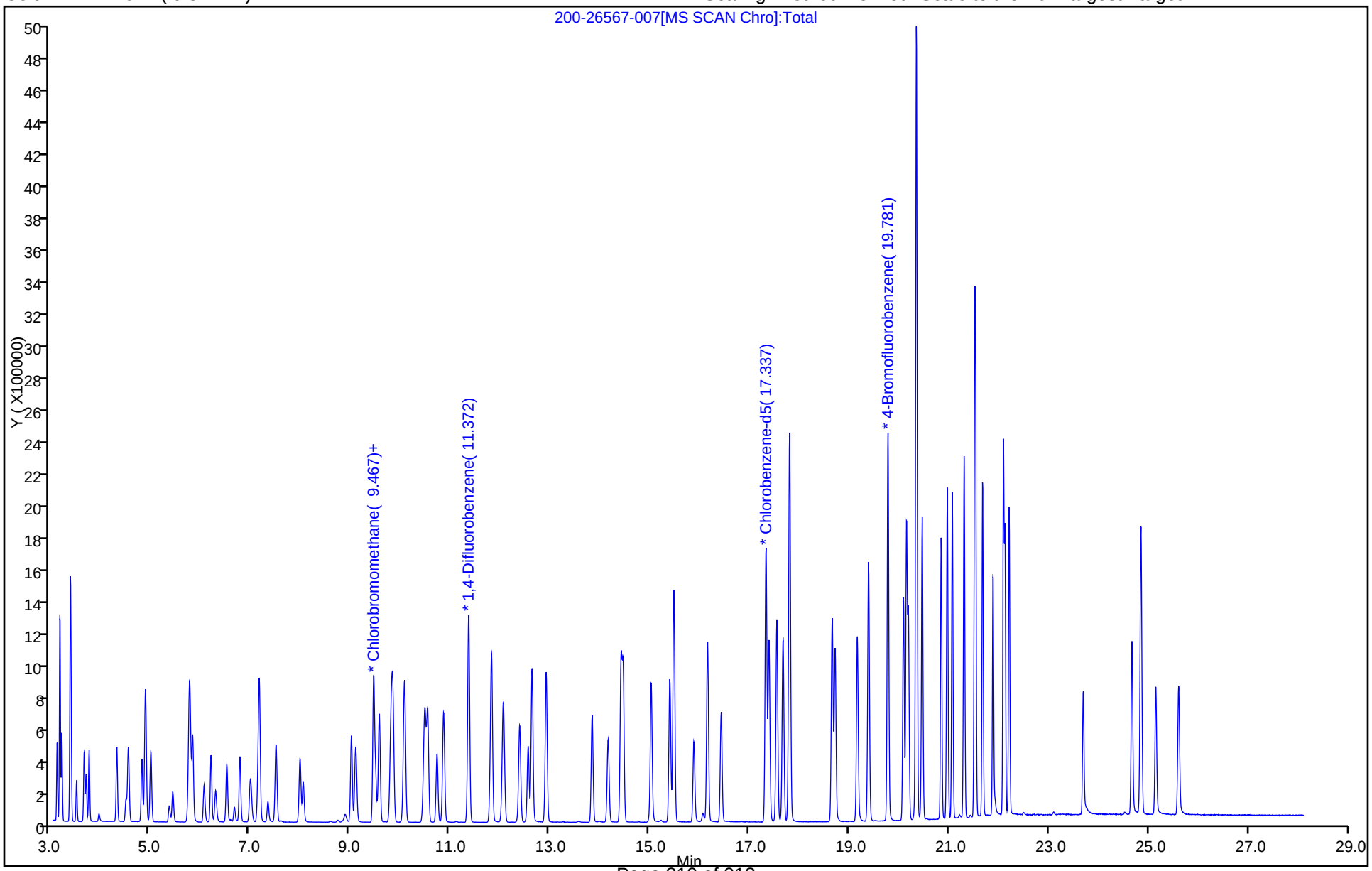
Report Date: 25-Aug-2017 10:17:52 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-007.D

Injection Date:	24-Aug-2017 20:45:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	icis			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-008.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Aug-2017 21:36:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-008
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:54 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 09:28:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.123	3.122	0.001	95	318413	15.0	15.5	
2 Dichlorodifluoromethane	85	3.181	3.176	0.005	100	1669879	15.0	15.3	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	873743	15.0	15.5	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	94	1319004	15.0	15.2	
5 Chloromethane	50	3.513	3.513	0.000	99	388302	15.0	15.1	
6 Butane	43	3.668	3.668	0.000	95	572731	15.0	15.2	
7 Vinyl chloride	62	3.706	3.705	0.001	98	457854	15.0	15.5	
8 Butadiene	54	3.764	3.764	0.000	96	303368	15.0	15.4	
10 Bromomethane	94	4.321	4.321	0.000	98	494972	15.0	15.1	
11 Chloroethane	64	4.503	4.503	0.000	98	195135	15.0	15.4	
12 2-Methylbutane	43	4.551	4.551	0.000	89	378989	15.0	14.8	
13 Vinyl bromide	106	4.824	4.824	0.000	97	476647	15.0	15.1	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	98	1449807	15.0	14.9	
16 Pentane	43	5.000	5.000	0.000	97	549971	15.0	15.5	
17 Ethanol	45	5.369	5.369	0.000	96	189990	20.0	20.4	
18 Ethyl ether	59	5.439	5.439	0.000	97	223599	15.0	16.2	
20 1,1,2-Trichloro-1,2,2-trif	101	5.781	5.781	0.000	97	927656	15.0	15.0	
19 Acrolein	56	5.792	5.792	0.000	95	83693	15.0	16.1	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	95	402363	15.0	15.1	
22 Acetone	43	6.070	6.070	0.000	100	558059	15.0	15.4	
23 Carbon disulfide	76	6.209	6.209	0.000	100	1142211	15.0	15.3	
24 Isopropyl alcohol	45	6.300	6.300	0.000	99	552732	15.0	15.9	
25 3-Chloro-1-propene	41	6.525	6.525	0.000	94	392813	15.0	15.3	
26 Acetonitrile	41	6.675	6.675	0.000	96	198319	15.0	16.0	
27 Methylene Chloride	49	6.787	6.787	0.000	94	472857	15.0	15.4	
28 2-Methyl-2-propanol	59	7.001	7.001	0.000	95	826772	15.0	15.9	
29 Methyl tert-butyl ether	73	7.162	7.161	0.001	95	1134269	15.0	15.7	
31 trans-1,2-Dichloroethene	61	7.183	7.177	0.006	97	629635	15.0	15.5	
32 Acrylonitrile	53	7.354	7.354	0.000	93	209509	15.0	16.1	
33 Hexane	57	7.515	7.509	0.006	89	514080	15.0	15.8	
34 1,1-Dichloroethane	63	7.996	7.996	0.000	99	829345	15.0	15.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.060	8.055	0.005	100	843137	15.0	15.9	
37 cis-1,2-Dichloroethene	96	9.023	9.023	0.000	95	494997	15.0	15.5	
38 2-Butanone (MEK)	72	9.098	9.098	0.000	97	171026	15.0	15.6	
39 Ethyl acetate	88	9.120	9.119	0.001	98	23692	15.0	15.6	
* 40 Chlorobromomethane	128	9.473	9.467	0.006	84	334549	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.505	0.000	84	359139	15.0	16.2	
42 Chloroform	83	9.585	9.579	0.006	97	1171181	15.0	15.2	
S 30 1,2-Dichloroethene, Total	61				0		30.0	31.0	
43 Cyclohexane	84	9.815	9.815	0.000	94	561646	15.0	16.2	
44 1,1,1-Trichloroethane	97	9.852	9.852	0.000	97	1294353	15.0	15.5	
45 Carbon tetrachloride	117	10.088	10.088	0.000	98	1416222	15.0	16.3	
46 Isooctane	57	10.494	10.494	0.000	97	1931330	15.0	16.6	
47 Benzene	78	10.553	10.553	0.000	96	1376972	15.0	15.7	
48 1,2-Dichloroethane	62	10.741	10.735	0.005	99	900253	15.0	15.9	
49 n-Heptane	43	10.874	10.869	0.005	89	695006	15.0	16.5	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1582090	10.0	10.0	
52 n-Butanol	56	11.800	11.800	0.000	92	208444	15.0	16.5	
53 Trichloroethene	95	11.832	11.832	0.000	95	795681	15.0	15.8	
54 1,2-Dichloropropane	63	12.399	12.393	0.006	81	505343	15.0	16.0	
A 51 GRO	1	12.447	(4.541-20.353)		0	203778095	15.0	0	
55 Methyl methacrylate	69	12.565	12.565	0.000	90	412549	15.0	17.0	
56 1,4-Dioxane	88	12.640	12.645	-0.005	49	274778	15.0	16.4	
57 Dibromomethane	174	12.650	12.645	0.005	93	662201	15.0	16.0	
58 Dichlorobromomethane	83	12.929	12.928	0.001	98	1432968	15.0	16.6	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.000	97	882718	15.0	16.8	
61 4-Methyl-2-pentanone (MIBK	43	14.170	14.170	0.000	97	916819	15.0	17.0	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	316027558	15.0	0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	4848261	NC	NC	
65 Toluene	92	14.432	14.426	0.006	94	1063144	15.0	15.6	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	4223491	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	88	1009428	15.0	16.6	
66 trans-1,3-Dichloropropene	75	15.036	15.036	0.000	98	966646	15.0	17.0	
67 1,1,2-Trichloroethane	83	15.411	15.405	0.006	99	575726	15.0	15.5	
68 Tetrachloroethene	166	15.491	15.491	0.000	91	968799	15.0	15.0	
69 2-Hexanone	43	15.887	15.887	0.000	94	893391	15.0	16.0	
71 Chlorodibromomethane	129	16.165	16.165	0.000	97	1427874	15.0	16.3	
72 Ethylene Dibromide	107	16.438	16.438	0.000	99	1118237	15.0	16.1	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	88	1510356	10.0	10.0	
75 Chlorobenzene	112	17.396	17.395	0.001	95	1497476	15.0	15.5	
76 Ethylbenzene	91	17.551	17.551	0.000	99	2335748	15.0	15.8	
77 n-Nonane	57	17.679	17.679	0.000	85	947062	15.0	16.3	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	1838872	30.0	31.7	
79 o-Xylene	106	18.663	18.663	0.000	99	922659	15.0	15.9	
80 Styrene	104	18.722	18.722	0.000	99	1380362	15.0	16.8	
81 Bromoform	173	19.166	19.166	0.000	93	1156184	15.0	16.6	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	2622022	15.0	15.8	
S 73 Xylenes, Total	106				0		45.0	47.6	
* 83 4-Bromofluorobenzene	95	19.782	19.781	0.001	87	1136756	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	1401039	15.0	15.9	
85 N-Propylbenzene	91	20.156	20.150	0.006	98	3167051	15.0	16.1	
86 1,2,3-Trichloropropane	75	20.193	20.188	0.005	97	1119166	15.0	15.4	
87 n-Decane	57	20.343	20.343	0.000	94	1174789	15.0	16.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.354	20.354	0.000	95	2590565	15.0	16.6	
89 2-Chlorotoluene	91	20.354	20.354	0.000	93	2318806	15.0	16.2	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	2168853	15.0	16.1	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	88	1074486	15.0	17.3	
92 tert-Butylbenzene	119	20.969	20.969	0.000	90	1983230	15.0	15.9	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	2166805	15.0	16.4	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	3034588	15.0	16.3	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	2554335	15.0	16.7	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	1484728	15.0	16.3	
97 1,4-Dichlorobenzene	146	21.681	21.680	0.001	93	1488970	15.0	16.3	
98 Benzyl chloride	91	21.889	21.884	0.005	98	1955205	15.0	17.3	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	2391466	15.0	17.4	
99 Undecane	57	22.125	22.125	0.001	93	1130141	15.0	16.2	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	1362201	15.0	16.0	
102 Dodecane	57	23.697	23.697	0.000	95	849268	15.0	17.3	
103 1,2,4-Trichlorobenzene	180	24.676	24.671	0.005	93	828230	15.0	17.0	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	89	724529	15.0	16.5	
105 Naphthalene	128	25.153	25.152	0.001	99	1847211	15.0	17.4	
106 1,2,3-Trichlorobenzene	180	25.613	25.607	0.006	94	697543	15.0	16.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL5w_00068	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

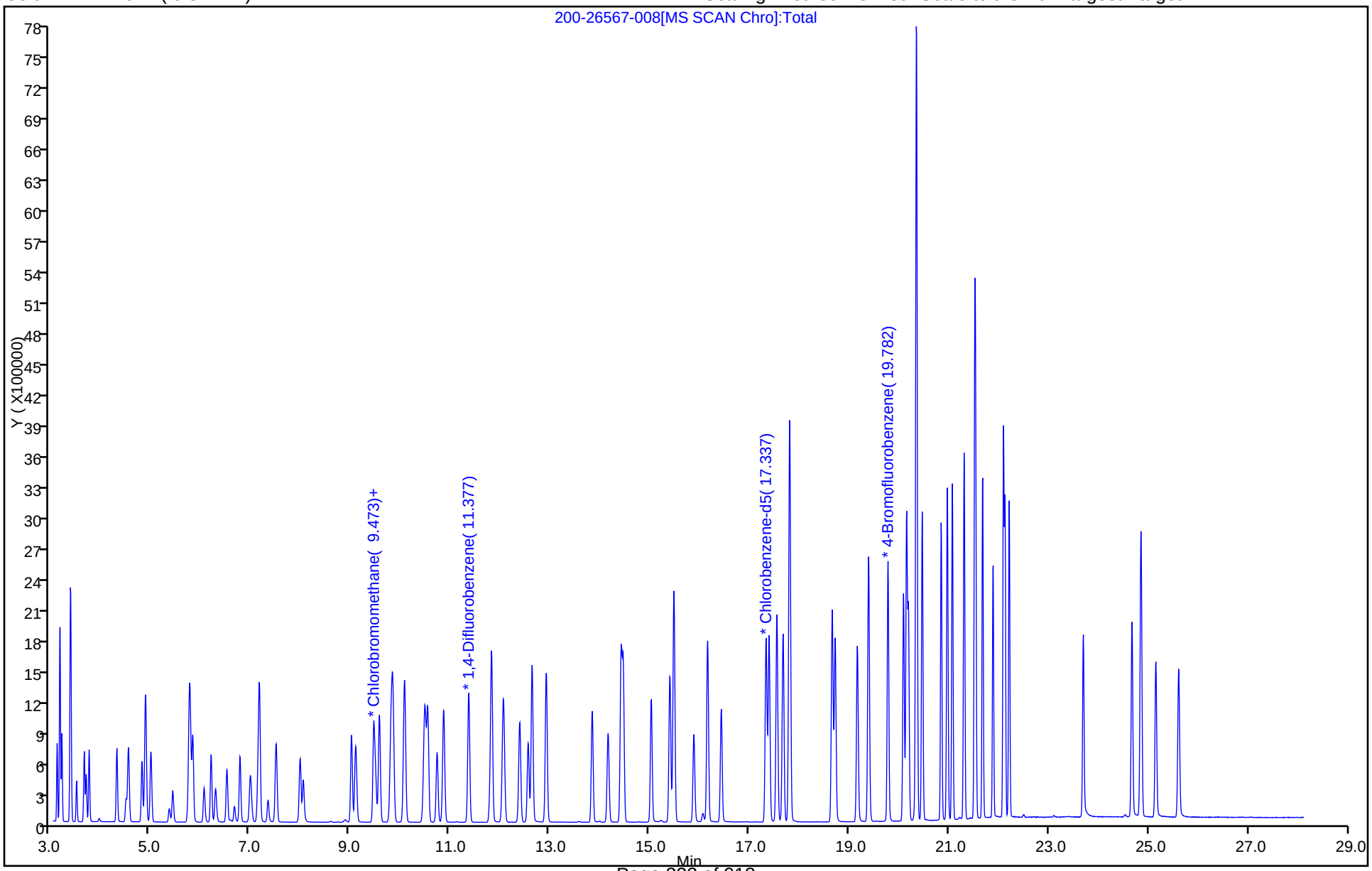
Report Date: 25-Aug-2017 10:17:55 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-008.D

Injection Date:	24-Aug-2017 21:36:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-009.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Aug-2017 22:27:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-009
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:17:59 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 09:29:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.122	0.000	95	429320	20.0	20.5	
2 Dichlorodifluoromethane	85	3.181	3.176	0.005	99	2170675	20.0	19.5	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	1150682	20.0	20.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	94	1735663	20.0	19.6	
5 Chloromethane	50	3.513	3.513	0.000	98	527124	20.0	20.1	
6 Butane	43	3.668	3.668	0.000	95	781858	20.0	20.4	
7 Vinyl chloride	62	3.706	3.705	0.001	98	622766	20.0	20.7	
8 Butadiene	54	3.764	3.764	0.000	96	417826	20.0	20.9	
10 Bromomethane	94	4.321	4.321	0.000	98	669574	20.0	20.0	
11 Chloroethane	64	4.503	4.503	0.000	98	264473	20.0	20.4	
12 2-Methylbutane	43	4.551	4.551	0.000	89	507873	20.0	19.5	
13 Vinyl bromide	106	4.824	4.824	0.000	98	638982	20.0	19.9	
14 Trichlorofluoromethane	101	4.899	4.893	0.006	99	1893488	20.0	19.1	
16 Pentane	43	5.006	5.000	0.006	97	738761	20.0	20.5	
17 Ethanol	45	5.375	5.369	0.006	96	336859	40.0	35.5	
18 Ethyl ether	59	5.444	5.439	0.005	98	289093	20.0	20.5	
20 1,1,2-Trichloro-1,2,2-trif	101	5.781	5.781	0.000	94	1237457	20.0	19.7	
19 Acrolein	56	5.792	5.792	0.000	95	111188	20.0	21.0	
21 1,1-Dichloroethene	96	5.845	5.840	0.005	95	532758	20.0	19.6	
22 Acetone	43	6.070	6.070	0.000	100	696081	20.0	18.8	
23 Carbon disulfide	76	6.209	6.209	0.000	100	1553207	20.0	20.4	
24 Isopropyl alcohol	45	6.300	6.300	0.000	99	723694	20.0	20.4	
25 3-Chloro-1-propene	41	6.530	6.525	0.005	94	527952	20.0	20.1	
26 Acetonitrile	41	6.680	6.675	0.005	97	253135	20.0	20.0	
27 Methylene Chloride	49	6.787	6.787	0.000	93	635916	20.0	20.3	
28 2-Methyl-2-propanol	59	7.001	7.001	0.000	95	1095202	20.0	20.6	
29 Methyl tert-butyl ether	73	7.161	7.161	0.000	95	1433167	20.0	19.5	
31 trans-1,2-Dichloroethene	61	7.183	7.177	0.006	97	852201	20.0	20.6	
32 Acrylonitrile	53	7.354	7.354	0.000	92	271506	20.0	20.4	
33 Hexane	57	7.515	7.509	0.006	89	702925	20.0	21.2	
34 1,1-Dichloroethane	63	7.996	7.996	0.000	99	1126108	20.0	20.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.060	8.055	0.005	100	1079367	20.0	20.0	
37 cis-1,2-Dichloroethene	96	9.029	9.023	0.005	95	663024	20.0	20.3	
38 2-Butanone (MEK)	72	9.103	9.098	0.005	100	212149	20.0	19.0	
39 Ethyl acetate	88	9.119	9.119	0.000	97	29121	20.0	18.8	
* 40 Chlorobromomethane	128	9.473	9.467	0.006	84	340859	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.505	0.000	85	461283	20.0	18.8	
42 Chloroform	83	9.585	9.579	0.006	97	1572414	20.0	20.1	
S 30 1,2-Dichloroethene, Total	61				0		40.0	40.9	
43 Cyclohexane	84	9.815	9.815	0.000	94	760639	20.0	19.7	
44 1,1,1-Trichloroethane	97	9.852	9.852	0.000	95	1724703	20.0	18.6	
45 Carbon tetrachloride	117	10.088	10.088	0.000	98	1887824	20.0	19.6	
46 Isooctane	57	10.500	10.494	0.006	97	2665639	20.0	20.6	
47 Benzene	78	10.553	10.553	0.000	96	1901329	20.0	19.5	
48 1,2-Dichloroethane	62	10.740	10.735	0.005	98	1236866	20.0	19.7	
49 n-Heptane	43	10.874	10.869	0.005	90	961696	20.0	20.6	
* 50 1,4-Difluorobenzene	114	11.377	11.372	0.005	94	1755573	10.0	10.0	
52 n-Butanol	56	11.805	11.800	0.005	91	280513	20.0	20.1	
53 Trichloroethene	95	11.837	11.832	0.005	95	1086295	20.0	19.4	
54 1,2-Dichloropropane	63	12.399	12.393	0.006	82	697004	20.0	19.9	
A 51 GRO	1	12.447	(4.541-20.353)		0	244923164	20.0	0	
55 Methyl methacrylate	69	12.570	12.565	0.005	91	517429	20.0	19.3	
57 Dibromomethane	174	12.650	12.645	0.005	96	881859	20.0	19.2	
56 1,4-Dioxane	88	12.645	12.645	0.000	91	356531	20.0	19.2	
58 Dichlorobromomethane	83	12.928	12.928	0.000	98	1943205	20.0	20.3	
60 cis-1,3-Dichloropropene	75	13.854	13.849	0.005	97	1245174	20.0	21.4	
61 4-Methyl-2-pentanone (MIBK	43	14.170	14.170	0.000	97	1178169	20.0	19.7	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	411763753	20.0	0	
65 Toluene	92	14.432	14.426	0.006	94	1414384	20.0	20.2	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	6278004	NC	NC	
64 n-Octane	43	14.475	14.469	0.005	89	1379651	20.0	20.5	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	5906397	NC	NC	
66 trans-1,3-Dichloropropene	75	15.036	15.036	0.000	98	1291208	20.0	20.4	
67 1,1,2-Trichloroethane	83	15.405	15.405	0.000	99	768548	20.0	20.1	
68 Tetrachloroethene	166	15.491	15.491	0.000	91	1290207	20.0	19.4	
69 2-Hexanone	43	15.887	15.887	0.000	94	1177634	20.0	20.5	
71 Chlorodibromomethane	129	16.165	16.165	0.000	97	1978697	20.0	22.0	
72 Ethylene Dibromide	107	16.438	16.438	0.000	98	1520774	20.0	21.3	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1551932	10.0	10.0	
75 Chlorobenzene	112	17.395	17.395	0.000	94	2041458	20.0	20.6	
76 Ethylbenzene	91	17.556	17.551	0.005	99	3083123	20.0	20.3	
77 n-Nonane	57	17.679	17.679	0.000	86	1274130	20.0	21.4	
78 m-Xylene & p-Xylene	106	17.813	17.807	0.006	0	2397944	40.0	40.3	
79 o-Xylene	106	18.663	18.663	0.000	99	1208819	20.0	20.2	
80 Styrene	104	18.722	18.722	0.000	99	1816829	20.0	21.5	
81 Bromoform	173	19.166	19.166	0.000	93	1538577	20.0	21.6	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	3400142	20.0	20.0	
S 73 Xylenes, Total	106				0		60.0	60.5	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	86	1162886	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	1822914	20.0	20.1	
85 N-Propylbenzene	91	20.156	20.150	0.006	98	4067363	20.0	20.1	
86 1,2,3-Trichloropropane	75	20.193	20.188	0.005	98	1427529	20.0	19.1	
87 n-Decane	57	20.343	20.343	0.000	94	1505496	20.0	20.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91	20.354	20.354	0.000	95	2972639	20.0	20.2	
88 4-Ethyltoluene	105	20.354	20.354	0.000	96	3239579	20.0	20.2	
90 1,3,5-Trimethylbenzene	105	20.472	20.466	0.006	92	2771908	20.0	20.0	
91 Alpha Methyl Styrene	118	20.851	20.846	0.005	88	1383963	20.0	21.7	
92 tert-Butylbenzene	119	20.974	20.969	0.005	90	2537227	20.0	19.7	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	2759918	20.0	20.3	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	3887221	20.0	20.3	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	3182139	20.0	20.2	
96 1,3-Dichlorobenzene	146	21.541	21.536	0.005	99	1897878	20.0	20.3	
97 1,4-Dichlorobenzene	146	21.681	21.680	0.001	92	1897158	20.0	20.2	
98 Benzyl chloride	91	21.889	21.884	0.005	98	2471142	20.0	21.3	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	2980804	20.0	21.1	
99 Undecane	57	22.125	22.125	0.001	94	1353187	20.0	18.8	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	93	1749833	20.0	20.0	
102 Dodecane	57	23.697	23.697	0.000	95	1096994	20.0	21.8	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	93	988031	20.0	19.7	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	94	805663	20.0	17.9	
105 Naphthalene	128	25.153	25.152	0.000	99	2210190	20.0	20.3	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	93	866603	20.0	20.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL6w_00143	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

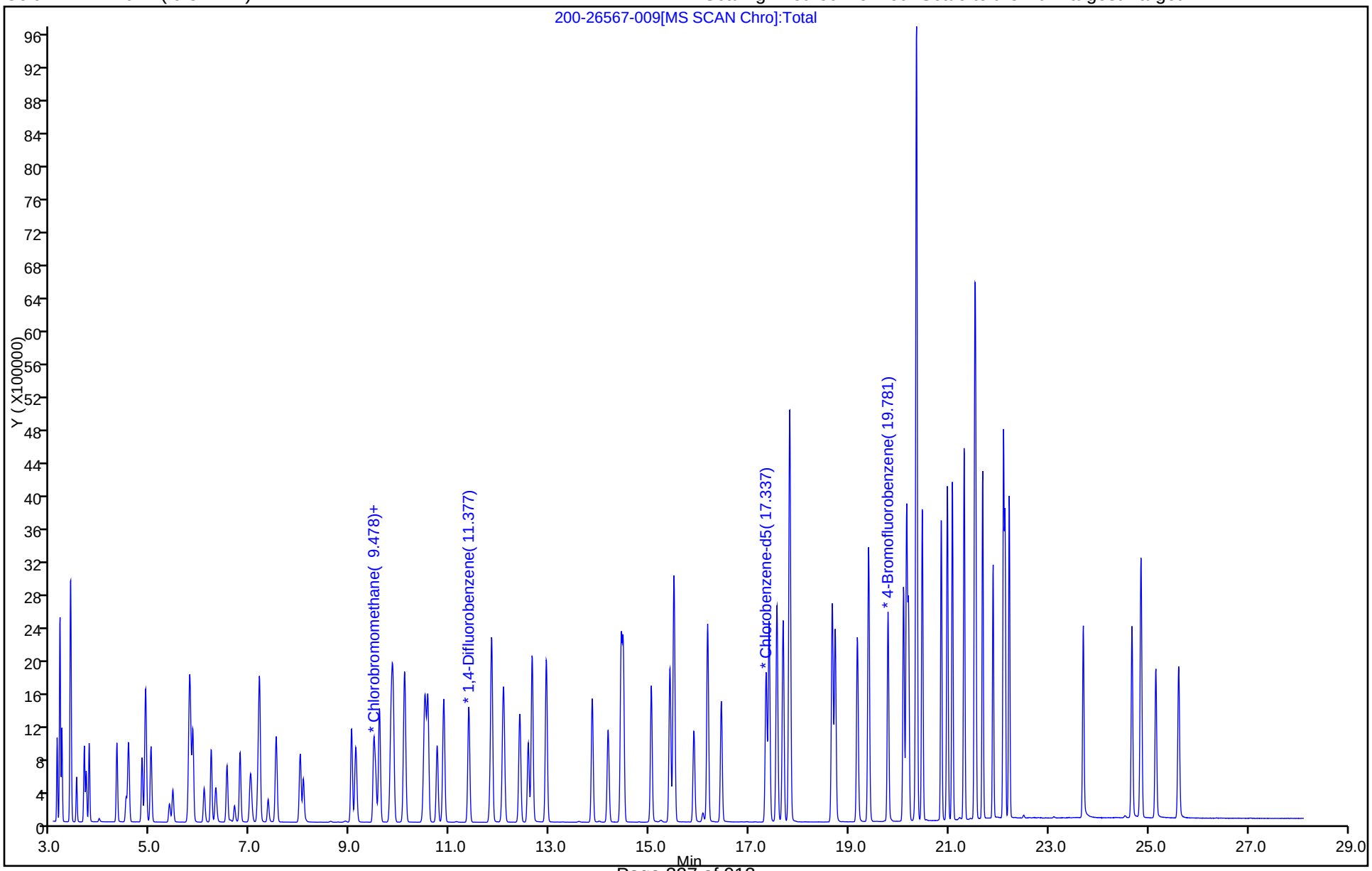
Report Date: 25-Aug-2017 10:18:00 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-009.D

Injection Date:	24-Aug-2017 22:27:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Aug-2017 23:17:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-010
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:18:04 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 08:48:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.122	0.000	95	846398	40.0	38.3	
2 Dichlorodifluoromethane	85	3.181	3.176	0.005	99	3932478	40.0	33.4	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	2141764	40.0	35.2	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.395	3.390	0.005	97	3193175	40.0	34.1	
5 Chloromethane	50	3.513	3.513	0.000	99	1025894	40.0	37.0	
6 Butane	43	3.668	3.668	0.000	95	1515765	40.0	37.5	
7 Vinyl chloride	62	3.705	3.705	0.000	98	1201873	40.0	37.9	
8 Butadiene	54	3.770	3.764	0.006	96	803341	40.0	38.0	
10 Bromomethane	94	4.326	4.321	0.005	98	1276699	40.0	36.1	
11 Chloroethane	64	4.508	4.503	0.005	98	510457	40.0	37.4	
12 2-Methylbutane	43	4.556	4.551	0.005	89	966223	40.0	35.1	
13 Vinyl bromide	106	4.829	4.824	0.005	98	1219741	40.0	35.9	
14 Trichlorofluoromethane	101	4.898	4.893	0.005	99	3494940	40.0	33.4	
16 Pentane	43	5.011	5.000	0.011	97	1430598	40.0	37.5	
17 Ethanol	45	5.385	5.369	0.016	97	887585	100.0	88.5	
18 Ethyl ether	59	5.444	5.439	0.005	96	596023	40.0	40.0	
20 1,1,2-Trichloro-1,2,2-trif	101	5.786	5.781	0.005	93	2360882	40.0	35.6	
19 Acrolein	56	5.797	5.792	0.005	95	231440	40.0	41.4	
21 1,1-Dichloroethene	96	5.845	5.840	0.005	95	1053718	40.0	36.7	
22 Acetone	43	6.070	6.070	0.000	100	1470276	40.0	37.6	
23 Carbon disulfide	76	6.214	6.209	0.005	100	3034442	40.0	37.8	
24 Isopropyl alcohol	45	6.311	6.300	0.011	100	1521277	40.0	40.5	
25 3-Chloro-1-propene	41	6.530	6.525	0.005	94	1045181	40.0	37.7	
26 Acetonitrile	41	6.685	6.675	0.010	96	546271	40.0	40.9	
27 Methylene Chloride	49	6.792	6.787	0.005	93	1236647	40.0	37.3	
28 2-Methyl-2-propanol	59	7.006	7.001	0.005	95	2235082	40.0	39.9	
29 Methyl tert-butyl ether	73	7.167	7.161	0.006	95	3014003	40.0	38.8	
31 trans-1,2-Dichloroethene	61	7.188	7.177	0.011	97	1647056	40.0	37.7	
32 Acrylonitrile	53	7.359	7.354	0.005	91	582910	40.0	41.5	
33 Hexane	57	7.520	7.509	0.011	89	1382831	40.0	39.4	
34 1,1-Dichloroethane	63	8.001	7.996	0.005	99	2209898	40.0	38.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.065	8.055	0.010	100	2271795	40.0	39.8	
37 cis-1,2-Dichloroethene	96	9.028	9.023	0.005	95	1310675	40.0	38.0	
38 2-Butanone (MEK)	72	9.103	9.098	0.005	97	464396	40.0	39.4	
39 Ethyl acetate	88	9.125	9.119	0.006	99	63943	40.0	39.1	
* 40 Chlorobromomethane	128	9.478	9.467	0.011	85	360157	10.0	10.0	
41 Tetrahydrofuran	42	9.510	9.505	0.005	85	984630	40.0	40.2	
42 Chloroform	83	9.590	9.579	0.011	97	3069009	40.0	37.0	
S 30 1,2-Dichloroethene, Total	61				0		80.0	75.7	
43 Cyclohexane	84	9.820	9.815	0.005	94	1517548	40.0	39.5	
44 1,1,1-Trichloroethane	97	9.858	9.852	0.006	95	3341780	40.0	36.2	
45 Carbon tetrachloride	117	10.093	10.088	0.005	98	3658366	40.0	38.2	
46 Isooctane	57	10.500	10.494	0.006	97	5330963	40.0	41.3	
47 Benzene	78	10.558	10.553	0.005	96	3811204	40.0	39.2	
48 1,2-Dichloroethane	62	10.746	10.735	0.011	99	2426069	40.0	38.8	
49 n-Heptane	43	10.874	10.869	0.005	89	1887235	40.0	40.6	
* 50 1,4-Difluorobenzene	114	11.382	11.372	0.010	95	1750959	10.0	10.0	
52 n-Butanol	56	11.805	11.800	0.005	91	608973	40.0	43.7	
53 Trichloroethene	95	11.837	11.832	0.005	95	2162658	40.0	38.8	
54 1,2-Dichloropropane	63	12.404	12.393	0.011	82	1406807	40.0	40.3	
A 51 GRO	1	12.447	(4.541-20.353)		0	495928194	40.0	0	
55 Methyl methacrylate	69	12.575	12.565	0.010	92	1184517	40.0	44.2	
56 1,4-Dioxane	88	12.645	12.645	0.000	90	770776	40.0	41.6	
57 Dibromomethane	174	12.650	12.645	0.005	90	1699372	40.0	37.1	
58 Dichlorobromomethane	83	12.934	12.928	0.006	98	3916954	40.0	41.1	
60 cis-1,3-Dichloropropene	75	13.854	13.849	0.005	96	2487642	40.0	42.9	
61 4-Methyl-2-pentanone (MIBK	43	14.169	14.170	-0.001	96	2509413	40.0	42.0	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	847967458	40.0	0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	13476390	NC	NC	
65 Toluene	92	14.432	14.426	0.006	94	2957857	40.0	41.6	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	11430252	NC	NC	
64 n-Octane	43	14.474	14.469	0.005	91	2749637	40.0	40.9	
66 trans-1,3-Dichloropropene	75	15.041	15.036	0.005	98	2718568	40.0	43.1	
67 1,1,2-Trichloroethane	83	15.411	15.405	0.006	99	1597134	40.0	41.2	
68 Tetrachloroethene	166	15.496	15.491	0.005	90	2468876	40.0	36.6	
69 2-Hexanone	43	15.892	15.887	0.005	94	2491376	40.0	42.6	
71 Chlorodibromomethane	129	16.170	16.165	0.005	97	3825881	40.0	41.8	
72 Ethylene Dibromide	107	16.443	16.438	0.005	99	3096427	40.0	42.7	
* 74 Chlorobenzene-d5	117	17.342	17.337	0.005	87	1576738	10.0	10.0	
75 Chlorobenzene	112	17.401	17.395	0.006	93	4129160	40.0	41.1	
76 Ethylbenzene	91	17.556	17.551	0.005	99	6522901	40.0	42.2	
77 n-Nonane	57	17.684	17.679	0.005	85	2676976	40.0	44.2	
78 m-Xylene & p-Xylene	106	17.813	17.807	0.006	0	5041172	80.0	83.4	
79 o-Xylene	106	18.669	18.663	0.006	99	2587276	40.0	42.6	
80 Styrene	104	18.727	18.722	0.005	99	3989101	40.0	46.4	
81 Bromoform	173	19.171	19.166	0.005	92	2937528	40.0	40.5	
82 Isopropylbenzene	105	19.396	19.391	0.005	97	7225103	40.0	41.8	
S 73 Xylenes, Total	106				0		120.0	126.0	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	94	1185490	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.097	20.092	0.005	98	3919501	40.0	42.5	
85 N-Propylbenzene	91	20.161	20.150	0.011	98	8724880	40.0	42.5	
86 1,2,3-Trichloropropane	75	20.193	20.188	0.005	98	3124848	40.0	41.1	
87 n-Decane	57	20.348	20.343	0.005	93	3132121	40.0	41.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.359	20.354	0.005	87	6302358	40.0	38.7	
89 2-Chlorotoluene	91	20.359	20.354	0.005	94	5671346	40.0	37.9	
90 1,3,5-Trimethylbenzene	105	20.471	20.466	0.005	92	6064522	40.0	43.1	
91 Alpha Methyl Styrene	118	20.851	20.846	0.005	88	3060659	40.0	47.2	
92 tert-Butylbenzene	119	20.974	20.969	0.005	90	5468604	40.0	41.9	
93 1,2,4-Trimethylbenzene	105	21.076	21.071	0.005	98	6054983	40.0	43.9	
94 sec-Butylbenzene	105	21.311	21.306	0.005	98	8371004	40.0	43.1	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	96	6601195	40.0	41.3	
96 1,3-Dichlorobenzene	146	21.541	21.536	0.005	98	3728730	40.0	39.2	
97 1,4-Dichlorobenzene	146	21.680	21.680	0.000	91	3972982	40.0	41.7	
98 Benzyl chloride	91	21.889	21.884	0.005	98	5667505	40.0	48.1	
100 n-Butylbenzene	91	22.098	22.098	0.000	99	6606238	40.0	46.1	
99 Undecane	57	22.130	22.125	0.006	93	3259747	40.0	44.7	
101 1,2-Dichlorobenzene	146	22.215	22.210	0.005	92	3681870	40.0	41.5	
102 Dodecane	57	23.697	23.697	0.000	96	2243948	40.0	43.9	
103 1,2,4-Trichlorobenzene	180	24.676	24.671	0.005	94	2236666	40.0	44.0	
104 Hexachlorobutadiene	225	24.858	24.853	0.005	88	1677775	40.0	36.6	
105 Naphthalene	128	25.152	25.152	0.000	99	5211160	40.0	47.1	
106 1,2,3-Trichlorobenzene	180	25.612	25.607	0.005	94	1879876	40.0	43.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ATTO15CAL7w_00070	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

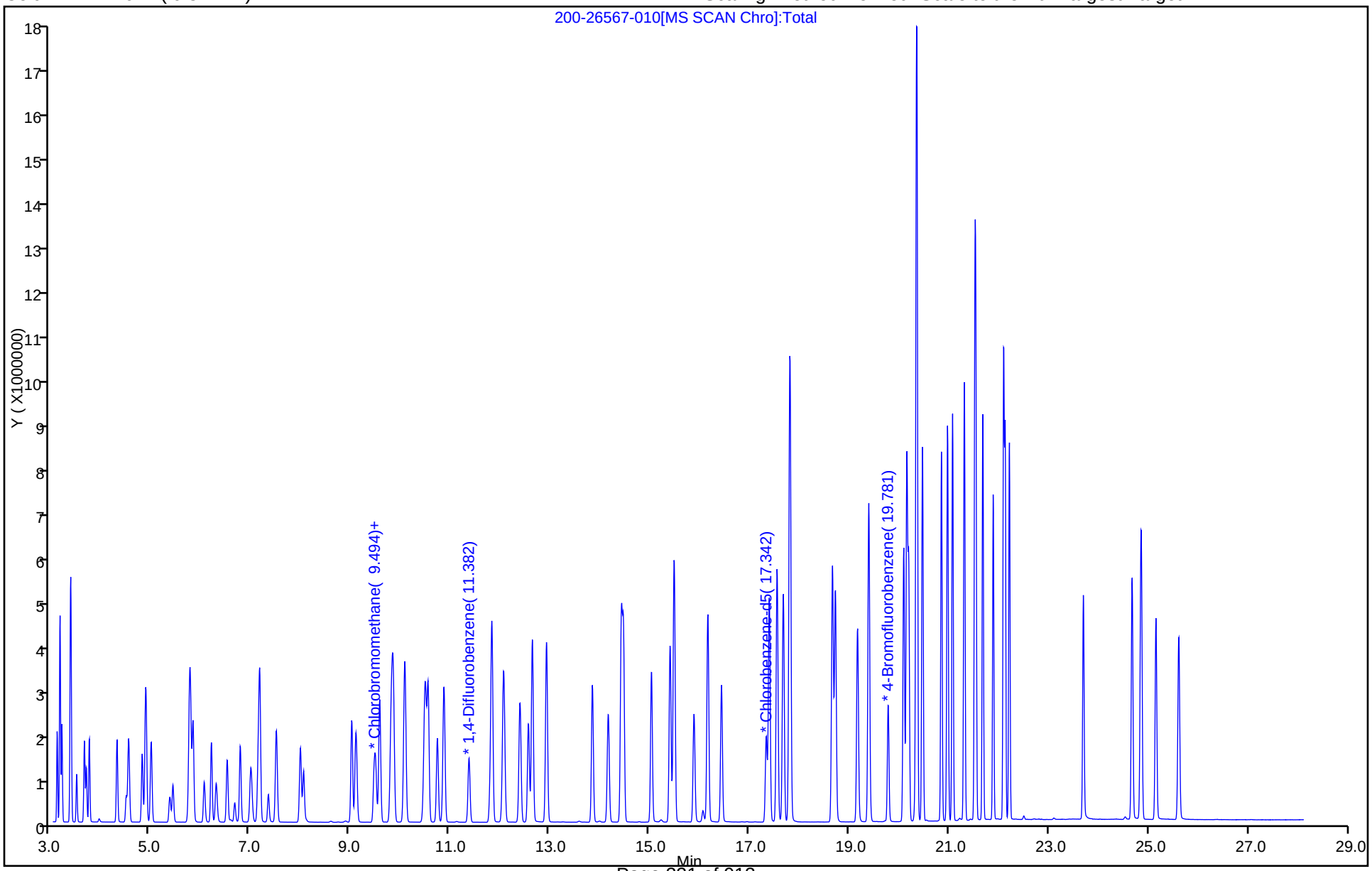
Report Date: 25-Aug-2017 10:18:05 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Injection Date:	24-Aug-2017 23:17:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab Sample ID: ICV 200-120200/13 Calibration Date: 08/25/2017 01:48

Instrument ID: CHG.i Calib Start Date: 08/24/2017 17:24

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/24/2017 23:17

Lab File ID: 200-26567-013.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6130	0.5385		8.78	10.0	-12.1	30.0
Dichlorodifluoromethane	Ave	3.268	2.993		9.16	10.0	-8.4	30.0
Freon 22	Ave	1.688	1.518		8.99	10.0	-10.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.601	2.664		10.2	10.0	2.4	30.0
Chloromethane	Ave	0.7709	0.6623		8.59	10.0	-14.1	30.0
n-Butane	Ave	1.123	1.011		9.00	10.0	-10.0	30.0
Vinyl chloride	Ave	0.8809	0.8114		9.21	10.0	-7.9	30.0
1,3-Butadiene	Ave	0.5872	0.5269		8.97	10.0	-10.3	30.0
Bromomethane	Ave	0.9814	0.9128		9.30	10.0	-7.0	30.0
Chloroethane	Ave	0.3794	0.3396		8.95	10.0	-10.5	30.0
Isopentane	Ave	0.7645	0.7238		9.47	10.0	-5.3	30.0
Bromoethene(Vinyl Bromide)	Ave	0.9424	0.8661		9.19	10.0	-8.1	30.0
Trichlorofluoromethane	Ave	2.908	2.614		8.99	10.0	-10.1	30.0
n-Pentane	Ave	1.059	1.054		9.96	10.0	-0.4	30.0
Ethanol	Ave	0.2783	0.2655		14.3	15.0	-4.6	30.0
Ethyl ether	Ave	0.4135	0.4337		10.5	10.0	4.9	30.0
Freon TF	Ave	1.843	1.729		9.38	10.0	-6.2	30.0
Acrolein	Ave	0.1552	0.1854		11.9	10.0	19.5	30.0
1,1-Dichloroethene	Ave	0.7983	0.7233		9.06	10.0	-9.4	30.0
Acetone	Ave	1.085	1.006		9.26	10.0	-7.3	30.0
Carbon disulfide	Ave	2.231	2.381		10.7	10.0	6.7	30.0
Isopropyl alcohol	Ave	1.042	0.8395		8.05	10.0	-19.5	30.0
3-Chloropropene	Ave	0.7688	0.7240		9.42	10.0	-5.8	30.0
Acetonitrile	Ave	0.3712	0.3692		9.94	10.0	-0.5	30.0
Methylene Chloride	Ave	0.9196	0.8363		9.09	10.0	-9.1	30.0
tert-Butyl alcohol	Ave	1.556	1.340		8.61	10.0	-13.9	30.0
Methyl tert-butyl ether	Ave	2.160	2.024		9.37	10.0	-6.3	30.0
trans-1,2-Dichloroethene	Ave	1.214	1.198		9.87	10.0	-1.3	30.0
Acrylonitrile	Ave	0.3901	0.3823		9.80	10.0	-2.0	30.0
n-Hexane	Ave	0.9747	0.9778		10.0	10.0	0.3	30.0
1,1-Dichloroethane	Ave	1.597	1.510		9.45	10.0	-5.5	30.0
Vinyl acetate	Ave	1.584	1.533		9.67	10.0	-3.2	30.0
cis-1,2-Dichloroethene	Ave	0.9575	0.8929		9.32	10.0	-6.7	30.0
Methyl Ethyl Ketone	Ave	0.3276	0.3032		9.25	10.0	-7.4	30.0
Ethyl acetate	Ave	0.0455	0.0460		10.1	10.0	1.3	30.0
Tetrahydrofuran	Ave	0.1399	0.1246		8.91	10.0	-10.9	30.0
Chloroform	Ave	2.300	2.167		9.42	10.0	-5.8	30.0
Cyclohexane	Ave	0.2195	0.2084		9.49	10.0	-5.0	30.0
1,1,1-Trichloroethane	Ave	0.5269	0.4831		9.17	10.0	-8.3	30.0
Carbon tetrachloride	Ave	0.5475	0.5236		9.56	10.0	-4.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab Sample ID: ICV 200-120200/13 Calibration Date: 08/25/2017 01:48

Instrument ID: CHG.i Calib Start Date: 08/24/2017 17:24

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/24/2017 23:17

Lab File ID: 200-26567-013.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.7370	0.6908		9.37	10.0	-6.3	30.0
Benzene	Ave	0.5546	0.5065		9.13	10.0	-8.7	30.0
1,2-Dichloroethane	Ave	0.3570	0.3243		9.08	10.0	-9.1	30.0
n-Heptane	Ave	0.2657	0.2479		9.32	10.0	-6.7	30.0
n-Butanol	Ave	0.0796	0.0783		9.82	10.0	-1.7	30.0
Trichloroethene	Ave	0.3182	0.2969		9.33	10.0	-6.7	30.0
1,2-Dichloropropane	Ave	0.1993	0.1869		9.38	10.0	-6.2	30.0
Methyl methacrylate	Ave	0.1530	0.1501		9.81	10.0	-1.9	30.0
1,4-Dioxane	Ave	0.1058	0.0915		8.65	10.0	-13.5	30.0
Dibromomethane	Ave	0.2618	0.2430		9.28	10.0	-7.2	30.0
Bromodichloromethane	Ave	0.5445	0.5220		9.58	10.0	-4.1	30.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3247		9.80	10.0	-2.0	30.0
Methyl isobutyl ketone	Ave	0.3410	0.3194		9.37	10.0	-6.3	30.0
Toluene	Ave	0.4509	0.4321		9.58	10.0	-4.2	30.0
n-Octane	Ave	0.3842	0.3647		9.49	10.0	-5.1	30.0
trans-1,3-Dichloropropene	Ave	0.3603	0.3579		9.93	10.0	-0.6	30.0
1,1,2-Trichloroethane	Ave	0.2459	0.2363		9.61	10.0	-3.9	30.0
Tetrachloroethene	Ave	0.4275	0.4045		9.46	10.0	-5.4	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.3707	0.3430		9.25	10.0	-7.5	30.0
Dibromochloromethane	Ave	0.5806	0.5600		9.64	10.0	-3.5	30.0
1,2-Dibromoethane	Ave	0.4603	0.4514		9.81	10.0	-1.9	30.0
Chlorobenzene	Ave	0.6376	0.6070		9.52	10.0	-4.8	30.0
Ethylbenzene	Ave	0.9801	0.9364		9.55	10.0	-4.5	30.0
n-Nonane	Ave	0.3844	0.3779		9.83	10.0	-1.7	30.0
m,p-Xylene	Ave	0.3836	0.3664		19.1	20.0	-4.5	30.0
Xylene, o-	Ave	0.3848	0.3645		9.47	10.0	-5.3	30.0
Styrene	Ave	0.5453	0.5355		9.82	10.0	-1.8	30.0
Bromoform	Ave	0.4600	0.4726		10.3	10.0	2.7	30.0
Cumene	Ave	1.097	1.042		9.50	10.0	-5.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5848	0.5647		9.65	10.0	-3.4	30.0
n-Propylbenzene	Ave	1.301	1.227		9.43	10.0	-5.7	30.0
1,2,3-Trichloropropane	Ave	0.4818	0.4377		9.08	10.0	-9.2	30.0
n-Decane	Ave	0.4741	0.4437		9.36	10.0	-6.4	30.0
2-Chlorotoluene	Ave	0.9494	0.9034		9.51	10.0	-4.8	30.0
4-Ethyltoluene	Ave	1.032	1.031		9.99	10.0	-0.1	30.0
1,3,5-Trimethylbenzene	Ave	0.8926	0.8502		9.52	10.0	-4.8	30.0
Alpha Methyl Styrene	Ave	0.4114	0.4173		10.1	10.0	1.4	30.0
tert-Butylbenzene	Ave	0.8284	0.7814		9.43	10.0	-5.7	30.0
1,2,4-Trimethylbenzene	Ave	0.8746	0.8446		9.66	10.0	-3.4	30.0
sec-Butylbenzene	Ave	1.232	1.183		9.60	10.0	-4.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab Sample ID: ICV 200-120200/13 Calibration Date: 08/25/2017 01:48

Instrument ID: CHG.i Calib Start Date: 08/24/2017 17:24

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/24/2017 23:17

Lab File ID: 200-26567-013.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.014	0.9936		9.79	10.0	-2.1	30.0
1,3-Dichlorobenzene	Ave	0.6030	0.5931		9.83	10.0	-1.6	30.0
1,4-Dichlorobenzene	Ave	0.6045	0.5853		9.68	10.0	-3.2	30.0
Benzyl chloride	Ave	0.7471	0.7559		10.1	10.0	1.2	30.0
n-Butylbenzene	Ave	0.9089	0.9062		9.97	10.0	-0.3	30.0
n-Undecane	Ave	0.4628	0.4078		8.81	10.0	-11.9	30.0
1,2-Dichlorobenzene	Ave	0.5633	0.5476		9.72	10.0	-2.8	30.0
n-Dodecane	Ave	0.3245	0.3256		10.0	10.0	0.4	30.0
1,2,4-Trichlorobenzene	Ave	0.3227	0.2801		8.68	10.0	-13.2	30.0
Hexachlorobutadiene	Ave	0.2906	0.2851		9.81	10.0	-1.9	30.0
Naphthalene	Ave	0.7021	0.5651		8.05	10.0	-19.5	30.0
1,2,3-Trichlorobenzene	Ave	0.2770	0.2424		8.75	10.0	-12.5	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-013.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 25-Aug-2017 01:48:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-013
Operator ID: pad Instrument ID: CHG.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:18:04 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 10:17:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.122	0.000	94	186397	10.0	8.78	
2 Dichlorodifluoromethane	85	3.181	3.176	0.005	100	1036027	10.0	9.16	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	525357	10.0	8.99	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	97	922038	10.0	10.2	
5 Chloromethane	50	3.513	3.513	0.000	99	229229	10.0	8.59	
6 Butane	43	3.668	3.668	0.000	95	350073	10.0	9.00	
7 Vinyl chloride	62	3.706	3.705	0.001	98	280836	10.0	9.21	
8 Butadiene	54	3.764	3.764	0.000	96	182386	10.0	8.97	
10 Bromomethane	94	4.321	4.321	0.000	98	315944	10.0	9.30	
11 Chloroethane	64	4.503	4.503	0.000	98	117525	10.0	8.95	
12 2-Methylbutane	43	4.551	4.551	0.000	89	250506	10.0	9.47	
13 Vinyl bromide	106	4.824	4.824	0.000	98	299762	10.0	9.19	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	99	904895	10.0	8.99	
16 Pentane	43	5.000	5.000	0.000	97	364907	10.0	9.96	
17 Ethanol	45	5.369	5.369	0.000	96	137901	15.0	14.3	
18 Ethyl ether	59	5.444	5.439	0.005	97	150096	10.0	10.5	
20 1,1,2-Trichloro-1,2,2-trif	101	5.776	5.781	-0.005	95	598279	10.0	9.38	
19 Acrolein	56	5.797	5.792	0.005	95	64168	10.0	11.9	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	96	250354	10.0	9.06	
9 BFB									
22 Acetone	43	6.070	6.070	0.000	100	348075	10.0	9.26	
23 Carbon disulfide	76	6.209	6.209	0.000	100	824111	10.0	10.7	
24 Isopropyl alcohol	45	6.300	6.300	0.000	99	290566	10.0	8.05	
25 3-Chloro-1-propene	41	6.525	6.525	0.000	93	250601	10.0	9.42	
26 Acetonitrile	41	6.680	6.675	0.005	96	127776	10.0	9.94	
27 Methylene Chloride	49	6.787	6.787	0.000	93	289453	10.0	9.09	
28 2-Methyl-2-propanol	59	7.001	7.001	0.000	95	463662	10.0	8.61	
29 Methyl tert-butyl ether	73	7.167	7.161	0.006	95	700631	10.0	9.37	
31 trans-1,2-Dichloroethene	61	7.178	7.177	0.001	98	414535	10.0	9.87	
32 Acrylonitrile	53	7.354	7.354	0.000	94	132311	10.0	9.80	
33 Hexane	57	7.509	7.509	0.000	89	338437	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	7.996	7.996	0.000	99	522561	10.0	9.45	
35 Vinyl acetate	43	8.060	8.055	0.005	100	530443	10.0	9.67	
37 cis-1,2-Dichloroethene	96	9.023	9.023	0.000	94	309052	10.0	9.32	
38 2-Butanone (MEK)	72	9.103	9.098	0.005	96	104944	10.0	9.25	
39 Ethyl acetate	88	9.114	9.119	-0.005	99	15936	10.0	10.1	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	81	346190	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.505	0.000	84	215083	10.0	8.91	
42 Chloroform	83	9.580	9.579	0.001	97	750193	10.0	9.42	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.2	
43 Cyclohexane	84	9.815	9.815	0.000	93	359691	10.0	9.49	
44 1,1,1-Trichloroethane	97	9.852	9.852	0.000	95	833794	10.0	9.17	
45 Carbon tetrachloride	117	10.088	10.088	0.000	98	903621	10.0	9.56	
46 Isooctane	57	10.494	10.494	0.000	97	1192080	10.0	9.37	
47 Benzene	78	10.553	10.553	0.000	96	874141	10.0	9.13	
48 1,2-Dichloroethane	62	10.740	10.735	0.005	99	559728	10.0	9.08	
49 n-Heptane	43	10.869	10.869	0.000	88	427730	10.0	9.32	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1726100	10.0	10.0	
52 n-Butanol	56	11.810	11.800	0.010	93	135073	10.0	9.82	
53 Trichloroethene	95	11.832	11.832	0.000	95	512455	10.0	9.33	
54 1,2-Dichloropropane	63	12.393	12.393	0.000	81	322532	10.0	9.38	
A 51 GRO	1	12.447	(4.541-20.353)		0	125153187	10.0	0	
55 Methyl methacrylate	69	12.565	12.565	0.000	90	259006	10.0	9.81	
57 Dibromomethane	174	12.645	12.645	0.000	91	419284	10.0	9.28	
56 1,4-Dioxane	88	12.645	12.645	0.000	47	157974	10.0	8.65	
58 Dichlorobromomethane	83	12.928	12.928	0.000	98	900871	10.0	9.58	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.000	97	560317	10.0	9.80	
61 4-Methyl-2-pentanone (MIBK	43	14.170	14.170	0.000	97	551274	10.0	9.37	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	192184354	10.0	0	
65 Toluene	92	14.426	14.426	0.000	94	675566	10.0	9.58	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	5708852	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	88	629297	10.0	9.49	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	5708852	NC	NC	
66 trans-1,3-Dichloropropene	75	15.031	15.036	-0.005	98	617696	10.0	9.93	
67 1,1,2-Trichloroethane	83	15.405	15.405	0.000	99	369391	10.0	9.61	
68 Tetrachloroethene	166	15.486	15.491	-0.005	92	632379	10.0	9.46	
69 2-Hexanone	43	15.887	15.887	0.000	93	536224	10.0	9.25	
71 Chlorodibromomethane	129	16.165	16.165	0.000	97	875542	10.0	9.64	
72 Ethylene Dibromide	107	16.438	16.438	0.000	99	705786	10.0	9.81	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1563714	10.0	10.0	
75 Chlorobenzene	112	17.395	17.395	0.000	94	949012	10.0	9.52	
76 Ethylbenzene	91	17.551	17.551	0.000	99	1464035	10.0	9.55	
77 n-Nonane	57	17.674	17.679	-0.005	88	590812	10.0	9.83	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	1145600	20.0	19.1	
79 o-Xylene	106	18.663	18.663	0.000	98	569840	10.0	9.47	
80 Styrene	104	18.722	18.722	0.000	99	837252	10.0	9.82	
81 Bromoform	173	19.166	19.166	0.000	93	738828	10.0	10.3	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	1628759	10.0	9.50	
S 73 Xylenes, Total	106				0		30.0	28.6	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	87	1180341	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	882902	10.0	9.65	
85 N-Propylbenzene	91	20.151	20.150	0.001	99	1918218	10.0	9.43	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	98	684254	10.0	9.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57	20.343	20.343	0.000	94	693755	10.0	9.36	
89 2-Chlorotoluene	91	20.354	20.354	0.000	92	1412356	10.0	9.51	
88 4-Ethyltoluene	105	20.354	20.354	0.000	88	1611563	10.0	9.99	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	1329143	10.0	9.52	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	88	652329	10.0	10.1	
92 tert-Butylbenzene	119	20.969	20.969	0.000	90	1221565	10.0	9.43	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	1320485	10.0	9.66	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	1850164	10.0	9.60	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	1553339	10.0	9.79	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	99	927255	10.0	9.83	
97 1,4-Dichlorobenzene	146	21.681	21.680	0.001	93	915049	10.0	9.68	
98 Benzyl chloride	91	21.889	21.884	0.005	98	1181718	10.0	10.1	
100 n-Butylbenzene	91	22.098	22.098	0.000	99	1416765	10.0	9.97	
99 Undecane	57	22.125	22.125	0.001	93	637601	10.0	8.81	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	856053	10.0	9.72	
102 Dodecane	57	23.697	23.697	0.000	94	509074	10.0	10.0	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	93	437840	10.0	8.68	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	92	445682	10.0	9.81	
105 Naphthalene	128	25.153	25.152	0.001	99	883553	10.0	8.05	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	93	379027	10.0	8.75	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00705	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

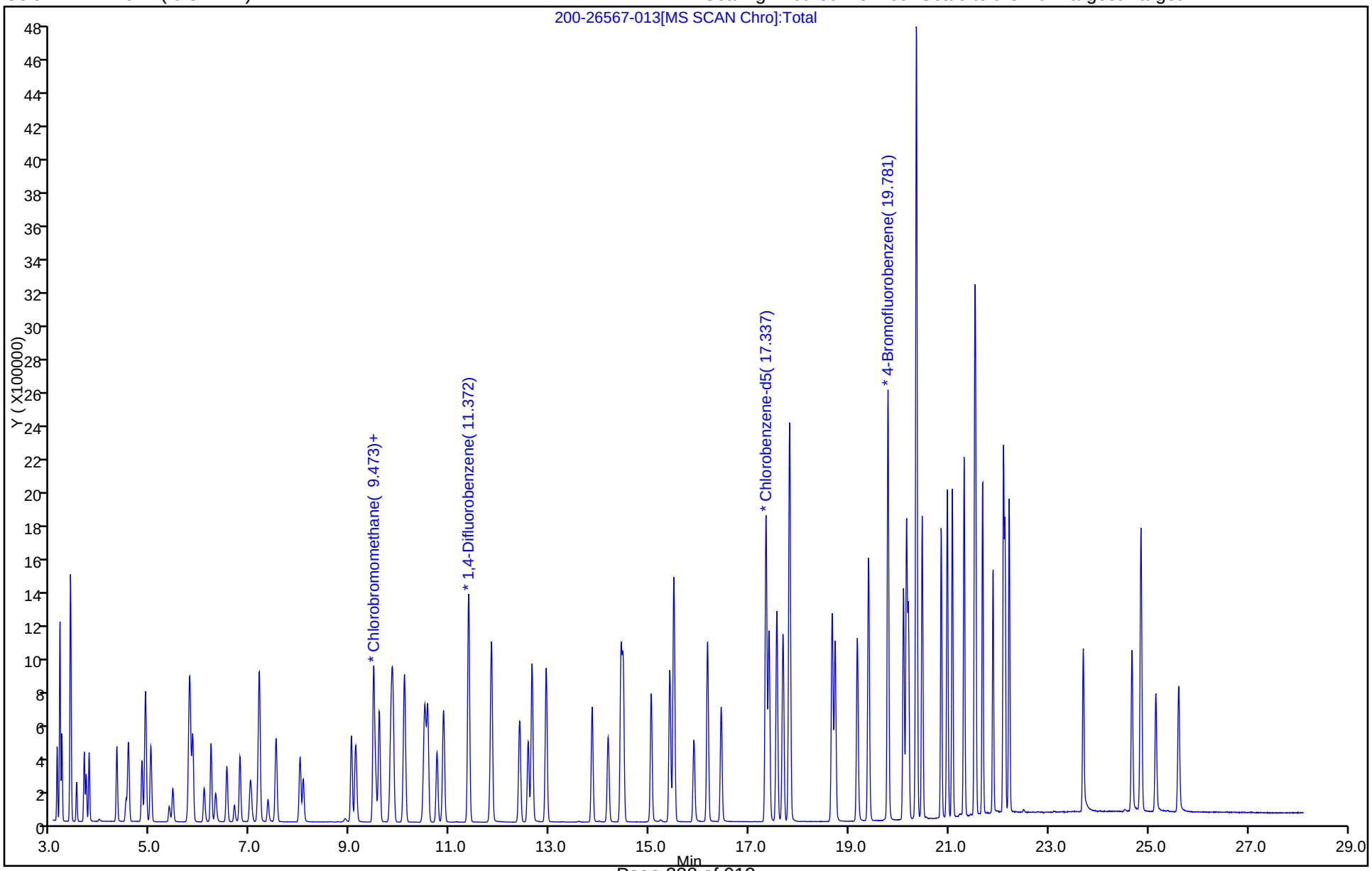
Report Date: 25-Aug-2017 10:18:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-013.D

Injection Date:	25-Aug-2017 01:48:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	icv			Worklist Smp#:	13
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab Sample ID: CCVIS 200-120218/2 Calibration Date: 08/25/2017 10:38

Instrument ID: CHG.i Calib Start Date: 08/24/2017 17:24

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/24/2017 23:17

Lab File ID: 200-26579-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6130	0.6690		10.9	10.0	9.1	30.0
Dichlorodifluoromethane	Ave	3.268	3.411		10.4	10.0	4.4	30.0
Freon 22	Ave	1.688	1.760		10.4	10.0	4.2	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.601	2.704		10.4	10.0	4.0	30.0
Chloromethane	Ave	0.7709	0.7928		10.3	10.0	2.8	30.0
n-Butane	Ave	1.123	1.176		10.5	10.0	4.7	30.0
Vinyl chloride	Ave	0.8809	0.9343		10.6	10.0	6.1	30.0
1,3-Butadiene	Ave	0.5872	0.6168		10.5	10.0	5.0	30.0
Bromomethane	Ave	0.9814	1.004		10.2	10.0	2.3	30.0
Chloroethane	Ave	0.3794	0.3807		10.0	10.0	0.3	30.0
Isopentane	Ave	0.7645	0.7452		9.75	10.0	-2.5	30.0
Bromoethene(Vinyl Bromide)	Ave	0.9424	0.9677		10.3	10.0	2.7	30.0
Trichlorofluoromethane	Ave	2.908	2.912		10.0	10.0	0.1	30.0
n-Pentane	Ave	1.059	1.077		10.2	10.0	1.7	30.0
Ethanol	Ave	0.2783	0.2923		15.8	15.0	5.0	30.0
Ethyl ether	Ave	0.4135	0.4293		10.4	10.0	3.8	30.0
Freon TF	Ave	1.843	1.864		10.1	10.0	1.1	30.0
Acrolein	Ave	0.1552	0.1335		8.60	10.0	-14.0	30.0
1,1-Dichloroethene	Ave	0.7983	0.7964		9.97	10.0	-0.2	30.0
Acetone	Ave	1.085	1.189		11.0	10.0	9.5	30.0
Carbon disulfide	Ave	2.231	2.256		10.1	10.0	1.1	30.0
Isopropyl alcohol	Ave	1.042	1.019		9.77	10.0	-2.3	30.0
3-Chloropropene	Ave	0.7688	0.8391		10.9	10.0	9.1	30.0
Acetonitrile	Ave	0.3712	0.3676		9.90	10.0	-1.0	30.0
Methylene Chloride	Ave	0.9196	0.9180		9.98	10.0	-0.2	30.0
tert-Butyl alcohol	Ave	1.556	1.523		9.79	10.0	-2.1	30.0
Methyl tert-butyl ether	Ave	2.160	2.182		10.1	10.0	1.0	30.0
trans-1,2-Dichloroethene	Ave	1.214	1.227		10.1	10.0	1.1	30.0
Acrylonitrile	Ave	0.3901	0.4001		10.3	10.0	2.6	30.0
n-Hexane	Ave	0.9747	1.007		10.3	10.0	3.3	30.0
1,1-Dichloroethane	Ave	1.597	1.608		10.1	10.0	0.7	30.0
Vinyl acetate	Ave	1.584	1.595		10.1	10.0	0.7	30.0
cis-1,2-Dichloroethene	Ave	0.9575	0.9635		10.1	10.0	0.6	30.0
Methyl Ethyl Ketone	Ave	0.3276	0.3237		9.88	10.0	-1.2	30.0
Ethyl acetate	Ave	0.0455	0.0475		10.4	10.0	4.4	30.0
Tetrahydrofuran	Ave	0.1399	0.1320		9.44	10.0	-5.6	30.0
Chloroform	Ave	2.300	2.293		9.97	10.0	-0.3	30.0
Cyclohexane	Ave	0.2195	0.2173		9.90	10.0	-1.0	30.0
1,1,1-Trichloroethane	Ave	0.5269	0.4988		9.47	10.0	-5.3	30.0
Carbon tetrachloride	Ave	0.5475	0.5458		9.97	10.0	-0.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab Sample ID: CCVIS 200-120218/2 Calibration Date: 08/25/2017 10:38

Instrument ID: CHG.i Calib Start Date: 08/24/2017 17:24

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/24/2017 23:17

Lab File ID: 200-26579-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.7370	0.7344		9.96	10.0	-0.3	30.0
Benzene	Ave	0.5546	0.5340		9.63	10.0	-3.7	30.0
1,2-Dichloroethane	Ave	0.3570	0.3446		9.65	10.0	-3.5	30.0
n-Heptane	Ave	0.2657	0.2636		9.92	10.0	-0.8	30.0
n-Butanol	Ave	0.0796	0.0746		9.37	10.0	-6.3	30.0
Trichloroethene	Ave	0.3182	0.3091		9.71	10.0	-2.9	30.0
1,2-Dichloropropane	Ave	0.1993	0.1905		9.56	10.0	-4.4	30.0
Methyl methacrylate	Ave	0.1530	0.1522		9.95	10.0	-0.5	30.0
1,4-Dioxane	Ave	0.1058	0.0985		9.31	10.0	-6.9	30.0
Dibromomethane	Ave	0.2618	0.2593		9.90	10.0	-1.0	30.0
Bromodichloromethane	Ave	0.5445	0.5476		10.1	10.0	0.6	30.0
cis-1,3-Dichloropropene	Ave	0.3314	0.3342		10.1	10.0	0.9	30.0
Methyl isobutyl ketone	Ave	0.3410	0.3279		9.61	10.0	-3.8	30.0
Toluene	Ave	0.4509	0.4348		9.64	10.0	-3.6	30.0
n-Octane	Ave	0.3842	0.3797		9.88	10.0	-1.2	30.0
trans-1,3-Dichloropropene	Ave	0.3603	0.3662		10.2	10.0	1.7	30.0
1,1,2-Trichloroethane	Ave	0.2459	0.2345		9.53	10.0	-4.6	30.0
Tetrachloroethene	Ave	0.4275	0.4190		9.80	10.0	-2.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.3707	0.3380		9.12	10.0	-8.8	30.0
Dibromochloromethane	Ave	0.5806	0.6062		10.4	10.0	4.4	30.0
1,2-Dibromoethane	Ave	0.4603	0.4601		9.99	10.0	-0.0	30.0
Chlorobenzene	Ave	0.6376	0.6226		9.76	10.0	-2.4	30.0
Ethylbenzene	Ave	0.9801	0.9513		9.70	10.0	-2.9	30.0
n-Nonane	Ave	0.3844	0.3797		9.88	10.0	-1.2	30.0
m,p-Xylene	Ave	0.3836	0.3764		19.6	20.0	-1.9	30.0
Xylene, o-	Ave	0.3848	0.3820		9.92	10.0	-0.7	30.0
Styrene	Ave	0.5453	0.5556		10.2	10.0	1.9	30.0
Bromoform	Ave	0.4600	0.5130		11.1	10.0	11.5	30.0
Cumene	Ave	1.097	1.085		9.89	10.0	-1.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5848	0.5593		9.56	10.0	-4.4	30.0
n-Propylbenzene	Ave	1.301	1.279		9.83	10.0	-1.7	30.0
1,2,3-Trichloropropane	Ave	0.4818	0.4445		9.22	10.0	-7.7	30.0
n-Decane	Ave	0.4741	0.4536		9.57	10.0	-4.3	30.0
2-Chlorotoluene	Ave	0.9494	0.9325		9.82	10.0	-1.8	30.0
4-Ethyltoluene	Ave	1.032	1.049		10.2	10.0	1.7	30.0
1,3,5-Trimethylbenzene	Ave	0.8926	0.8825		9.89	10.0	-1.1	30.0
Alpha Methyl Styrene	Ave	0.4114	0.4267		10.4	10.0	3.7	30.0
tert-Butylbenzene	Ave	0.8284	0.8239		9.94	10.0	-0.5	30.0
1,2,4-Trimethylbenzene	Ave	0.8746	0.8804		10.1	10.0	0.7	30.0
sec-Butylbenzene	Ave	1.232	1.244		10.1	10.0	0.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Lab Sample ID: CCVIS 200-120218/2 Calibration Date: 08/25/2017 10:38

Instrument ID: CHG.i Calib Start Date: 08/24/2017 17:24

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 08/24/2017 23:17

Lab File ID: 200-26579-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.014	1.045		10.3	10.0	3.0	30.0
1,3-Dichlorobenzene	Ave	0.6030	0.6232		10.3	10.0	3.4	30.0
1,4-Dichlorobenzene	Ave	0.6045	0.6207		10.3	10.0	2.7	30.0
Benzyl chloride	Ave	0.7471	0.7824		10.5	10.0	4.7	30.0
n-Butylbenzene	Ave	0.9089	0.9503		10.5	10.0	4.6	30.0
n-Undecane	Ave	0.4628	0.4178		9.03	10.0	-9.7	30.0
1,2-Dichlorobenzene	Ave	0.5633	0.5699		10.1	10.0	1.2	30.0
n-Dodecane	Ave	0.3245	0.2538		7.82	10.0	-21.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3227	0.3047		9.44	10.0	-5.6	30.0
Hexachlorobutadiene	Ave	0.2906	0.2995		10.3	10.0	3.1	30.0
Naphthalene	Ave	0.7021	0.6290		8.96	10.0	-10.4	30.0
1,2,3-Trichlorobenzene	Ave	0.2770	0.2535		9.15	10.0	-8.5	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-002.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Aug-2017 10:38:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-002
Operator ID: pad Instrument ID: CHG.i
Sublist: chrom-TO15_MasterMethod_(v1)_G*sub1

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 10:42:54 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 10:42:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.122	0.000	95	228333	10.0	10.9	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	1164339	10.0	10.4	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	600567	10.0	10.4	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	95	922967	10.0	10.4	
5 Chloromethane	50	3.513	3.513	0.000	99	270587	10.0	10.3	
6 Butane	43	3.668	3.668	0.000	95	401358	10.0	10.5	
7 Vinyl chloride	62	3.705	3.705	0.000	98	318895	10.0	10.6	
8 Butadiene	54	3.764	3.764	0.000	96	210507	10.0	10.5	
10 Bromomethane	94	4.321	4.321	0.000	98	342691	10.0	10.2	
11 Chloroethane	64	4.503	4.503	0.000	98	129938	10.0	10.0	
12 2-Methylbutane	43	4.551	4.551	0.000	89	254362	10.0	9.75	
13 Vinyl bromide	106	4.824	4.824	0.000	98	330281	10.0	10.3	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	99	993804	10.0	10.0	
16 Pentane	43	5.000	5.000	0.000	97	367671	10.0	10.2	
17 Ethanol	45	5.369	5.369	0.000	96	149734	15.0	15.8	
18 Ethyl ether	59	5.439	5.439	0.000	97	146541	10.0	10.4	
20 1,1,2-Trichloro-1,2,2-trif	101	5.781	5.781	0.000	95	636164	10.0	10.1	
19 Acrolein	56	5.792	5.792	0.000	95	45554	10.0	8.60	
21 1,1-Dichloroethene	96	5.840	5.840	0.000	96	271816	10.0	9.97	
9 BFB									
22 Acetone	43	6.070	6.070	0.000	100	405764	10.0	11.0	
23 Carbon disulfide	76	6.209	6.209	0.000	100	770156	10.0	10.1	
24 Isopropyl alcohol	45	6.295	6.295	0.000	99	347735	10.0	9.77	
25 3-Chloro-1-propene	41	6.525	6.525	0.000	93	286386	10.0	10.9	
26 Acetonitrile	41	6.675	6.675	0.000	96	125468	10.0	9.90	
27 Methylene Chloride	49	6.787	6.787	0.000	94	313326	10.0	9.98	
28 2-Methyl-2-propanol	59	6.996	6.996	0.000	95	519953	10.0	9.79	
29 Methyl tert-butyl ether	73	7.161	7.161	0.000	95	744783	10.0	10.1	
31 trans-1,2-Dichloroethene	61	7.177	7.177	0.000	98	418911	10.0	10.1	
32 Acrylonitrile	53	7.349	7.349	0.000	94	136550	10.0	10.3	
33 Hexane	57	7.509	7.509	0.000	89	343603	10.0	10.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	7.991	7.991	0.000	99	548760	10.0	10.1	
35 Vinyl acetate	43	8.060	8.060	0.000	100	544439	10.0	10.1	
37 cis-1,2-Dichloroethene	96	9.023	9.023	0.000	95	328871	10.0	10.1	
38 2-Butanone (MEK)	72	9.098	9.098	0.000	97	110493	10.0	9.88	
39 Ethyl acetate	88	9.114	9.114	0.000	98	16202	10.0	10.4	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	82	341385	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.505	0.000	84	228381	10.0	9.44	
42 Chloroform	83	9.579	9.579	0.000	97	782532	10.0	9.97	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.2	
43 Cyclohexane	84	9.815	9.815	0.000	94	375943	10.0	9.90	
44 1,1,1-Trichloroethane	97	9.852	9.852	0.000	95	862859	10.0	9.47	
45 Carbon tetrachloride	117	10.088	10.088	0.000	98	944232	10.0	9.97	
46 Isooctane	57	10.489	10.489	0.000	97	1270443	10.0	9.96	
47 Benzene	78	10.553	10.553	0.000	96	923764	10.0	9.63	
48 1,2-Dichloroethane	62	10.740	10.740	0.000	99	596053	10.0	9.65	
49 n-Heptane	43	10.869	10.869	0.000	88	456026	10.0	9.92	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1730190	10.0	10.0	
52 n-Butanol	56	11.800	11.800	0.000	91	129097	10.0	9.37	
53 Trichloroethene	95	11.832	11.832	0.000	95	534624	10.0	9.71	
54 1,2-Dichloropropane	63	12.393	12.393	0.000	85	329486	10.0	9.56	
A 51 GRO	1	12.447	(4.541-20.353)		0	135246337	10.0	0	
55 Methyl methacrylate	69	12.565	12.565	0.000	91	263344	10.0	9.95	
56 1,4-Dioxane	88	12.645	12.645	0.000	84	170396	10.0	9.31	
57 Dibromomethane	174	12.645	12.645	0.000	94	448485	10.0	9.90	
58 Dichlorobromomethane	83	12.928	12.928	0.000	98	947287	10.0	10.1	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.000	97	578193	10.0	10.1	
61 4-Methyl-2-pentanone (MIBK	43	14.169	14.169	0.000	97	567154	10.0	9.61	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	207415953	10.0	0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	5956532	NC	NC	
65 Toluene	92	14.426	14.426	0.000	94	698187	10.0	9.64	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	5956532	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	88	656783	10.0	9.88	
66 trans-1,3-Dichloropropene	75	15.031	15.031	0.000	98	633550	10.0	10.2	
67 1,1,2-Trichloroethane	83	15.405	15.405	0.000	99	376438	10.0	9.53	
68 Tetrachloroethene	166	15.486	15.486	0.000	93	672751	10.0	9.80	
69 2-Hexanone	43	15.887	15.887	0.000	94	542624	10.0	9.12	
71 Chlorodibromomethane	129	16.160	16.160	0.000	97	973333	10.0	10.4	
72 Ethylene Dibromide	107	16.438	16.438	0.000	99	738697	10.0	10.0	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1605949	10.0	10.0	
75 Chlorobenzene	112	17.395	17.395	0.000	95	999635	10.0	9.76	
76 Ethylbenzene	91	17.551	17.551	0.000	99	1527398	10.0	9.70	
77 n-Nonane	57	17.674	17.674	0.000	85	609620	10.0	9.88	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	1208687	20.0	19.6	
79 o-Xylene	106	18.663	18.663	0.000	99	613366	10.0	9.92	
80 Styrene	104	18.722	18.722	0.000	99	892116	10.0	10.2	
81 Bromoform	173	19.166	19.166	0.000	93	823656	10.0	11.1	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	1741308	10.0	9.89	
S 73 Xylenes, Total	106				0		30.0	29.5	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	88	1206605	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	898067	10.0	9.56	
85 N-Propylbenzene	91	20.150	20.150	0.000	99	2053814	10.0	9.83	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	97	713747	10.0	9.22	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 n-Decane	57	20.343	20.343	0.000	94	728372	10.0	9.57	
88 4-Ethyltoluene	105	20.354	20.354	0.000	88	1684410	10.0	10.2	
89 2-Chlorotoluene	91	20.354	20.354	0.000	93	1497171	10.0	9.82	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	1416962	10.0	9.89	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	90	685051	10.0	10.4	
92 tert-Butylbenzene	119	20.969	20.969	0.000	90	1322894	10.0	9.94	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	1413629	10.0	10.1	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	1996918	10.0	10.1	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	1677269	10.0	10.3	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	1000675	10.0	10.3	
97 1,4-Dichlorobenzene	146	21.675	21.675	0.000	93	996652	10.0	10.3	
98 Benzyl chloride	91	21.889	21.889	0.000	98	1256244	10.0	10.5	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	1525824	10.0	10.5	
99 Undecane	57	22.125	22.125	0.000	93	670879	10.0	9.03	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	915098	10.0	10.1	
102 Dodecane	57	23.697	23.697	0.000	95	407520	10.0	7.82	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	94	489279	10.0	9.44	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	91	480868	10.0	10.3	
105 Naphthalene	128	25.147	25.147	0.000	99	1009980	10.0	8.96	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	94	407000	10.0	9.15	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00635	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

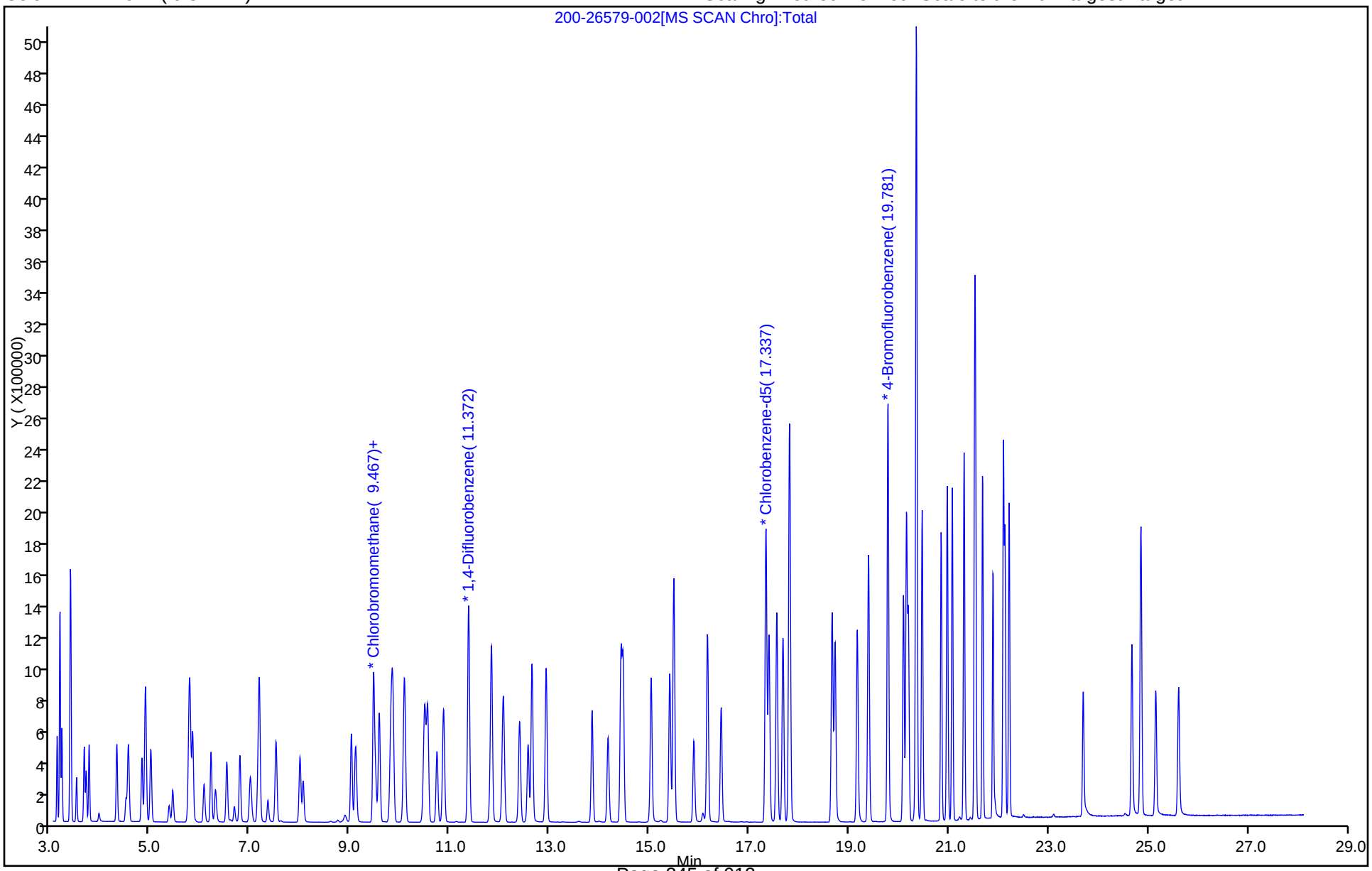
Report Date: 28-Aug-2017 10:42:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-002.D

Injection Date:	25-Aug-2017 10:38:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	ccvis			Worklist Smp#:	2
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-001.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 24-Aug-2017 15:51:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0026567-001
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Aug-2017 10:37:45 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: daiglep Date: 25-Aug-2017 10:37:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		9.467				10.0	ND	
* 50 1,4-Difluorobenzene	114		11.372				10.0	ND	
* 74 Chlorobenzene-d5	117		17.337				10.0	ND	
* 83 4-Bromofluorobenzene	95		19.781				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

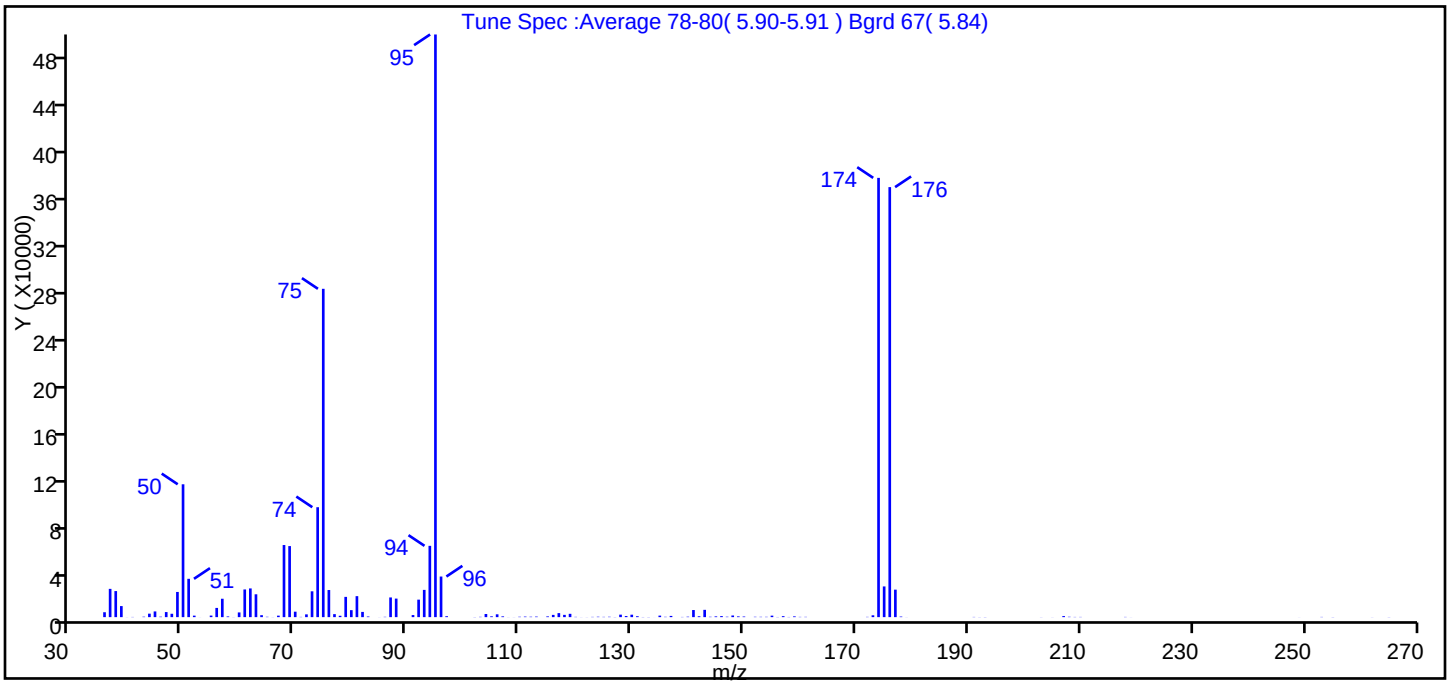
ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-001.D				
Injection Date:	24-Aug-2017 15:51:30	Instrument ID:	CHG.i		
Lims ID:	bfb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	200.0 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Tune Method:	BFB Method TO-15				

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	22.8
75	30.0 to 66.0 Percent of m/e 95	56.4
96	5.0 to 9.0 Percent of m/e 95	7.0
173	Less than 2.0 Percent of m/e 174	0.3 (0.4)
174	50.0 to 120.0 Percent of m/e 95	75.4
175	4.0 to 9.0 Percent of m/e 174	5.3 (7.0)
176	93.0 to 101.0 Percent of m/e 174	73.8 (97.9)
177	5.0 to 9.0 Percent of m/e 176	4.7 (6.4)

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-001.D\TO15_MasterMethod_(v1)
Injection Date: 24-Aug-2017 15:51:30
Spectrum: Tune Spec :Average 78-80(5.90-5.91) Bgrd 67(5.84)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4212	73.00	22168	116.00	1936	153.00	279
37.00	24256	74.00	94304	117.00	3461	154.00	278
38.00	22360	75.00	281664	118.00	1951	155.00	1281
39.00	9487	76.00	23264	119.00	2848	156.00	135
40.00	56	77.00	2584	120.00	231	157.00	837
41.00	170	78.00	1174	121.00	55	158.00	154
43.00	371	79.00	17384	122.00	62	159.00	654
44.00	2989	80.00	5996	123.00	220	160.00	222
45.00	4896	81.00	18008	124.00	358	161.00	248
46.00	392	82.00	4490	125.00	231	172.00	233
47.00	4359	83.00	542	126.00	326	173.00	1582
48.00	2893	85.00	51	127.00	111	174.00	376832
49.00	21608	86.00	268	128.00	2136	175.00	26344
50.00	113976	87.00	16896	129.00	934	176.00	368896
51.00	32880	88.00	15913	130.00	2104	177.00	23584
52.00	1292	91.00	1787	131.00	776	178.00	491
53.00	40	92.00	15015	132.00	129	179.00	51
55.00	1351	93.00	23384	133.00	122	191.00	184
56.00	7912	94.00	61168	134.00	24	192.00	95
57.00	15785	95.00	499840	135.00	1303	193.00	122
58.00	612	96.00	34840	136.00	281	203.00	75
59.00	76	97.00	797	137.00	1058	205.00	56
60.00	4040	102.00	117	139.00	176	207.00	902
61.00	23752	103.00	256	140.00	383	208.00	320
62.00	24632	104.00	2689	141.00	6105	209.00	183
63.00	19608	105.00	695	142.00	745	210.00	190
64.00	1682	106.00	2433	143.00	6263	218.00	195
65.00	296	107.00	662	144.00	323	219.00	44
66.00	64	108.00	59	145.00	651	249.00	37
67.00	1288	109.00	58	146.00	879	253.00	193
68.00	61864	110.00	334	147.00	362	255.00	113
69.00	60960	111.00	469	148.00	1415	261.00	2
70.00	4683	112.00	365	149.00	638	262.00	64

Report Date: 25-Aug-2017 10:37:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-001.D\TO15_MasterMethod_(v1)
Injection Date: 24-Aug-2017 15:51:30
Spectrum: Tune Spec :Average 78-80(5.90-5.91) Bgrd 67(5.84)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	205	113.00	479	150.00	525	265.00	99
72.00	2385	115.00	636	152.00	311		

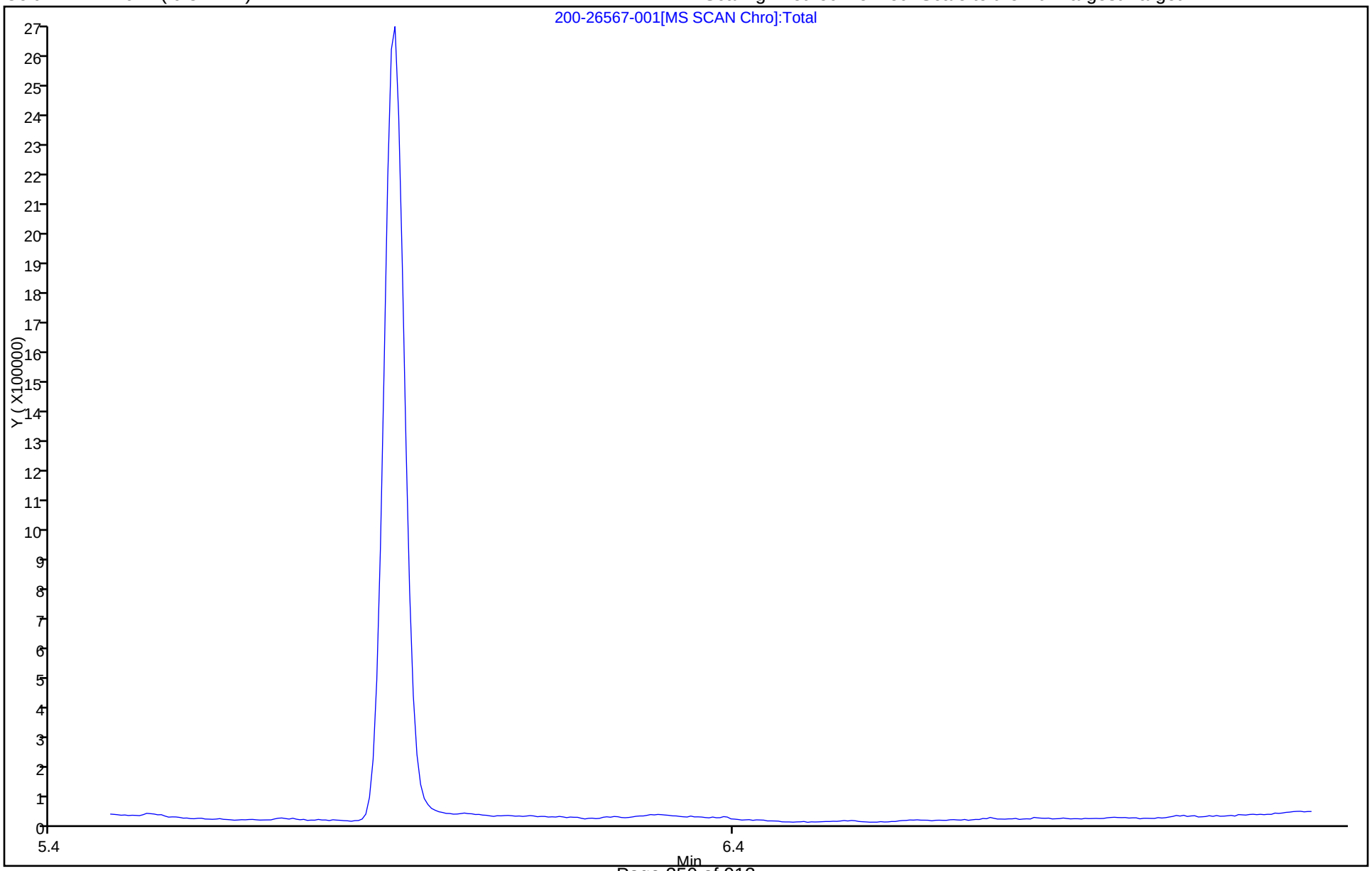
Report Date: 25-Aug-2017 10:37:45 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-001.D

Injection Date:	24-Aug-2017 15:51:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-001.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 25-Aug-2017 09:50:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-001
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 10:41:08 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 10:41:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		9.467				10.0	ND	
* 50 1,4-Difluorobenzene	114		11.372				10.0	ND	
* 74 Chlorobenzene-d5	117		17.337				10.0	ND	
* 83 4-Bromofluorobenzene	95		19.781				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

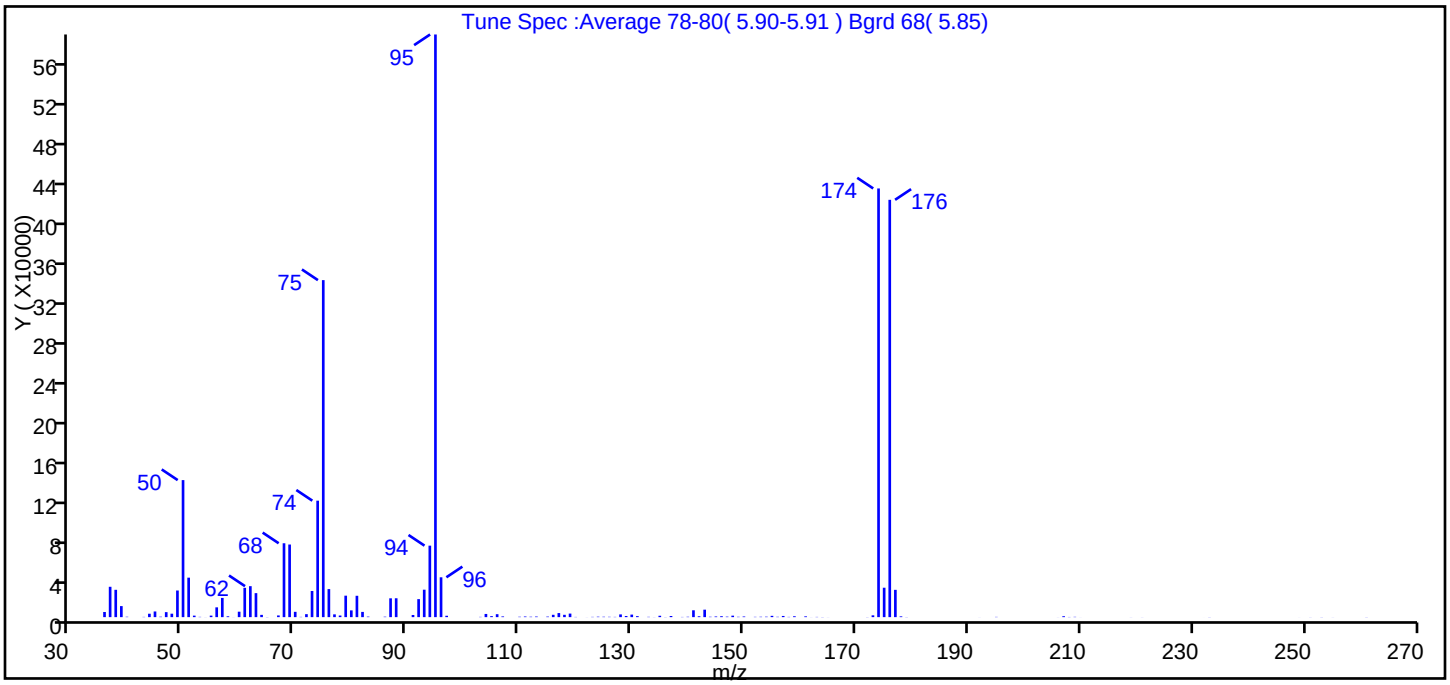
ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-001.D
Injection Date: 25-Aug-2017 09:50:30 Instrument ID: CHG.i
Lims ID: bfb
Client ID:
Operator ID: pad ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	23.5
75	30.0 to 66.0 Percent of m/e 95	57.8
96	5.0 to 9.0 Percent of m/e 95	6.8
173	Less than 2.0 Percent of m/e 174	0.3 (0.4)
174	50.0 to 120.0 Percent of m/e 95	73.6
175	4.0 to 9.0 Percent of m/e 174	5.0 (6.9)
176	93.0 to 101.0 Percent of m/e 174	71.6 (97.4)
177	5.0 to 9.0 Percent of m/e 176	4.7 (6.5)

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-001.D\TO15_MasterMethod_(v1)
Injection Date: 25-Aug-2017 09:50:30
Spectrum: Tune Spec :Average 78-80(5.90-5.91) Bgrd 68(5.85)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 135

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5188	73.00	26392	119.00	3591	157.00	1188
37.00	30624	74.00	117488	120.00	207	158.00	243
38.00	27568	75.00	339968	122.00	50	159.00	882
39.00	11143	76.00	28304	123.00	264	161.00	800
40.00	395	77.00	2813	124.00	458	162.00	53
43.00	234	78.00	1619	125.00	399	163.00	230
44.00	3447	79.00	21656	126.00	336	164.00	137
45.00	5720	80.00	6824	127.00	252	165.00	53
46.00	440	81.00	21552	128.00	2759	172.00	118
47.00	5054	82.00	5281	129.00	1129	173.00	1827
48.00	3475	83.00	532	130.00	2572	174.00	432448
49.00	26872	86.00	442	131.00	1004	175.00	29680
50.00	138240	87.00	18992	133.00	302	176.00	420992
51.00	39824	88.00	19040	134.00	86	177.00	27544
52.00	1528	91.00	2169	135.00	1383	178.00	783
53.00	273	92.00	18176	136.00	122	179.00	133
54.00	63	93.00	27696	137.00	1156	192.00	46
55.00	1539	94.00	72112	139.00	208	195.00	258
56.00	9884	95.00	587776	140.00	378	206.00	54
57.00	19376	96.00	40200	141.00	6921	207.00	913
58.00	856	97.00	1388	142.00	874	208.00	180
59.00	59	103.00	258	143.00	7532	209.00	306
60.00	5495	104.00	3217	144.00	393	210.00	35
61.00	29568	105.00	1007	145.00	673	219.00	61
62.00	31248	106.00	2978	146.00	922	221.00	62
63.00	24216	107.00	724	147.00	506	232.00	14
64.00	2302	110.00	401	148.00	1492	233.00	111
65.00	136	111.00	645	149.00	350	249.00	29
67.00	1717	112.00	423	150.00	650	251.00	79
68.00	74528	113.00	609	152.00	301	253.00	110
69.00	73264	115.00	545	153.00	392	254.00	4
70.00	5364	116.00	2370	154.00	460	255.00	55
71.00	250	117.00	4119	155.00	1317	261.00	116

Report Date: 28-Aug-2017 10:41:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-001.D\TO15_MasterMethod_(v1)
Injection Date: 25-Aug-2017 09:50:30
Spectrum: Tune Spec :Average 78-80(5.90-5.91) Bgrd 68(5.85)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 135

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3012	118.00	2354	156.00	349		

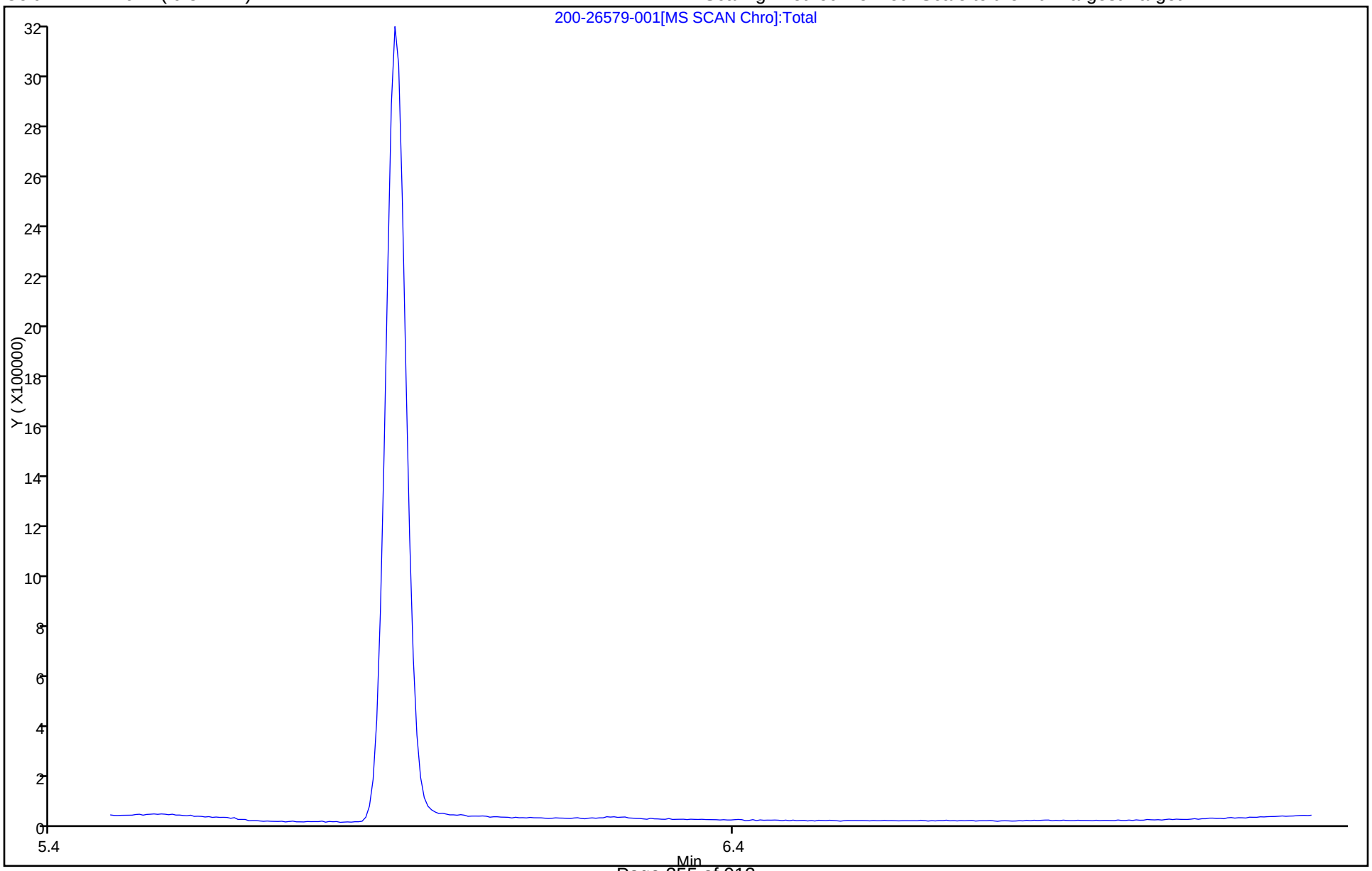
Report Date: 28-Aug-2017 10:41:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-001.D

Injection Date:	25-Aug-2017 09:50:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: Lab Sample ID: MB 200-120218/4

Matrix: Air Lab File ID: 200-26579-004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 12:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.028	U	0.20	0.028
56-23-5	Carbon tetrachloride	153.81	0.011	U	0.20	0.011
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
74-87-3	Chloromethane	50.49	0.16	U	0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	0.050	U	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
100-41-4	Ethylbenzene	106.17	0.034	U	0.20	0.034
75-09-2	Methylene Chloride	84.93	0.068	U	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
179601-23-1	m,p-Xylene	106.17	0.077	U	0.50	0.077
91-20-3	Naphthalene	128.17	0.10	U	0.50	0.10
127-18-4	Tetrachloroethene	165.83	0.0098	U	0.20	0.0098
108-88-3	Toluene	92.14	0.035	U	0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	0.040	U	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.057	U	0.20	0.057
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
95-47-6	Xylene, o-	106.17	0.040	U	0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: Lab Sample ID: MB 200-120218/4

Matrix: Air Lab File ID: 200-26579-004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 12:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.089	U	0.64	0.089
56-23-5	Carbon tetrachloride	153.81	0.069	U	1.3	0.069
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
74-87-3	Chloromethane	50.49	0.33	U	1.0	0.33
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
100-41-4	Ethylbenzene	106.17	0.15	U	0.87	0.15
75-09-2	Methylene Chloride	84.93	0.24	U	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
179601-23-1	m,p-Xylene	106.17	0.33	U	2.2	0.33
91-20-3	Naphthalene	128.17	0.52	U	2.6	0.52
127-18-4	Tetrachloroethene	165.83	0.066	U	1.4	0.066
108-88-3	Toluene	92.14	0.13	U	0.75	0.13
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.28	U	0.98	0.28
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
95-47-6	Xylene, o-	106.17	0.17	U	0.87	0.17

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 25-Aug-2017 12:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-004
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 10:47:33 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 10:47:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.122					ND	
2 Dichlorodifluoromethane	85		3.181					ND	
3 Chlorodifluoromethane	51		3.219					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390					ND	
5 Chloromethane	50		3.513					ND	
6 Butane	43		3.668					ND	
7 Vinyl chloride	62		3.705					ND	
8 Butadiene	54		3.764					ND	
10 Bromomethane	94		4.321					ND	
11 Chloroethane	64		4.503					ND	
12 2-Methylbutane	43		4.551					ND	
13 Vinyl bromide	106		4.824					ND	
14 Trichlorofluoromethane	101		4.893					ND	
16 Pentane	43		5.000					ND	
17 Ethanol	45		5.369					ND	
18 Ethyl ether	59		5.439					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.781					ND	
19 Acrolein	56		5.792					ND	
21 1,1-Dichloroethene	96		5.840					ND	
22 Acetone	43		6.070					ND	
23 Carbon disulfide	76		6.209					ND	
24 Isopropyl alcohol	45		6.295					ND	
25 3-Chloro-1-propene	41		6.525					ND	
26 Acetonitrile	41		6.675					ND	
27 Methylene Chloride	49		6.787					ND	
28 2-Methyl-2-propanol	59		6.996					ND	
29 Methyl tert-butyl ether	73		7.161					ND	
31 trans-1,2-Dichloroethene	61		7.177					ND	
32 Acrylonitrile	53		7.349					ND	
33 Hexane	57		7.509					ND	
34 1,1-Dichloroethane	63		7.991					ND	
35 Vinyl acetate	43		8.060					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		9.023					ND	
38 2-Butanone (MEK)	72		9.098					ND	
39 Ethyl acetate	88		9.114					ND	
* 40 Chlorobromomethane	128	9.467	9.467	0.000	81	336606	10.0	10.0	
41 Tetrahydrofuran	42		9.505					ND	
42 Chloroform	83		9.579					ND	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84		9.815					ND	
44 1,1,1-Trichloroethane	97		9.852					ND	
45 Carbon tetrachloride	117		10.088					ND	
46 Isooctane	57		10.489					ND	
47 Benzene	78		10.553					ND	
48 1,2-Dichloroethane	62		10.740					ND	
49 n-Heptane	43		10.869					ND	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1795265	10.0	10.0	
52 n-Butanol	56		11.800					ND	
53 Trichloroethene	95		11.832					ND	
54 1,2-Dichloropropane	63		12.393					ND	
A 51 GRO	1	12.447	(4.541-20.353)		0	689726		0	
55 Methyl methacrylate	69		12.565					ND	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
56 1,4-Dioxane	88		12.645					ND	
57 Dibromomethane	174		12.645					ND	
58 Dichlorobromomethane	83		12.928					ND	
60 cis-1,3-Dichloropropene	75		13.849					ND	
61 4-Methyl-2-pentanone (MIBK	43		14.169					ND	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	827117		0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	4762		NC	
65 Toluene	92		14.426					ND	
A 62 C8 Range	1	14.469	(14.431-14.507)		0	4696		NC	
64 n-Octane	43		14.469					ND	
66 trans-1,3-Dichloropropene	75		15.031					ND	
67 1,1,2-Trichloroethane	83		15.405					ND	
68 Tetrachloroethene	166		15.486					ND	
69 2-Hexanone	43		15.887					ND	
71 Chlorodibromomethane	129		16.160					ND	
72 Ethylene Dibromide	107		16.438					ND	
* 74 Chlorobenzene-d5	117	17.331	17.337	-0.006	87	1541927	10.0	10.0	
75 Chlorobenzene	112		17.395					ND	
76 Ethylbenzene	91		17.551					ND	
77 n-Nonane	57		17.674					ND	
78 m-Xylene & p-Xylene	106		17.807					ND	
79 o-Xylene	106		18.663					ND	
80 Styrene	104		18.722					ND	
81 Bromoform	173		19.166					ND	
82 Isopropylbenzene	105		19.391					ND	
S 73 Xylenes, Total	106		19.600					ND	
* 83 4-Bromofluorobenzene	95	19.781	19.781	0.000	88	1026105	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.092					ND	
85 N-Propylbenzene	91		20.150					ND	
86 1,2,3-Trichloropropane	75		20.188					ND	
87 n-Decane	57		20.343					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105		20.354					ND	
89 2-Chlorotoluene	91		20.354					ND	
90 1,3,5-Trimethylbenzene	105		20.466					ND	
91 Alpha Methyl Styrene	118		20.846					ND	
92 tert-Butylbenzene	119		20.969					ND	
93 1,2,4-Trimethylbenzene	105		21.071					ND	
94 sec-Butylbenzene	105		21.306					ND	
95 4-Isopropyltoluene	119		21.520					ND	
96 1,3-Dichlorobenzene	146	21.541	21.536	0.005	84	1649		0.0177	
97 1,4-Dichlorobenzene	146	21.681	21.675	0.006	93	2207		0.0237	M
98 Benzyl chloride	91		21.889					ND	
100 n-Butylbenzene	91		22.098					ND	
99 Undecane	57		22.125					ND	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	89	1467		0.0169	
102 Dodecane	57		23.697					ND	
103 1,2,4-Trichlorobenzene	180	24.676	24.671	0.005	84	2181		0.0438	
104 Hexachlorobutadiene	225		24.853					ND	
105 Naphthalene	128	25.147	25.147	0.000	96	5381		0.0497	M
106 1,2,3-Trichlorobenzene	180		25.607					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00015 Amount Added: 20.00 Units: mL Run Reagent

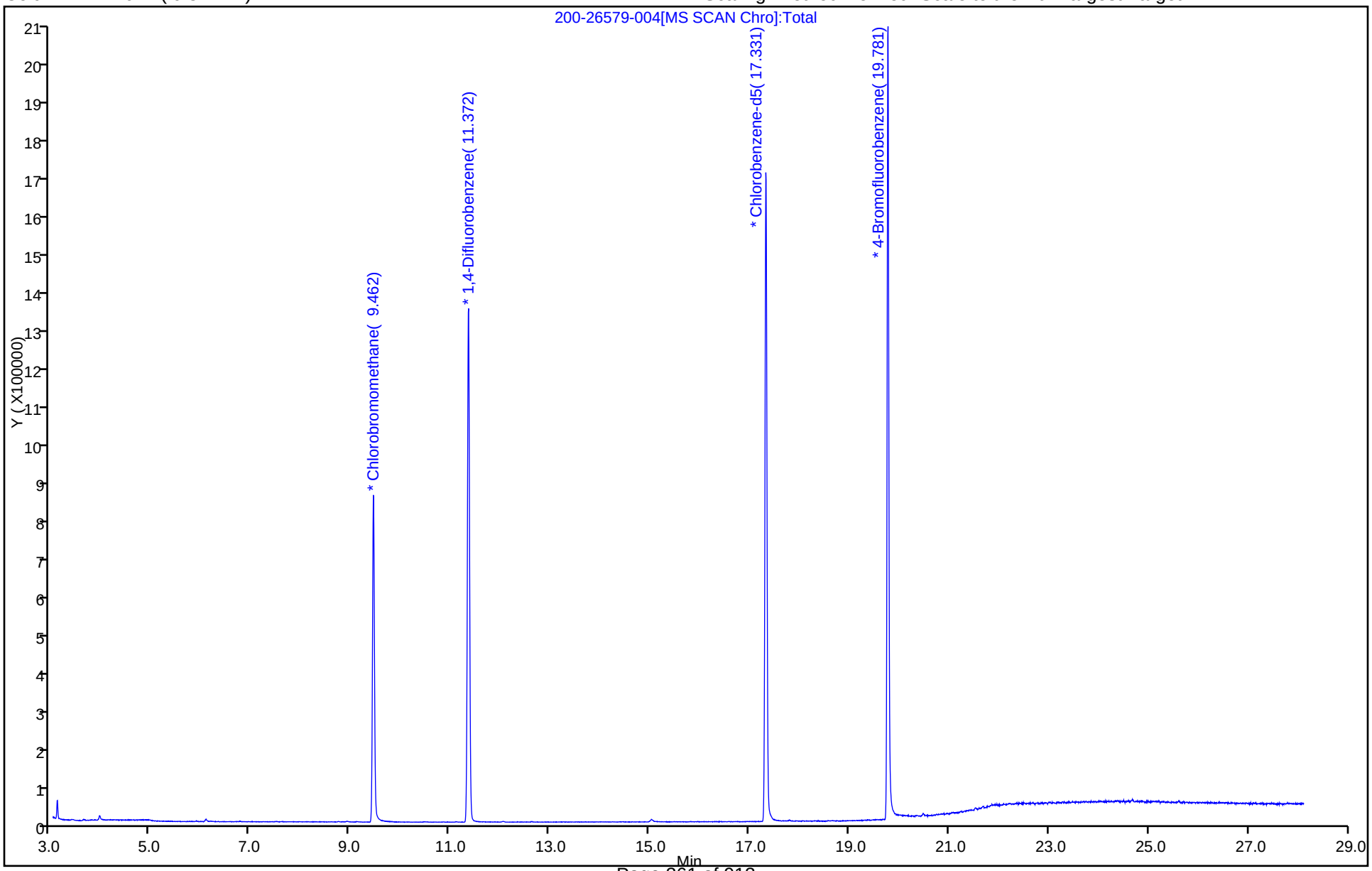
Report Date: 28-Aug-2017 10:47:33 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-004.D

Injection Date:	25-Aug-2017 12:20:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

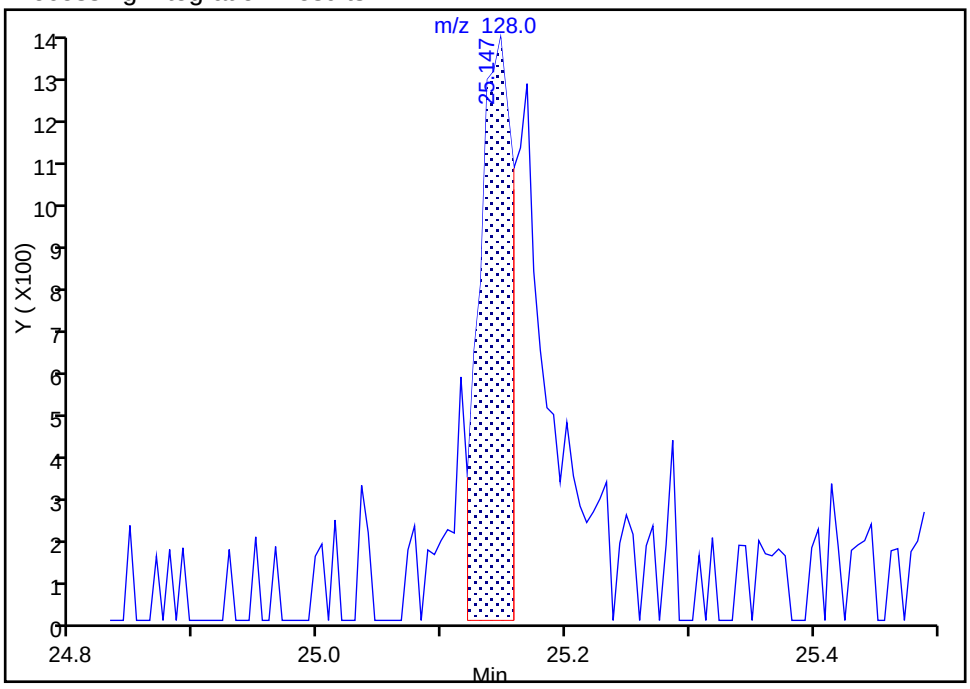
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-004.D				
Injection Date:	25-Aug-2017 12:20:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

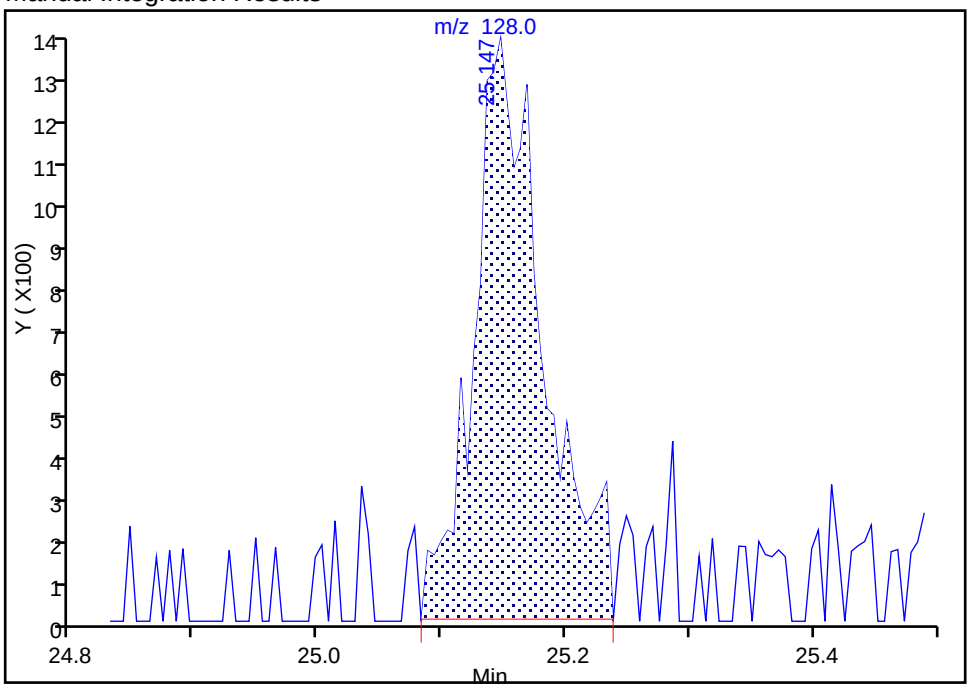
Processing Integration Results

RT: 25.15
Area: 2580
Amount: 0.023831
Amount Units: ppb v/v



Manual Integration Results

RT: 25.15
Area: 5381
Amount: 0.049703
Amount Units: ppb v/v



Reviewer: puangmaleek, 28-Aug-2017 10:47:15

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Client Sample ID: Lab Sample ID: LCS 200-120218/3

Matrix: Air Lab File ID: 200-26579-003.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2017 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 120218 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	8.99		0.20	0.028
56-23-5	Carbon tetrachloride	153.81	9.59		0.20	0.011
108-90-7	Chlorobenzene	112.56	9.48		0.20	0.025
75-00-3	Chloroethane	64.52	9.06		0.50	0.13
74-87-3	Chloromethane	50.49	8.61		0.50	0.16
156-59-2	cis-1,2-Dichloroethene	96.94	9.40		0.20	0.029
541-73-1	1,3-Dichlorobenzene	147.00	9.86		0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	9.75		0.20	0.045
75-34-3	1,1-Dichloroethane	98.96	9.49		0.20	0.017
107-06-2	1,2-Dichloroethane	98.96	9.06		0.20	0.034
75-35-4	1,1-Dichloroethene	96.94	9.13		0.20	0.035
78-87-5	1,2-Dichloropropane	112.99	9.28		0.20	0.035
100-41-4	Ethylbenzene	106.17	9.51		0.20	0.034
75-09-2	Methylene Chloride	84.93	9.20		0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	9.75		0.20	0.041
179601-23-1	m,p-Xylene	106.17	19.0		0.50	0.077
91-20-3	Naphthalene	128.17	8.24		0.50	0.10
127-18-4	Tetrachloroethene	165.83	9.32		0.20	0.0098
108-88-3	Toluene	92.14	9.45		0.20	0.035
156-60-5	trans-1,2-Dichloroethene	96.94	9.92		0.20	0.050
71-55-6	1,1,1-Trichloroethane	133.41	9.07		0.20	0.026
79-01-6	Trichloroethene	131.39	9.17		0.20	0.0091
108-67-8	1,3,5-Trimethylbenzene	120.20	9.61		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	9.75		0.20	0.057
75-01-4	Vinyl chloride	62.50	9.21		0.20	0.018
95-47-6	Xylene, o-	106.17	9.47		0.20	0.040

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-003.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 25-Aug-2017 11:29:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026579-003
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Aug-2017 10:42:54 Calib Date: 24-Aug-2017 23:17:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170824-26567.b\200-26567-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 28-Aug-2017 10:45:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.123	3.122	0.001	94	183726	10.0	8.70	
2 Dichlorodifluoromethane	85	3.181	3.181	0.000	99	1028282	10.0	9.14	
3 Chlorodifluoromethane	51	3.219	3.219	0.000	96	529999	10.0	9.12	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.390	3.390	0.000	99	917051	10.0	10.2	
5 Chloromethane	50	3.513	3.513	0.000	99	228738	10.0	8.61	
6 Butane	43	3.668	3.668	0.000	95	351335	10.0	9.08	
7 Vinyl chloride	62	3.706	3.705	0.001	98	279514	10.0	9.21	
8 Butadiene	54	3.765	3.764	0.000	96	179957	10.0	8.90	
10 Bromomethane	94	4.321	4.321	0.000	98	314991	10.0	9.32	
11 Chloroethane	64	4.503	4.503	0.000	98	118376	10.0	9.06	
12 2-Methylbutane	43	4.551	4.551	0.000	88	249687	10.0	9.48	
13 Vinyl bromide	106	4.824	4.824	0.000	98	300254	10.0	9.25	
14 Trichlorofluoromethane	101	4.893	4.893	0.000	98	912140	10.0	9.11	
16 Pentane	43	5.006	5.000	0.006	97	368367	10.0	10.1	
17 Ethanol	45	5.375	5.369	0.006	96	134412	15.0	14.0	
18 Ethyl ether	59	5.444	5.439	0.005	97	153803	10.0	10.8	
20 1,1,2-Trichloro-1,2,2-trif	101	5.781	5.781	0.000	95	601080	10.0	9.47	
19 Acrolein	56	5.792	5.792	0.000	96	66661	10.0	12.5	
21 1,1-Dichloroethene	96	5.846	5.840	0.006	96	251074	10.0	9.13	
9 BFB									
22 Acetone	43	6.070	6.070	0.000	100	358362	10.0	9.59	
23 Carbon disulfide	76	6.209	6.209	0.000	100	820081	10.0	10.7	
24 Isopropyl alcohol	45	6.300	6.295	0.005	99	297090	10.0	8.27	
25 3-Chloro-1-propene	41	6.525	6.525	0.000	93	254683	10.0	9.62	
26 Acetonitrile	41	6.680	6.675	0.005	96	130839	10.0	10.2	
27 Methylene Chloride	49	6.787	6.787	0.000	93	291587	10.0	9.20	
28 2-Methyl-2-propanol	59	7.001	6.996	0.005	95	468813	10.0	8.74	
29 Methyl tert-butyl ether	73	7.167	7.161	0.006	95	725174	10.0	9.75	
31 trans-1,2-Dichloroethene	61	7.178	7.177	0.001	98	414686	10.0	9.92	
32 Acrylonitrile	53	7.349	7.349	0.000	93	137060	10.0	10.2	
33 Hexane	57	7.515	7.509	0.006	89	341632	10.0	10.2	
34 1,1-Dichloroethane	63	7.991	7.991	0.000	99	522273	10.0	9.49	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.060	8.060	0.000	100	552230	10.0	10.1	
37 cis-1,2-Dichloroethene	96	9.023	9.023	0.000	95	309974	10.0	9.40	
38 2-Butanone (MEK)	72	9.098	9.098	0.000	100	107945	10.0	9.57	
39 Ethyl acetate	88	9.125	9.114	0.011	97	16433	10.0	10.5	
* 40 Chlorobromomethane	128	9.473	9.467	0.006	82	344490	10.0	10.0	
41 Tetrahydrofuran	42	9.505	9.505	0.000	85	226290	10.0	9.25	
42 Chloroform	83	9.585	9.579	0.006	96	750876	10.0	9.48	
S 30 1,2-Dichloroethene, Total	61				0		20.0	19.3	
43 Cyclohexane	84	9.815	9.815	0.000	94	365015	10.0	9.51	
44 1,1,1-Trichloroethane	97	9.852	9.852	0.000	95	836001	10.0	9.07	
45 Carbon tetrachloride	117	10.088	10.088	0.000	98	918245	10.0	9.59	
46 Isooctane	57	10.494	10.489	0.005	97	1196031	10.0	9.28	
47 Benzene	78	10.553	10.553	0.000	96	871942	10.0	8.99	
48 1,2-Dichloroethane	62	10.741	10.740	0.001	99	565605	10.0	9.06	
49 n-Heptane	43	10.869	10.869	0.000	89	431530	10.0	9.29	
* 50 1,4-Difluorobenzene	114	11.372	11.372	0.000	94	1748889	10.0	10.0	
52 n-Butanol	56	11.805	11.800	0.005	93	134661	10.0	9.67	
53 Trichloroethene	95	11.832	11.832	0.000	95	510169	10.0	9.17	
54 1,2-Dichloropropane	63	12.394	12.393	0.001	81	323476	10.0	9.28	
A 51 GRO	1	12.447	(4.541-20.353)		0	127178880	10.0	0	
55 Methyl methacrylate	69	12.565	12.565	0.000	91	269742	10.0	10.1	
56 1,4-Dioxane	88	12.645	12.645	0.000	47	163861	10.0	8.86	
57 Dibromomethane	174	12.645	12.645	0.000	92	427233	10.0	9.33	
58 Dichlorobromomethane	83	12.929	12.928	0.001	98	904745	10.0	9.50	
60 cis-1,3-Dichloropropene	75	13.849	13.849	0.001	97	569897	10.0	9.83	
61 4-Methyl-2-pentanone (MIBK	43	14.170	14.169	0.001	97	551104	10.0	9.24	
A 59 TVOC as Toluene	92	14.365	(3.112-25.617)		0	196182395	10.0	0	
A 63 Toluene Range	92	14.426	(14.386-14.466)		0	5713871	NC	NC	
65 Toluene	92	14.426	14.426	0.000	94	687503	10.0	9.45	
A 62 C8 Range	1	14.469	(14.419-14.519)		0	5713871	NC	NC	
64 n-Octane	43	14.469	14.469	0.000	87	608632	10.0	9.06	
66 trans-1,3-Dichloropropene	75	15.031	15.031	0.000	98	625780	10.0	9.93	
67 1,1,2-Trichloroethane	83	15.405	15.405	0.000	99	376530	10.0	9.49	
68 Tetrachloroethene	166	15.486	15.486	0.000	92	643084	10.0	9.32	
69 2-Hexanone	43	15.887	15.887	0.000	93	534327	10.0	8.93	
71 Chlorodibromomethane	129	16.165	16.160	0.005	97	896465	10.0	9.57	
72 Ethylene Dibromide	107	16.438	16.438	0.000	99	727612	10.0	9.80	
* 74 Chlorobenzene-d5	117	17.337	17.337	0.000	87	1613757	10.0	10.0	
75 Chlorobenzene	112	17.396	17.395	0.001	95	975033	10.0	9.48	
76 Ethylbenzene	91	17.551	17.551	0.001	99	1504026	10.0	9.51	
77 n-Nonane	57	17.679	17.674	0.005	85	582951	10.0	9.40	
78 m-Xylene & p-Xylene	106	17.807	17.807	0.000	0	1177554	20.0	19.0	
79 o-Xylene	106	18.663	18.663	0.000	99	588338	10.0	9.47	
80 Styrene	104	18.722	18.722	0.000	98	859255	10.0	9.77	
81 Bromoform	173	19.166	19.166	0.000	93	769343	10.0	10.4	
82 Isopropylbenzene	105	19.391	19.391	0.000	97	1686550	10.0	9.53	
S 73 Xylenes, Total	106				0		30.0	28.5	
* 83 4-Bromofluorobenzene	95	19.782	19.781	0.001	88	1197755	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83	20.092	20.092	0.000	98	908317	10.0	9.62	
85 N-Propylbenzene	91	20.151	20.150	0.001	99	1996581	10.0	9.51	
86 1,2,3-Trichloropropane	75	20.188	20.188	0.000	97	700121	10.0	9.01	
87 n-Decane	57	20.343	20.343	0.000	94	706199	10.0	9.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	20.354	20.354	0.000	89	1677066	10.0	10.1	
89 2-Chlorotoluene	91	20.354	20.354	0.000	92	1449937	10.0	9.46	
90 1,3,5-Trimethylbenzene	105	20.466	20.466	0.000	92	1384346	10.0	9.61	
91 Alpha Methyl Styrene	118	20.846	20.846	0.000	89	680519	10.0	10.2	
92 tert-Butylbenzene	119	20.969	20.969	0.000	91	1278363	10.0	9.56	
93 1,2,4-Trimethylbenzene	105	21.071	21.071	0.000	98	1375894	10.0	9.75	
94 sec-Butylbenzene	105	21.306	21.306	0.000	98	1919934	10.0	9.66	
95 4-Isopropyltoluene	119	21.520	21.520	0.000	97	1620901	10.0	9.90	
96 1,3-Dichlorobenzene	146	21.536	21.536	0.000	98	959644	10.0	9.86	
97 1,4-Dichlorobenzene	146	21.675	21.675	0.000	93	945889	10.0	9.70	
98 Benzyl chloride	91	21.884	21.889	-0.005	98	1223612	10.0	10.1	
100 n-Butylbenzene	91	22.098	22.098	0.000	98	1473569	10.0	10.0	
99 Undecane	57	22.125	22.125	0.001	93	673750	10.0	9.02	
101 1,2-Dichlorobenzene	146	22.210	22.210	0.000	94	885966	10.0	9.75	
102 Dodecane	57	23.697	23.697	0.000	95	503859	10.0	9.62	
103 1,2,4-Trichlorobenzene	180	24.671	24.671	0.000	93	471712	10.0	9.06	
104 Hexachlorobutadiene	225	24.853	24.853	0.000	90	477072	10.0	10.2	
105 Naphthalene	128	25.153	25.147	0.006	99	933771	10.0	8.24	
106 1,2,3-Trichlorobenzene	180	25.607	25.607	0.000	94	390336	10.0	8.73	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00705	Amount Added: 200.00	Units: mL	
ATTO15GIS_00015	Amount Added: 20.00	Units: mL	Run Reagent

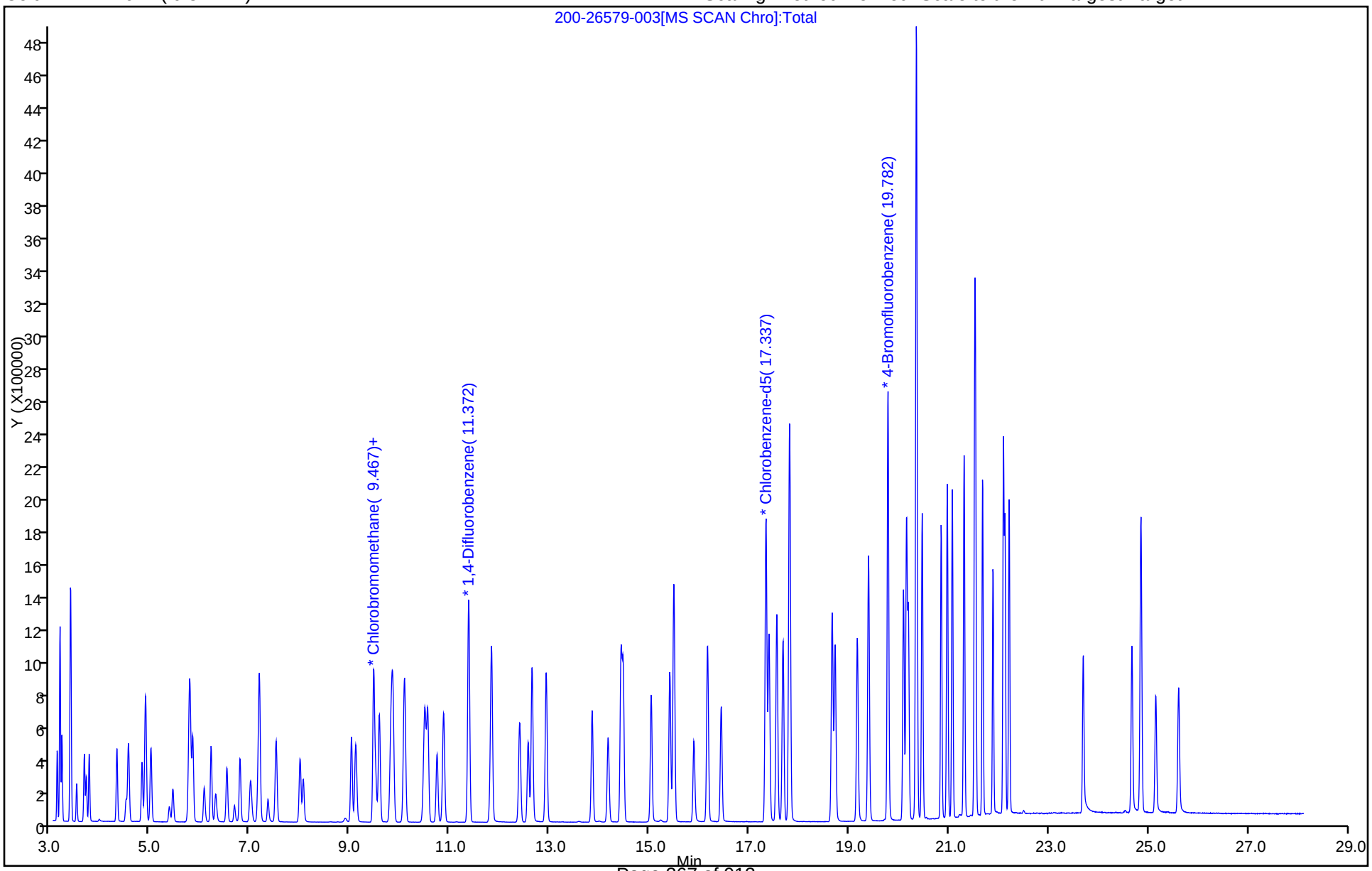
Report Date: 28-Aug-2017 10:45:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170825-26579.b\200-26579-003.D

Injection Date:	25-Aug-2017 11:29:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Instrument ID: CHG.i Start Date: 08/24/2017 15:51

Analysis Batch Number: 120200 End Date: 08/25/2017 03:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-120200/1		08/24/2017 15:51	1	200-26567-001.D	RTX-624 0.32(mm)
VIBLK 200-120200/2		08/24/2017 16:34	1		RTX-624 0.32(mm)
IC 200-120200/3		08/24/2017 17:24	1	200-26567-003.D	RTX-624 0.32(mm)
IC 200-120200/4		08/24/2017 18:14	1	200-26567-004.D	RTX-624 0.32(mm)
IC 200-120200/5		08/24/2017 19:05	1	200-26567-005.D	RTX-624 0.32(mm)
IC 200-120200/6		08/24/2017 19:55	1	200-26567-006.D	RTX-624 0.32(mm)
ICIS 200-120200/7		08/24/2017 20:45	1	200-26567-007.D	RTX-624 0.32(mm)
IC 200-120200/8		08/24/2017 21:36	1	200-26567-008.D	RTX-624 0.32(mm)
IC 200-120200/9		08/24/2017 22:27	1	200-26567-009.D	RTX-624 0.32(mm)
IC 200-120200/10		08/24/2017 23:17	1	200-26567-010.D	RTX-624 0.32(mm)
VIBLK 200-120200/11		08/25/2017 00:08	1		RTX-624 0.32(mm)
VIBLK 200-120200/12		08/25/2017 00:58	1		RTX-624 0.32(mm)
ICV 200-120200/13		08/25/2017 01:48	1	200-26567-013.D	RTX-624 0.32(mm)
ZZZZZ		08/25/2017 02:38	1		RTX-624 0.32(mm)
VIBLK 200-120200/15		08/25/2017 03:29	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39823-1

SDG No.: 200-39823-1

Instrument ID: CHG.i Start Date: 08/25/2017 09:50

Analysis Batch Number: 120218 End Date: 08/26/2017 05:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-120218/1		08/25/2017 09:50	1	200-26579-001.D	RTX-624 0.32(mm)
CCVIS 200-120218/2		08/25/2017 10:38	1	200-26579-002.D	RTX-624 0.32(mm)
LCS 200-120218/3		08/25/2017 11:29	1	200-26579-003.D	RTX-624 0.32(mm)
MB 200-120218/4		08/25/2017 12:20	1	200-26579-004.D	RTX-624 0.32(mm)
ZZZZZ		08/25/2017 13:10	49.5		RTX-624 0.32(mm)
ZZZZZ		08/25/2017 14:01	50.5		RTX-624 0.32(mm)
ZZZZZ		08/25/2017 14:51	50		RTX-624 0.32(mm)
ZZZZZ		08/25/2017 15:42	51.2		RTX-624 0.32(mm)
ZZZZZ		08/25/2017 16:32	49.1		RTX-624 0.32(mm)
ZZZZZ		08/25/2017 17:23	51.2		RTX-624 0.32(mm)
ZZZZZ		08/25/2017 18:13	46.8		RTX-624 0.32(mm)
200-39823-1		08/25/2017 19:04	1	200-26579-012.D	RTX-624 0.32(mm)
200-39823-2		08/25/2017 19:55	49.2	200-26579-013.D	RTX-624 0.32(mm)
200-39823-3		08/25/2017 20:45	10	200-26579-014.D	RTX-624 0.32(mm)
200-39823-4		08/25/2017 21:35	30.3	200-26579-015.D	RTX-624 0.32(mm)
200-39823-5		08/25/2017 22:25	30.5	200-26579-016.D	RTX-624 0.32(mm)
200-39823-6		08/25/2017 23:16	1	200-26579-017.D	RTX-624 0.32(mm)
200-39823-7		08/26/2017 00:06	1	200-26579-018.D	RTX-624 0.32(mm)
200-39823-8		08/26/2017 00:56	1	200-26579-019.D	RTX-624 0.32(mm)
200-39823-9		08/26/2017 01:47	1	200-26579-020.D	RTX-624 0.32(mm)
200-39823-10		08/26/2017 02:37	49.5	200-26579-021.D	RTX-624 0.32(mm)
200-39823-11		08/26/2017 03:28	60.1	200-26579-022.D	RTX-624 0.32(mm)
200-39823-12		08/26/2017 04:18	48.1	200-26579-023.D	RTX-624 0.32(mm)
ZZZZZ		08/26/2017 05:08	4		RTX-624 0.32(mm)
ZZZZZ		08/26/2017 05:59	3		RTX-624 0.32(mm)

Post-Sampling Air Canister Pressure Check Record

Login # (w/ Location Code)	Date	Time (Military)	Lab BP ("Hg)	Lab Temp (°C)	Pressure Gauge ID	Analyst
200-39823	08/24/17	12:13	29.4	22	G16	SML

Sampling Information and Return Equipment Check	Yes	No	Comments
(1) Is a Field Test Data Sheet (FTDS) or similar sampling documentation present?	Yes		
(2) Is the flow controller ID used for each canister recorded?	Yes		
(3) MA MCP & NJ DKQP: Check return flow rate for flow controllers		No	
(4) Is visible sign of damage to canister and/or flow controller (FC) present?		No	
If damage observed, list equipment IDs and describe condition:			

Post-Sampling Return Pressure Check

Lab ID	Canister ID	Pressure[1] ("Hg)	Anomaly[2] (Y/N)	FC ID[3]	FC Check[4] Reference	FC Return (Y/N)	Can Cert Batch ID	Comments
200-39823-A-1	3790	-3.4	N	4188	77/44	Y	3790-26195	
200-39823-A-2	2535	-4.5	N	5009	77/44	Y	2535-26195	
200-39823-A-3	4794	-8.8	N	3117	77/45	Y	4794-26148	
200-39823-A-4	2563	-7.2	N	3956	77/44	Y	2563-26065	
200-39823-A-5	3419	-7.7	N	4571	77/45	Y	3419-26195	
200-39823-A-6	3659	-4.8	N	4526	77/44	Y	3659-26065	
200-39823-A-7	4382	-4.4	N	4595	77/45	Y	[illegible]	[illegible]
200-39823-A-8	2515	-5.1	N	3384	77/44	Y	[illegible]2515-26195	
200-39823-A-9	4308	-4.4	N	2763	77/44	Y	4308-25840	
200-39823-A-10	4543	-5.7	N	4193	77/44	Y	4543-26165	
200-39823-A-11	4067	-3.3	N	3932	77/44	Y	4067-25845	
200-39823-A-12	2538	-2.7	N	4720	77/44	Y	2538-25950	

[1] Criteria: Return Pressure should be between -1 and -10 ("Hg) with the exception of grab samples or those using 100 or 200mL/minute flow controllers. These samples must be returned at no lower than -10 "Hg but have no specific criteria otherwise.

[2] If return pressure is not within criteria, initiate Non-Conformance Memo.

[3] Record the ID of the FC used for sampling if information is provided, otherwise leave blank.

[4] Record the Flow Controller Set Flow Rate Logbook ID and Page number in which the original FC Check was recorded.

Summa Canister Dilution Worksheet

Client: AKRF Inc

Job No.: 200-39823-1
SDG No.: 200-39823-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Date	Analyst
200-39823-2	6	-4.7	0.84	5.06	49.4	4.36	26.16		5.17	5.17	08/25/17 13:59	Daigle, Paul A
200-39823-4	6	-7.3	0.76	4.54	39.2	3.67	22.00		4.85	4.85	08/25/17 14:05	Daigle, Paul A
200-39823-5	6	-7.5	0.75	4.50	39.0	3.65	21.92		4.88	4.88	08/25/17 14:11	Daigle, Paul A
200-39823-10	6	-3.9	0.87	5.22	51.8	4.52	27.14		5.20	5.20	08/25/17 14:46	Daigle, Paul A
200-39823-11	6	-5.4	0.82	4.92	39.4	3.68	22.08		4.49	4.49	08/25/17 14:47	Daigle, Paul A
200-39823-11	6	0	1.00	6.00	19.7	2.34	14.04		2.34	10.51	08/25/17 14:47	Daigle, Paul A
200-39823-12	6	-2.9	0.90	5.42	49.1	4.34	26.04		4.81	4.81	08/25/17 14:47	Daigle, Paul A

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg
Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type:
Oven 4/2	100	7/5/2017	EJE	1L / 6L	Individual / Batch

Port	Can ID	Initial (psia)	Final (psia)	Diff.[1]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	✓ 5081	.04	.05	.01	-29.6	G25	8.10.17	10:00	CC	23	G16	8.14.17	14:30	CC	23
2	✓ 4348	RECLEAN													
3	✓ 5042	.04	.05	.01	-29.6		8.10.17	10:00	CC	23		8.14.17	14:30	CC	23
4	✓ 4087	.04	.17	.13	-29.6		"	"	"	"		"	"	CC	23
5	✓ 4308	.04	.06	.01	-29.6		"	"	"	"		"	"	CC	23
6	✓ 4141	RECLEAN													
7	✓ 4708	.04					8.10.17	10:00	CC	23					23
8	✓ 2754		.08	.04	-29.6							8.14.17	14:30	CC	23
9	2535		.05	.01	-29.6									CC	23
10	3790		.06	.04	-29.6									CC	23
11	4437		.05	.01	-29.6									CC	23
12	5088		.05	.01	-29.6									CC	23

EJE 7/12/17

angle is good

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.
Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

	Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
1	5081	7/11/17	25849	EKT		XXXXX				7/20/17	WMD
2	4348	RECLEAN				XXXXX					
3	5042	7/11/17	25849	EKT		XXXXX				7/20/17	WMD
4	4087	7/11/17	"	"		XXXXX				"	"
5	4308	7/11/17	"	"		XXXXX				"	"
6	4141	RECLEAN 7/6/17	25445	WMD		XXXXX				7/20/17	WMD
7	3708	7/11/17	25849	EKT		XXXXX				7/20/17	WMD
8	2754	"	"	"		XXXXX				"	"
9	2535	8/18/17	25975KP	KP		XXXXX				8/01/17	PAD
10	3790	"	"	"		XXXXX				"	"
11	4437	"	"	"		XXXXX				"	"
12	5088	7/20/17	25955	BK		XXXXX				7/20/17	WMD

EKT 7/19/17

EKT 7/19/17

Inventory Level 1: Individual Canister Certification (TO15LL 0.01)

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv)

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv)

Inventory Level 4: Individual or Batch Certification (TO15LLN2 0.08 ppbv)

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

0.04 INDIVIDUAL CERT.

200 39198-A.1
Loc: 200
39198
#1
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type:
Over 1/2	100	7/7/2017	EJC	1L / 6L	Individual / Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4376	.04	.04	0	-29.6	GB	8.9.17	15:45	CE	23	GB	8.10.17	14:00	CE	22
2	5114	.04	.05	.01	-29.6										
3	4439	.04	.04	0	-29.6										
4	2538	.04	.04	0	-29.6										
5	3346	.04	.04	0	-29.6										
6	5100														
7	3419	.04	.05	.01	-29.6	GB	8.9.17	15:45	CE	23	GB	8.10.17	14:00	CE	23
8	4318				-29.6										
9	4925	.04	.07	.03	-29.6										
10	3259	.04			-29.6										
11	2515	.04	.07	.03	-29.6										
12	4344	.04	.04	0	-29.6										

[1] Batch Certification. The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine/ ≤ TO15 LL ≤ NJDEP-LL TO15

	Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
1	4376	7/20/17	25555	BK		XXXX				7/20/17	WM
2	5114					XXXX					
3	4439					XXXX					
4	2538					XXXX					
5	3346	8/08/17	26195	KP		XXXX				8/08/17	PAD
6	5100	Reclean				XXXX					
7	3419	8/08/17	26195	KP		XXXX					
8	4318	Reclean				XXXX					
9	4925	8/08/17	26195	KP		XXXX					
10	3259					XXXX					
11	2515					XXXX					
12	4344					XXXX					

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.06 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

TO15 0.04 INDIVIDUAL CERT

Page 23 of 1043

200-39232-A-1
Loc: 200
39232
#1
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type	
Top Rack	25	7/22/2017	SML	1L	6L	Individual	Batch

Port	Can ID	Initial* (psia)	Final (psia)	Diff.*	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5694	.05	.09	.04	-29.6	GK	7/24/17	9:30	CC	22	6.24	8.8.17	1245	CC	22
2	3620	"	.05	0	-29.4	"	"	"	"	"	"	"	"	"	"
3	4569	"	.05	0	-29.4	"	"	"	"	"	"	"	"	"	"
4	2798	"	.05	0	-29.4	"	"	"	"	"	"	"	"	"	"
5	5649	"	.05	0	-29.4	"	"	"	"	"	"	"	"	"	"
6	5637	"	.14	.09	-29.6	"	"	"	"	"	"	"	"	"	"
7	3854	"	.06	0	-29.4	"	"	"	"	"	"	"	"	"	"
8	5633	"	.10	.05	-29.6	"	"	"	"	"	"	"	"	"	"
9	3551	"	.05	0	-29.4	"	"	"	"	"	"	"	"	"	"
10	2563	.05	.01	0	-29.6	"	"	"	"	"	"	"	"	"	"
11	2989	.01	.09	.04	-29.6	GK	7.24.17	9:30	CC	22	"	8.8.17	1245	CC	22
12	3486	"	.05	0	-29.4	"	"	"	"	"	"	"	"	"	"

*Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

*Difference = Final Pressure - Initial Pressure Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi (2) Pressure readings must be at least 24 hours apart

If time frame was not met, the PM must authorize shipment of canister PM Authorization Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
2563	7/26/17	26065	[illegible]		XXX	XXX			7/31/17	[illegible]
		26065				CC 7.24.17				

Inventory Level 1: Individual Canister Certification (TO15LL 0.01)

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv)

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects

Comments:

FAI023.04.26.17.10
TestAmerica Burlington

200-39423-A-10
Loc: 200
39423
#10
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type:
Bottom Rack	25	7/22/2017	SML	1L / 6L	Individual / Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	DNF[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5039	.05	.05	Ø	-29.6	6.5	7.24.17	9:30	CC	22	6.5	8.9.17	10:30	CC	22
2	4290		.13	.08	-29.7										
3	5896		.29	.24	-29.6										
4	5712		.07	.02	-29.7										
5	3937		.06	.01	-29.6										
6	2969		.05	Ø	-29.6										
7	4303		.08	.03	-29.6										
8	5087		.05	Ø	-29.6										
9	4574		.05	Ø	-29.6										
10	5124		.05	Ø	-29.6										
11	4287		.06	Ø	-29.6										
12	3659	.04	.15	.09	-29.6	6.5	8.8.17	13:50	CC	22	6.5	8.9.17	11:00	CC	22

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister — PM Authorization — Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: TO14 / Routine / TO15 LL / NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
3659	7/26/17	26065			XXX	XXX 7.24.17 CC			7/31/17	VMB

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLN1 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects

Comments:

FAIII/3/04 25 17:10
TestAmerica Burlington

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200-39424-A-12

LOC: 200
39424
#12
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type
Bottom Rack	20	7/27/2017	KJH	1L / 6L	Individual / Batch

Port	Can ID	Initial (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Initial Reading Date:	Initial Reading Time:	Initial Reading Tech:	Initial Reading Temp:	Final Reading Gauge:	Final Reading Date:	Final Reading Time:	Final Reading Tech:	Final Reading Temp:
1	4382	.05	.05	0	-29.5	G25	8.8.17	8:30	CK	22	G25	8.9.17	14:00	CK	22
2	3323	.04	.04	0	-29.5	"	8.8.17	8:00	CK	22	"	8/7/17	12:30	CK	22
3	4234	"	.04	0	-29.5	"	"	"	"	"	"	"	"	"	"
4	4083	"	.10	.06	-29.5	"	"	"	"	"	"	"	"	"	"
5	5070	"	.04	0	-29.5	"	"	"	"	"	"	"	"	"	"
6	2639	"	.06	.02	-29.5	"	"	"	"	"	"	"	"	"	"
7	5105	"	.06	.02	-29.5	"	"	"	"	"	"	"	"	"	"
8	5453	"	.06	.02	-29.5	"	"	"	"	"	"	"	"	"	"
9	4236	"	.08	.04	-29.5	"	"	"	"	"	"	"	"	"	"
10	3527	"	.04	0	-29.5	"	"	"	"	"	"	"	"	"	"
11	4356	"	.08	.04	-29.5	"	"	"	"	"	"	"	"	"	"
12	3328	"	.08	.04	-29.5	"	"	"	"	"	"	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart

If time frame was not met the PM must authorize shipment of canister — PM Authorization — Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: TO15 Routine / TO15 LL / NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
3037	8/02/17	26165	KP		XXXX				8/03/17	PAD
4382										
MC	8/14/17									

Inventory Level 1: Individual Canister Certification (TO15LL 0.01)

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4 Individual or Batch Certification (TO15LLNJ 0.06 ppbv)

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

FA023.04.26.17:10
TestAmerica Burlington

200-39486-A-1
39486
#1
A
Log: 200

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type:
Bottom Rack	25	7/26/2017	EJE	1L / 6L	Individual / Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Initial Reading Date:	Initial Reading Time:	Initial Reading Tech:	Initial Reading Temp:	Final Reading Gauge:	Final Reading Date:	Final Reading Time:	Final Reading Tech:	Final Reading Temp:
1	4794	.05	.05	0	-29.6	G25	8.8.17	15:20	CE	22	G25	8.9.17	19:00	CE	22
2	3012	.04	.05	.01	-29.5	G25	7.31.17	11:30	CE	23		8.9.17	8:10	CE	23
3	5439		.06	.02	-29.3										
4	6022		.05	.01	-29.5										
5	5691		.05	.01	-29.5										
6	4325		.05	.01	-29.3										
7	3274		.07	.03	-29.3										
8	4010		.05	.01	-29.5										
9	3428		.14	.10	-29.6										
10	5418		.13	.08	-29.5										
11	3529		.04	0	-29.6										
12	6147		.10	.06	-29.3										

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: < TO15 Routine < TO15 LL < NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	Inventory Level 2	Inventory Level 3	Inventory Level 4	Secondary Review: Limited	Secondary Review: Review Date	Secondary Review: Reviewer
4794	8/02/17	26148	EP		XXXX				8/02/17	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15-LNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments: _____

FAI023:04.26.17:10

TestAmerica Burlington

200-39500-A-1
39500
#1
A
Log: 200

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type	
Bottom Rack	50	7/31/2017	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4015	-.04	-.05	-.01	-29.6	6-25	8/2/17	1215	JE	23	625	8.4.17	11:30	EE	23
2	3362	〃	-.11	-.07	-29.5	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃
3	4343	-.05	-.06	-.01	-29.6	625	8/2/17	1215	EE	22	625	8.9.17	14:00	EE	22
4	2909	-.04	-.19	-.15	-29.3	6-25	8/2/17	1215	JE	23	625	8.4.17	11:30	EE	23
5	5053		-.07	-.03	-29.5										
6	4069		-.05	-.01	-29.6										
7	3460		-.05	-.01	-29.6										
8	4871		-.06	-.01	-29.6										
9	2868		-.05	-.01	-29.5										
10	6164		-.06	> 0.01	-29.6										
11	4779		-.05	-.01	-29.5										
12	4314	〃	-.06	-.01	-29.5	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃

[1] Batch Certification. The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +0.25psi. (2) Pressure readings must be at least 24 hours apart.

Time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
4343	8/03/17	26165	KP		XXXXX				8/04/17	AD

Inventory Level 1: Individual Canister Certification (TO15_LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments: _____

FAI023.04.26.17:10
TestAmerica Burlington

200-39531-A-3
Log: 200
39531
#3
A

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25849-04.d

Lab ID: LCS 200-118406/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	10.5	105	58-129	
Dichlorodifluoromethane	10.0	10.2	102	68-128	
Freon 22	10.0	10.6	106	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.6	116	78-138	
Chloromethane	10.0	10.3	103	57-126	
n-Butane	10.0	10.8	108	56-130	
Vinyl chloride	10.0	10.3	103	62-125	
1,3-Butadiene	10.0	10.5	105	59-125	
Bromomethane	10.0	10.4	104	68-128	
Chloroethane	10.0	10.9	109	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.6	106	67-127	
Trichlorofluoromethane	10.0	10.3	103	67-127	
Ethanol	15.0	17.2	115	28-168	
Freon TF	10.0	10.5	105	68-128	
1,1-Dichloroethene	10.0	10.5	105	67-127	
Acetone	10.0	13.2	132	64-136	
Isopropyl alcohol	10.0	11.7	117	55-124	
Carbon disulfide	10.0	12.9	129	81-141	
3-Chloropropene	10.0	11.7	117	53-133	
Methylene Chloride	10.0	11.7	117	62-122	
tert-Butyl alcohol	10.0	11.8	118	64-124	
Methyl tert-butyl ether	10.0	11.6	116	67-127	
trans-1,2-Dichloroethene	10.0	12.2	122	72-132	
n-Hexane	10.0	13.1	131	71-131	
1,1-Dichloroethane	10.0	11.2	112	66-126	
Vinyl acetate	10.0	13.5	135	62-130	*
Ethyl acetate	10.0	11.9	119	75-135	
Methyl Ethyl Ketone	10.0	11.4	114	62-122	
cis-1,2-Dichloroethene	10.0	10.7	107	67-127	
Chloroform	10.0	11.1	111	69-129	
Tetrahydrofuran	10.0	12.7	127	61-136	
1,1,1-Trichloroethane	10.0	10.8	108	70-130	
Cyclohexane	10.0	11.4	114	69-129	
Carbon tetrachloride	10.0	10.6	106	62-143	
2,2,4-Trimethylpentane	10.0	11.9	119	67-127	
Benzene	10.0	10.9	110	67-127	
1,2-Dichloroethane	10.0	11.4	114	67-132	
n-Heptane	10.0	12.0	120	62-130	
Trichloroethene	10.0	10.5	105	68-128	
Methyl methacrylate	10.0	11.7	117	70-130	
1,2-Dichloropropane	10.0	11.3	113	67-127	
1,4-Dioxane	10.0	10.8	108	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25849-04.d

Lab ID: LCS 200-118406/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.9	109	69-129	
cis-1,3-Dichloropropene	10.0	11.5	115	70-130	
methyl isobutyl ketone	10.0	12.0	120	62-130	
Toluene	10.0	10.7	107	67-127	
trans-1,3-Dichloropropene	10.0	11.3	113	69-129	
1,1,2-Trichloroethane	10.0	10.9	109	69-129	
Tetrachloroethene	10.0	9.95	100	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	11.9	119	61-127	
Dibromochloromethane	10.0	9.89	99	66-130	
1,2-Dibromoethane	10.0	10.7	107	70-130	
Chlorobenzene	10.0	10.2	102	68-128	
Ethylbenzene	10.0	10.8	108	68-128	
m,p-Xylene	20.0	21.4	107	68-128	
Xylene, o-	10.0	10.5	105	67-127	
Styrene	10.0	10.8	108	68-128	
Bromoform	10.0	9.25	92	34-170	
Cumene	10.0	10.7	107	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	69-129	
n-Propylbenzene	10.0	10.8	108	67-127	
4-Ethyltoluene	10.0	10.9	109	69-129	
1,3,5-Trimethylbenzene	10.0	10.6	106	65-125	
2-Chlorotoluene	10.0	10.6	106	67-127	
tert-Butylbenzene	10.0	10.2	102	63-125	
1,2,4-Trimethylbenzene	10.0	10.5	105	65-125	
sec-Butylbenzene	10.0	10.6	106	66-126	
4-Isopropyltoluene	10.0	10.5	105	67-129	
1,3-Dichlorobenzene	10.0	9.77	98	67-127	
1,4-Dichlorobenzene	10.0	9.50	95	66-126	
Benzyl chloride	10.0	9.73	97	54-135	
n-Butylbenzene	10.0	11.2	112	67-127	
1,2-Dichlorobenzene	10.0	9.67	97	67-127	
1,2,4-Trichlorobenzene	10.0	8.01	80	59-126	
Hexachlorobutadiene	10.0	8.83	88	62-130	
Naphthalene	10.0	6.97	70	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25955-05.d

Lab ID: LCS 200-118667/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	12.0	120	58-129	
Dichlorodifluoromethane	10.0	10.4	104	68-128	
Freon 22	10.0	11.5	115	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.7	117	78-138	
Chloromethane	10.0	11.6	116	57-126	
n-Butane	10.0	12.1	121	56-130	
Vinyl chloride	10.0	10.8	108	62-125	
1,3-Butadiene	10.0	11.0	110	59-125	
Bromomethane	10.0	9.86	99	68-128	
Chloroethane	10.0	10.6	106	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.89	99	67-127	
Trichlorofluoromethane	10.0	9.73	97	67-127	
Ethanol	15.0	19.3	129	28-168	
Freon TF	10.0	9.85	98	68-128	
1,1-Dichloroethene	10.0	9.91	99	67-127	
Acetone	10.0	13.3	133	64-136	
Isopropyl alcohol	10.0	11.4	114	55-124	
Carbon disulfide	10.0	12.5	125	81-141	
3-Chloropropene	10.0	11.8	118	53-133	
Methylene Chloride	10.0	12.1	121	62-122	
tert-Butyl alcohol	10.0	11.2	112	64-124	
Methyl tert-butyl ether	10.0	11.1	111	67-127	
trans-1,2-Dichloroethene	10.0	12.1	121	72-132	
n-Hexane	10.0	13.4	134	71-131	*
1,1-Dichloroethane	10.0	11.1	111	66-126	
Vinyl acetate	10.0	13.7	137	62-130	*
Ethyl acetate	10.0	11.4	114	75-135	
Methyl Ethyl Ketone	10.0	10.9	109	62-122	
cis-1,2-Dichloroethene	10.0	10.2	102	67-127	
Chloroform	10.0	10.8	108	69-129	
Tetrahydrofuran	10.0	13.1	131	61-136	
1,1,1-Trichloroethane	10.0	10.2	102	70-130	
Cyclohexane	10.0	10.7	107	69-129	
Carbon tetrachloride	10.0	9.97	100	62-143	
2,2,4-Trimethylpentane	10.0	11.9	119	67-127	
Benzene	10.0	10.5	105	67-127	
1,2-Dichloroethane	10.0	10.9	109	67-132	
n-Heptane	10.0	12.4	124	62-130	
Trichloroethene	10.0	9.99	100	68-128	
Methyl methacrylate	10.0	11.3	113	70-130	
1,2-Dichloropropane	10.0	11.1	111	67-127	
1,4-Dioxane	10.0	9.55	96	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25955-05.d

Lab ID: LCS 200-118667/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.3	103	69-129	
cis-1,3-Dichloropropene	10.0	10.9	109	70-130	
methyl isobutyl ketone	10.0	12.4	124	62-130	
Toluene	10.0	10.3	104	67-127	
trans-1,3-Dichloropropene	10.0	11.0	110	69-129	
1,1,2-Trichloroethane	10.0	10.6	106	69-129	
Tetrachloroethene	10.0	9.42	94	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.6	126	61-127	
Dibromochloromethane	10.0	8.95	90	66-130	
1,2-Dibromoethane	10.0	10.2	102	70-130	
Chlorobenzene	10.0	9.86	99	68-128	
Ethylbenzene	10.0	10.5	105	68-128	
m,p-Xylene	20.0	20.5	102	68-128	
Xylene, o-	10.0	10.1	101	67-127	
Styrene	10.0	10.5	105	68-128	
Bromoform	10.0	7.53	75	34-170	
Cumene	10.0	10.4	104	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	69-129	
n-Propylbenzene	10.0	10.8	108	67-127	
4-Ethyltoluene	10.0	10.6	106	69-129	
1,3,5-Trimethylbenzene	10.0	10.3	103	65-125	
2-Chlorotoluene	10.0	10.3	103	67-127	
tert-Butylbenzene	10.0	10.3	103	63-125	
1,2,4-Trimethylbenzene	10.0	10.6	106	65-125	
sec-Butylbenzene	10.0	10.7	108	66-126	
4-Isopropyltoluene	10.0	10.6	106	67-129	
1,3-Dichlorobenzene	10.0	9.98	100	67-127	
1,4-Dichlorobenzene	10.0	10.1	101	66-126	
Benzyl chloride	10.0	10.4	104	54-135	
n-Butylbenzene	10.0	11.7	117	67-127	
1,2-Dichlorobenzene	10.0	9.94	99	67-127	
1,2,4-Trichlorobenzene	10.0	8.60	86	59-126	
Hexachlorobutadiene	10.0	8.48	85	62-130	
Naphthalene	10.0	8.08	81	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-26195-007.D

Lab ID: LCS 200-119318/7 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	9.97	100	58-129	
Dichlorodifluoromethane	10.0	9.77	98	68-128	
Freon 22	10.0	9.92	99	64-128	
1,2-Dichlorotetrafluoroethane	10.0	9.53	95	78-138	
Chloromethane	10.0	9.57	96	57-126	
n-Butane	10.0	9.74	97	56-130	
Vinyl chloride	10.0	9.39	94	62-125	
1,3-Butadiene	10.0	9.58	96	59-125	
Bromomethane	10.0	9.31	93	68-128	
Chloroethane	10.0	10.0	100	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.20	92	67-127	
Trichlorofluoromethane	10.0	9.53	95	67-127	
Ethanol	15.0	15.7	105	28-168	
Freon TF	10.0	9.25	92	68-128	
1,1-Dichloroethene	10.0	8.94	89	67-127	
Acetone	10.0	10.4	104	64-136	
Isopropyl alcohol	10.0	10.2	102	55-124	
Carbon disulfide	10.0	9.66	97	81-141	
3-Chloropropene	10.0	10.5	105	53-133	
Methylene Chloride	10.0	9.96	100	62-122	
tert-Butyl alcohol	10.0	10.5	105	64-124	
Methyl tert-butyl ether	10.0	9.99	100	67-127	
trans-1,2-Dichloroethene	10.0	9.94	99	72-132	
n-Hexane	10.0	9.91	99	71-131	
1,1-Dichloroethane	10.0	9.46	95	66-126	
Vinyl acetate	10.0	10.3	103	62-130	
Ethyl acetate	10.0	9.68	97	75-135	
Methyl Ethyl Ketone	10.0	9.09	91	62-122	
cis-1,2-Dichloroethene	10.0	9.08	91	67-127	
Chloroform	10.0	8.28	83	69-129	
Tetrahydrofuran	10.0	9.37	94	61-136	
1,1,1-Trichloroethane	10.0	8.76	88	70-130	
Cyclohexane	10.0	8.52	85	69-129	
Carbon tetrachloride	10.0	9.36	94	62-143	
2,2,4-Trimethylpentane	10.0	8.15	81	67-127	
Benzene	10.0	8.04	80	67-127	
1,2-Dichloroethane	10.0	8.71	87	67-132	
n-Heptane	10.0	8.01	80	62-130	
Trichloroethene	10.0	7.64	76	68-128	
Methyl methacrylate	10.0	8.01	80	70-130	
1,2-Dichloropropane	10.0	7.35	73	67-127	
1,4-Dioxane	10.0	8.13	81	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-26195-007.D

Lab ID: LCS 200-119318/7 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	8.63	86	69-129	
cis-1,3-Dichloropropene	10.0	8.22	82	70-130	
methyl isobutyl ketone	10.0	7.90	79	62-130	
Toluene	10.0	8.35	83	67-127	
trans-1,3-Dichloropropene	10.0	8.34	83	69-129	
1,1,2-Trichloroethane	10.0	8.19	82	69-129	
Tetrachloroethene	10.0	8.00	80	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	8.12	81	61-127	
Dibromochloromethane	10.0	9.52	95	66-130	
1,2-Dibromoethane	10.0	8.56	86	70-130	
Chlorobenzene	10.0	8.54	85	68-128	
Ethylbenzene	10.0	8.71	87	68-128	
m,p-Xylene	20.0	17.5	87	68-128	
Xylene, o-	10.0	8.75	88	67-127	
Styrene	10.0	9.39	94	68-128	
Bromoform	10.0	10.5	105	34-170	
Cumene	10.0	9.01	90	67-127	
1,1,2,2-Tetrachloroethane	10.0	8.50	85	69-129	
n-Propylbenzene	10.0	9.15	91	67-127	
4-Ethyltoluene	10.0	9.57	96	69-129	
1,3,5-Trimethylbenzene	10.0	9.15	92	65-125	
2-Chlorotoluene	10.0	9.30	93	67-127	
tert-Butylbenzene	10.0	9.04	90	63-125	
1,2,4-Trimethylbenzene	10.0	9.31	93	65-125	
sec-Butylbenzene	10.0	9.12	91	66-126	
4-Isopropyltoluene	10.0	9.55	95	67-129	
1,3-Dichlorobenzene	10.0	8.91	89	67-127	
1,4-Dichlorobenzene	10.0	9.00	90	66-126	
Benzyl chloride	10.0	10.3	103	54-135	
n-Butylbenzene	10.0	9.60	96	67-127	
1,2-Dichlorobenzene	10.0	8.69	87	67-127	
1,2,4-Trichlorobenzene	10.0	8.46	85	59-126	
Hexachlorobutadiene	10.0	7.91	79	62-130	
Naphthalene	10.0	9.29	93	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25955-05.d

Lab ID: LCS 200-118667/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	12.0	120	58-129	
Dichlorodifluoromethane	10.0	10.4	104	68-128	
Freon 22	10.0	11.5	115	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.7	117	78-138	
Chloromethane	10.0	11.6	116	57-126	
n-Butane	10.0	12.1	121	56-130	
Vinyl chloride	10.0	10.8	108	62-125	
1,3-Butadiene	10.0	11.0	110	59-125	
Bromomethane	10.0	9.86	99	68-128	
Chloroethane	10.0	10.6	106	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.89	99	67-127	
Trichlorofluoromethane	10.0	9.73	97	67-127	
Ethanol	15.0	19.3	129	28-168	
Freon TF	10.0	9.85	98	68-128	
1,1-Dichloroethene	10.0	9.91	99	67-127	
Acetone	10.0	13.3	133	64-136	
Isopropyl alcohol	10.0	11.4	114	55-124	
Carbon disulfide	10.0	12.5	125	81-141	
3-Chloropropene	10.0	11.8	118	53-133	
Methylene Chloride	10.0	12.1	121	62-122	
tert-Butyl alcohol	10.0	11.2	112	64-124	
Methyl tert-butyl ether	10.0	11.1	111	67-127	
trans-1,2-Dichloroethene	10.0	12.1	121	72-132	
n-Hexane	10.0	13.4	134	71-131	*
1,1-Dichloroethane	10.0	11.1	111	66-126	
Vinyl acetate	10.0	13.7	137	62-130	*
Ethyl acetate	10.0	11.4	114	75-135	
Methyl Ethyl Ketone	10.0	10.9	109	62-122	
cis-1,2-Dichloroethene	10.0	10.2	102	67-127	
Chloroform	10.0	10.8	108	69-129	
Tetrahydrofuran	10.0	13.1	131	61-136	
1,1,1-Trichloroethane	10.0	10.2	102	70-130	
Cyclohexane	10.0	10.7	107	69-129	
Carbon tetrachloride	10.0	9.97	100	62-143	
2,2,4-Trimethylpentane	10.0	11.9	119	67-127	
Benzene	10.0	10.5	105	67-127	
1,2-Dichloroethane	10.0	10.9	109	67-132	
n-Heptane	10.0	12.4	124	62-130	
Trichloroethene	10.0	9.99	100	68-128	
Methyl methacrylate	10.0	11.3	113	70-130	
1,2-Dichloropropane	10.0	11.1	111	67-127	
1,4-Dioxane	10.0	9.55	96	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25955-05.d

Lab ID: LCS 200-118667/5 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.3	103	69-129	
cis-1,3-Dichloropropene	10.0	10.9	109	70-130	
methyl isobutyl ketone	10.0	12.4	124	62-130	
Toluene	10.0	10.3	104	67-127	
trans-1,3-Dichloropropene	10.0	11.0	110	69-129	
1,1,2-Trichloroethane	10.0	10.6	106	69-129	
Tetrachloroethene	10.0	9.42	94	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.6	126	61-127	
Dibromochloromethane	10.0	8.95	90	66-130	
1,2-Dibromoethane	10.0	10.2	102	70-130	
Chlorobenzene	10.0	9.86	99	68-128	
Ethylbenzene	10.0	10.5	105	68-128	
m,p-Xylene	20.0	20.5	102	68-128	
Xylene, o-	10.0	10.1	101	67-127	
Styrene	10.0	10.5	105	68-128	
Bromoform	10.0	7.53	75	34-170	
Cumene	10.0	10.4	104	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.8	108	69-129	
n-Propylbenzene	10.0	10.8	108	67-127	
4-Ethyltoluene	10.0	10.6	106	69-129	
1,3,5-Trimethylbenzene	10.0	10.3	103	65-125	
2-Chlorotoluene	10.0	10.3	103	67-127	
tert-Butylbenzene	10.0	10.3	103	63-125	
1,2,4-Trimethylbenzene	10.0	10.6	106	65-125	
sec-Butylbenzene	10.0	10.7	108	66-126	
4-Isopropyltoluene	10.0	10.6	106	67-129	
1,3-Dichlorobenzene	10.0	9.98	100	67-127	
1,4-Dichlorobenzene	10.0	10.1	101	66-126	
Benzyl chloride	10.0	10.4	104	54-135	
n-Butylbenzene	10.0	11.7	117	67-127	
1,2-Dichlorobenzene	10.0	9.94	99	67-127	
1,2,4-Trichlorobenzene	10.0	8.60	86	59-126	
Hexachlorobutadiene	10.0	8.48	85	62-130	
Naphthalene	10.0	8.08	81	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-26195-007.D

Lab ID: LCS 200-119318/7 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	9.97	100	58-129	
Dichlorodifluoromethane	10.0	9.77	98	68-128	
Freon 22	10.0	9.92	99	64-128	
1,2-Dichlorotetrafluoroethane	10.0	9.53	95	78-138	
Chloromethane	10.0	9.57	96	57-126	
n-Butane	10.0	9.74	97	56-130	
Vinyl chloride	10.0	9.39	94	62-125	
1,3-Butadiene	10.0	9.58	96	59-125	
Bromomethane	10.0	9.31	93	68-128	
Chloroethane	10.0	10.0	100	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.20	92	67-127	
Trichlorofluoromethane	10.0	9.53	95	67-127	
Ethanol	15.0	15.7	105	28-168	
Freon TF	10.0	9.25	92	68-128	
1,1-Dichloroethene	10.0	8.94	89	67-127	
Acetone	10.0	10.4	104	64-136	
Isopropyl alcohol	10.0	10.2	102	55-124	
Carbon disulfide	10.0	9.66	97	81-141	
3-Chloropropene	10.0	10.5	105	53-133	
Methylene Chloride	10.0	9.96	100	62-122	
tert-Butyl alcohol	10.0	10.5	105	64-124	
Methyl tert-butyl ether	10.0	9.99	100	67-127	
trans-1,2-Dichloroethene	10.0	9.94	99	72-132	
n-Hexane	10.0	9.91	99	71-131	
1,1-Dichloroethane	10.0	9.46	95	66-126	
Vinyl acetate	10.0	10.3	103	62-130	
Ethyl acetate	10.0	9.68	97	75-135	
Methyl Ethyl Ketone	10.0	9.09	91	62-122	
cis-1,2-Dichloroethene	10.0	9.08	91	67-127	
Chloroform	10.0	8.28	83	69-129	
Tetrahydrofuran	10.0	9.37	94	61-136	
1,1,1-Trichloroethane	10.0	8.76	88	70-130	
Cyclohexane	10.0	8.52	85	69-129	
Carbon tetrachloride	10.0	9.36	94	62-143	
2,2,4-Trimethylpentane	10.0	8.15	81	67-127	
Benzene	10.0	8.04	80	67-127	
1,2-Dichloroethane	10.0	8.71	87	67-132	
n-Heptane	10.0	8.01	80	62-130	
Trichloroethene	10.0	7.64	76	68-128	
Methyl methacrylate	10.0	8.01	80	70-130	
1,2-Dichloropropane	10.0	7.35	73	67-127	
1,4-Dioxane	10.0	8.13	81	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-26195-007.D

Lab ID: LCS 200-119318/7 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	8.63	86	69-129	
cis-1,3-Dichloropropene	10.0	8.22	82	70-130	
methyl isobutyl ketone	10.0	7.90	79	62-130	
Toluene	10.0	8.35	83	67-127	
trans-1,3-Dichloropropene	10.0	8.34	83	69-129	
1,1,2-Trichloroethane	10.0	8.19	82	69-129	
Tetrachloroethene	10.0	8.00	80	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	8.12	81	61-127	
Dibromochloromethane	10.0	9.52	95	66-130	
1,2-Dibromoethane	10.0	8.56	86	70-130	
Chlorobenzene	10.0	8.54	85	68-128	
Ethylbenzene	10.0	8.71	87	68-128	
m,p-Xylene	20.0	17.5	87	68-128	
Xylene, o-	10.0	8.75	88	67-127	
Styrene	10.0	9.39	94	68-128	
Bromoform	10.0	10.5	105	34-170	
Cumene	10.0	9.01	90	67-127	
1,1,2,2-Tetrachloroethane	10.0	8.50	85	69-129	
n-Propylbenzene	10.0	9.15	91	67-127	
4-Ethyltoluene	10.0	9.57	96	69-129	
1,3,5-Trimethylbenzene	10.0	9.15	92	65-125	
2-Chlorotoluene	10.0	9.30	93	67-127	
tert-Butylbenzene	10.0	9.04	90	63-125	
1,2,4-Trimethylbenzene	10.0	9.31	93	65-125	
sec-Butylbenzene	10.0	9.12	91	66-126	
4-Isopropyltoluene	10.0	9.55	95	67-129	
1,3-Dichlorobenzene	10.0	8.91	89	67-127	
1,4-Dichlorobenzene	10.0	9.00	90	66-126	
Benzyl chloride	10.0	10.3	103	54-135	
n-Butylbenzene	10.0	9.60	96	67-127	
1,2-Dichlorobenzene	10.0	8.69	87	67-127	
1,2,4-Trichlorobenzene	10.0	8.46	85	59-126	
Hexachlorobutadiene	10.0	7.91	79	62-130	
Naphthalene	10.0	9.29	93	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26065_03.D

Lab ID: LCS 200-118979/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	10.0	100	58-129	
Dichlorodifluoromethane	10.0	9.56	96	68-128	
Freon 22	10.0	9.61	96	64-128	
1,2-Dichlorotetrafluoroethane	10.0	10.5	105	78-138	
Chloromethane	10.0	9.19	92	57-126	
n-Butane	10.0	9.35	94	56-130	
Vinyl chloride	10.0	8.79	88	62-125	
1,3-Butadiene	10.0	8.64	86	59-125	
Bromomethane	10.0	9.10	91	68-128	
Chloroethane	10.0	8.94	89	65-125	
Bromoethene(Vinyl Bromide)	10.0	8.84	88	67-127	
Trichlorofluoromethane	10.0	9.20	92	67-127	
Ethanol	15.0	15.0	100	28-168	
Freon TF	10.0	9.12	91	68-128	
1,1-Dichloroethene	10.0	9.04	90	67-127	
Acetone	10.0	10.5	105	64-136	
Isopropyl alcohol	10.0	8.55	86	55-124	
Carbon disulfide	10.0	10.6	106	81-141	
3-Chloropropene	10.0	8.72	87	53-133	
Methylene Chloride	10.0	9.20	92	62-122	
tert-Butyl alcohol	10.0	9.19	92	64-124	
Methyl tert-butyl ether	10.0	9.42	94	67-127	
trans-1,2-Dichloroethene	10.0	9.92	99	72-132	
n-Hexane	10.0	10.0	100	71-131	
1,1-Dichloroethane	10.0	9.18	92	66-126	
Vinyl acetate	10.0	10.4	104	62-130	
Ethyl acetate	10.0	10.5	105	75-135	
Methyl Ethyl Ketone	10.0	9.19	92	62-122	
cis-1,2-Dichloroethene	10.0	9.25	93	67-127	
Chloroform	10.0	9.59	96	69-129	
Tetrahydrofuran	10.0	10.3	103	61-136	
1,1,1-Trichloroethane	10.0	9.62	96	70-130	
Cyclohexane	10.0	9.50	95	69-129	
Carbon tetrachloride	10.0	9.75	97	62-143	
2,2,4-Trimethylpentane	10.0	9.79	98	67-127	
Benzene	10.0	9.49	95	67-127	
1,2-Dichloroethane	10.0	9.74	97	67-132	
n-Heptane	10.0	9.99	100	62-130	
Trichloroethene	10.0	9.23	92	68-128	
Methyl methacrylate	10.0	10.0	100	70-130	
1,2-Dichloropropane	10.0	9.69	97	67-127	
1,4-Dioxane	10.0	8.87	89	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26065_03.D

Lab ID: LCS 200-118979/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.46	95	69-129	
cis-1,3-Dichloropropene	10.0	9.79	98	70-130	
methyl isobutyl ketone	10.0	10.4	104	62-130	
Toluene	10.0	9.58	96	67-127	
trans-1,3-Dichloropropene	10.0	9.42	94	69-129	
1,1,2-Trichloroethane	10.0	9.78	98	69-129	
Tetrachloroethene	10.0	8.89	89	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.5	105	61-127	
Dibromochloromethane	10.0	8.68	87	66-130	
1,2-Dibromoethane	10.0	9.56	96	70-130	
Chlorobenzene	10.0	9.38	94	68-128	
Ethylbenzene	10.0	9.54	95	68-128	
m,p-Xylene	20.0	18.8	94	68-128	
Xylene, o-	10.0	9.15	91	67-127	
Styrene	10.0	9.68	97	68-128	
Bromoform	10.0	7.99	80	34-170	
Cumene	10.0	9.31	93	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.88	99	69-129	
n-Propylbenzene	10.0	9.61	96	67-127	
4-Ethyltoluene	10.0	10.2	102	69-129	
1,3,5-Trimethylbenzene	10.0	9.63	96	65-125	
2-Chlorotoluene	10.0	9.92	99	67-127	
tert-Butylbenzene	10.0	9.48	95	63-125	
1,2,4-Trimethylbenzene	10.0	9.72	97	65-125	
sec-Butylbenzene	10.0	9.76	98	66-126	
4-Isopropyltoluene	10.0	9.80	98	67-129	
1,3-Dichlorobenzene	10.0	9.83	98	67-127	
1,4-Dichlorobenzene	10.0	9.77	98	66-126	
Benzyl chloride	10.0	9.77	98	54-135	
n-Butylbenzene	10.0	10.2	102	67-127	
1,2-Dichlorobenzene	10.0	9.68	97	67-127	
1,2,4-Trichlorobenzene	10.0	8.17	82	59-126	
Hexachlorobutadiene	10.0	8.83	88	62-130	
Naphthalene	10.0	7.85	78	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26065_03.D

Lab ID: LCS 200-118979/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	10.0	100	58-129	
Dichlorodifluoromethane	10.0	9.56	96	68-128	
Freon 22	10.0	9.61	96	64-128	
1,2-Dichlorotetrafluoroethane	10.0	10.5	105	78-138	
Chloromethane	10.0	9.19	92	57-126	
n-Butane	10.0	9.35	94	56-130	
Vinyl chloride	10.0	8.79	88	62-125	
1,3-Butadiene	10.0	8.64	86	59-125	
Bromomethane	10.0	9.10	91	68-128	
Chloroethane	10.0	8.94	89	65-125	
Bromoethene(Vinyl Bromide)	10.0	8.84	88	67-127	
Trichlorofluoromethane	10.0	9.20	92	67-127	
Ethanol	15.0	15.0	100	28-168	
Freon TF	10.0	9.12	91	68-128	
1,1-Dichloroethene	10.0	9.04	90	67-127	
Acetone	10.0	10.5	105	64-136	
Isopropyl alcohol	10.0	8.55	86	55-124	
Carbon disulfide	10.0	10.6	106	81-141	
3-Chloropropene	10.0	8.72	87	53-133	
Methylene Chloride	10.0	9.20	92	62-122	
tert-Butyl alcohol	10.0	9.19	92	64-124	
Methyl tert-butyl ether	10.0	9.42	94	67-127	
trans-1,2-Dichloroethene	10.0	9.92	99	72-132	
n-Hexane	10.0	10.0	100	71-131	
1,1-Dichloroethane	10.0	9.18	92	66-126	
Vinyl acetate	10.0	10.4	104	62-130	
Ethyl acetate	10.0	10.5	105	75-135	
Methyl Ethyl Ketone	10.0	9.19	92	62-122	
cis-1,2-Dichloroethene	10.0	9.25	93	67-127	
Chloroform	10.0	9.59	96	69-129	
Tetrahydrofuran	10.0	10.3	103	61-136	
1,1,1-Trichloroethane	10.0	9.62	96	70-130	
Cyclohexane	10.0	9.50	95	69-129	
Carbon tetrachloride	10.0	9.75	97	62-143	
2,2,4-Trimethylpentane	10.0	9.79	98	67-127	
Benzene	10.0	9.49	95	67-127	
1,2-Dichloroethane	10.0	9.74	97	67-132	
n-Heptane	10.0	9.99	100	62-130	
Trichloroethene	10.0	9.23	92	68-128	
Methyl methacrylate	10.0	10.0	100	70-130	
1,2-Dichloropropane	10.0	9.69	97	67-127	
1,4-Dioxane	10.0	8.87	89	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26065_03.D

Lab ID: LCS 200-118979/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.46	95	69-129	
cis-1,3-Dichloropropene	10.0	9.79	98	70-130	
methyl isobutyl ketone	10.0	10.4	104	62-130	
Toluene	10.0	9.58	96	67-127	
trans-1,3-Dichloropropene	10.0	9.42	94	69-129	
1,1,2-Trichloroethane	10.0	9.78	98	69-129	
Tetrachloroethene	10.0	8.89	89	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.5	105	61-127	
Dibromochloromethane	10.0	8.68	87	66-130	
1,2-Dibromoethane	10.0	9.56	96	70-130	
Chlorobenzene	10.0	9.38	94	68-128	
Ethylbenzene	10.0	9.54	95	68-128	
m,p-Xylene	20.0	18.8	94	68-128	
Xylene, o-	10.0	9.15	91	67-127	
Styrene	10.0	9.68	97	68-128	
Bromoform	10.0	7.99	80	34-170	
Cumene	10.0	9.31	93	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.88	99	69-129	
n-Propylbenzene	10.0	9.61	96	67-127	
4-Ethyltoluene	10.0	10.2	102	69-129	
1,3,5-Trimethylbenzene	10.0	9.63	96	65-125	
2-Chlorotoluene	10.0	9.92	99	67-127	
tert-Butylbenzene	10.0	9.48	95	63-125	
1,2,4-Trimethylbenzene	10.0	9.72	97	65-125	
sec-Butylbenzene	10.0	9.76	98	66-126	
4-Isopropyltoluene	10.0	9.80	98	67-129	
1,3-Dichlorobenzene	10.0	9.83	98	67-127	
1,4-Dichlorobenzene	10.0	9.77	98	66-126	
Benzyl chloride	10.0	9.77	98	54-135	
n-Butylbenzene	10.0	10.2	102	67-127	
1,2-Dichlorobenzene	10.0	9.68	97	67-127	
1,2,4-Trichlorobenzene	10.0	8.17	82	59-126	
Hexachlorobutadiene	10.0	8.83	88	62-130	
Naphthalene	10.0	7.85	78	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26165_04.D

Lab ID: LCS 200-119262/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	13.3	133	58-129	*
Dichlorodifluoromethane	10.0	11.6	117	68-128	
Freon 22	10.0	12.9	130	64-128	*
1,2-Dichlorotetrafluoroethane	10.0	12.2	122	78-138	
Chloromethane	10.0	11.9	119	57-126	
n-Butane	10.0	13.3	133	56-130	*
Vinyl chloride	10.0	10.8	108	62-125	
1,3-Butadiene	10.0	11.6	116	59-125	
Bromomethane	10.0	10.2	102	68-128	
Chloroethane	10.0	10.7	107	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.23	92	67-127	
Trichlorofluoromethane	10.0	10.9	109	67-127	
Ethanol	15.0	18.8	125	28-168	
Freon TF	10.0	9.99	100	68-128	
1,1-Dichloroethene	10.0	9.67	97	67-127	
Acetone	10.0	13.7	137	64-136	*
Isopropyl alcohol	10.0	11.3	113	55-124	
Carbon disulfide	10.0	12.1	121	81-141	
3-Chloropropene	10.0	12.8	128	53-133	
Methylene Chloride	10.0	12.3	123	62-122	*
tert-Butyl alcohol	10.0	11.1	111	64-124	
Methyl tert-butyl ether	10.0	11.0	110	67-127	
trans-1,2-Dichloroethene	10.0	12.2	122	72-132	
n-Hexane	10.0	12.5	125	71-131	
1,1-Dichloroethane	10.0	11.2	112	66-126	
Vinyl acetate	10.0	13.7	137	62-130	*
Ethyl acetate	10.0	11.2	112	75-135	
Methyl Ethyl Ketone	10.0	10.3	103	62-122	
cis-1,2-Dichloroethene	10.0	10.1	101	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	13.2	132	61-136	
1,1,1-Trichloroethane	10.0	11.0	110	70-130	
Cyclohexane	10.0	10.6	106	69-129	
Carbon tetrachloride	10.0	10.9	109	62-143	
2,2,4-Trimethylpentane	10.0	11.6	116	67-127	
Benzene	10.0	10.4	105	67-127	
1,2-Dichloroethane	10.0	12.4	124	67-132	
n-Heptane	10.0	12.6	126	62-130	
Trichloroethene	10.0	10.3	103	68-128	
Methyl methacrylate	10.0	11.0	110	70-130	
1,2-Dichloropropane	10.0	11.1	111	67-127	
1,4-Dioxane	10.0	9.37	94	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26165_04.D

Lab ID: LCS 200-119262/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.9	109	69-129	
cis-1,3-Dichloropropene	10.0	11.1	111	70-130	
methyl isobutyl ketone	10.0	12.7	127	62-130	
Toluene	10.0	10.7	107	67-127	
trans-1,3-Dichloropropene	10.0	11.0	110	69-129	
1,1,2-Trichloroethane	10.0	10.9	109	69-129	
Tetrachloroethene	10.0	10.4	104	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.2	102	61-127	
Dibromochloromethane	10.0	9.75	98	66-130	
1,2-Dibromoethane	10.0	10.0	100	70-130	
Chlorobenzene	10.0	9.83	98	68-128	
Ethylbenzene	10.0	10.3	103	68-128	
m,p-Xylene	20.0	19.7	98	68-128	
Xylene, o-	10.0	9.83	98	67-127	
Styrene	10.0	9.99	100	68-128	
Bromoform	10.0	9.17	92	34-170	
Cumene	10.0	10.7	107	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	69-129	
n-Propylbenzene	10.0	10.2	102	67-127	
4-Ethyltoluene	10.0	10.5	105	69-129	
1,3,5-Trimethylbenzene	10.0	10.1	101	65-125	
2-Chlorotoluene	10.0	10.4	104	67-127	
tert-Butylbenzene	10.0	10.1	101	63-125	
1,2,4-Trimethylbenzene	10.0	10.1	101	65-125	
sec-Butylbenzene	10.0	10.2	102	66-126	
4-Isopropyltoluene	10.0	10.1	101	67-129	
1,3-Dichlorobenzene	10.0	9.77	98	67-127	
1,4-Dichlorobenzene	10.0	9.54	95	66-126	
Benzyl chloride	10.0	10.1	101	54-135	
n-Butylbenzene	10.0	10.4	104	67-127	
1,2-Dichlorobenzene	10.0	9.64	96	67-127	
1,2,4-Trichlorobenzene	10.0	8.19	82	59-126	
Hexachlorobutadiene	10.0	8.96	90	62-130	
Naphthalene	10.0	6.94	69	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26148-03.D

Lab ID: LCS 200-119211/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	8.84	88	58-129	
Dichlorodifluoromethane	10.0	9.23	92	68-128	
Freon 22	10.0	8.95	90	64-128	
1,2-Dichlorotetrafluoroethane	10.0	10.1	101	78-138	
Chloromethane	10.0	8.56	86	57-126	
n-Butane	10.0	8.91	89	56-130	
Vinyl chloride	10.0	8.90	89	62-125	
1,3-Butadiene	10.0	8.45	85	59-125	
Bromomethane	10.0	9.21	92	68-128	
Chloroethane	10.0	8.93	89	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.24	92	67-127	
Trichlorofluoromethane	10.0	9.32	93	67-127	
Ethanol	15.0	12.5	83	28-168	
Freon TF	10.0	9.31	93	68-128	
1,1-Dichloroethene	10.0	9.28	93	67-127	
Acetone	10.0	10.3	103	64-136	
Isopropyl alcohol	10.0	8.66	87	55-124	
Carbon disulfide	10.0	10.7	107	81-141	
3-Chloropropene	10.0	8.52	85	53-133	
Methylene Chloride	10.0	8.91	89	62-122	
tert-Butyl alcohol	10.0	9.10	91	64-124	
Methyl tert-butyl ether	10.0	9.39	94	67-127	
trans-1,2-Dichloroethene	10.0	9.88	99	72-132	
n-Hexane	10.0	9.91	99	71-131	
1,1-Dichloroethane	10.0	9.03	90	66-126	
Vinyl acetate	10.0	9.76	98	62-130	
Ethyl acetate	10.0	10.2	102	75-135	
Methyl Ethyl Ketone	10.0	9.50	95	62-122	
cis-1,2-Dichloroethene	10.0	9.24	92	67-127	
Chloroform	10.0	9.41	94	69-129	
Tetrahydrofuran	10.0	9.37	94	61-136	
1,1,1-Trichloroethane	10.0	9.46	95	70-130	
Cyclohexane	10.0	9.42	94	69-129	
Carbon tetrachloride	10.0	9.36	94	62-143	
2,2,4-Trimethylpentane	10.0	9.18	92	67-127	
Benzene	10.0	9.22	92	67-127	
1,2-Dichloroethane	10.0	9.42	94	67-132	
n-Heptane	10.0	9.00	90	62-130	
Trichloroethene	10.0	9.30	93	68-128	
Methyl methacrylate	10.0	9.47	95	70-130	
1,2-Dichloropropane	10.0	9.12	91	67-127	
1,4-Dioxane	10.0	9.19	92	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26148-03.D

Lab ID: LCS 200-119211/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.15	91	69-129	
cis-1,3-Dichloropropene	10.0	9.38	94	70-130	
methyl isobutyl ketone	10.0	9.00	90	62-130	
Toluene	10.0	8.81	88	67-127	
trans-1,3-Dichloropropene	10.0	9.30	93	69-129	
1,1,2-Trichloroethane	10.0	8.93	89	69-129	
Tetrachloroethene	10.0	8.74	87	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	8.57	86	61-127	
Dibromochloromethane	10.0	8.40	84	66-130	
1,2-Dibromoethane	10.0	9.01	90	70-130	
Chlorobenzene	10.0	8.79	88	68-128	
Ethylbenzene	10.0	8.83	88	68-128	
m,p-Xylene	20.0	17.7	89	68-128	
Xylene, o-	10.0	8.80	88	67-127	
Styrene	10.0	8.97	90	68-128	
Bromoform	10.0	7.67	77	34-170	
Cumene	10.0	8.77	88	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.06	91	69-129	
n-Propylbenzene	10.0	8.91	89	67-127	
4-Ethyltoluene	10.0	9.18	92	69-129	
1,3,5-Trimethylbenzene	10.0	9.03	90	65-125	
2-Chlorotoluene	10.0	8.87	89	67-127	
tert-Butylbenzene	10.0	8.90	89	63-125	
1,2,4-Trimethylbenzene	10.0	8.95	90	65-125	
sec-Butylbenzene	10.0	8.86	89	66-126	
4-Isopropyltoluene	10.0	8.91	89	67-129	
1,3-Dichlorobenzene	10.0	9.04	90	67-127	
1,4-Dichlorobenzene	10.0	9.15	92	66-126	
Benzyl chloride	10.0	8.22	82	54-135	
n-Butylbenzene	10.0	8.52	85	67-127	
1,2-Dichlorobenzene	10.0	9.04	90	67-127	
1,2,4-Trichlorobenzene	10.0	8.59	86	59-126	
Hexachlorobutadiene	10.0	8.59	86	62-130	
Naphthalene	10.0	7.30	73	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26165_04.D

Lab ID: LCS 200-119262/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	13.3	133	58-129	*
Dichlorodifluoromethane	10.0	11.6	117	68-128	
Freon 22	10.0	12.9	130	64-128	*
1,2-Dichlorotetrafluoroethane	10.0	12.2	122	78-138	
Chloromethane	10.0	11.9	119	57-126	
n-Butane	10.0	13.3	133	56-130	*
Vinyl chloride	10.0	10.8	108	62-125	
1,3-Butadiene	10.0	11.6	116	59-125	
Bromomethane	10.0	10.2	102	68-128	
Chloroethane	10.0	10.7	107	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.23	92	67-127	
Trichlorofluoromethane	10.0	10.9	109	67-127	
Ethanol	15.0	18.8	125	28-168	
Freon TF	10.0	9.99	100	68-128	
1,1-Dichloroethene	10.0	9.67	97	67-127	
Acetone	10.0	13.7	137	64-136	*
Isopropyl alcohol	10.0	11.3	113	55-124	
Carbon disulfide	10.0	12.1	121	81-141	
3-Chloropropene	10.0	12.8	128	53-133	
Methylene Chloride	10.0	12.3	123	62-122	*
tert-Butyl alcohol	10.0	11.1	111	64-124	
Methyl tert-butyl ether	10.0	11.0	110	67-127	
trans-1,2-Dichloroethene	10.0	12.2	122	72-132	
n-Hexane	10.0	12.5	125	71-131	
1,1-Dichloroethane	10.0	11.2	112	66-126	
Vinyl acetate	10.0	13.7	137	62-130	*
Ethyl acetate	10.0	11.2	112	75-135	
Methyl Ethyl Ketone	10.0	10.3	103	62-122	
cis-1,2-Dichloroethene	10.0	10.1	101	67-127	
Chloroform	10.0	11.2	112	69-129	
Tetrahydrofuran	10.0	13.2	132	61-136	
1,1,1-Trichloroethane	10.0	11.0	110	70-130	
Cyclohexane	10.0	10.6	106	69-129	
Carbon tetrachloride	10.0	10.9	109	62-143	
2,2,4-Trimethylpentane	10.0	11.6	116	67-127	
Benzene	10.0	10.4	105	67-127	
1,2-Dichloroethane	10.0	12.4	124	67-132	
n-Heptane	10.0	12.6	126	62-130	
Trichloroethene	10.0	10.3	103	68-128	
Methyl methacrylate	10.0	11.0	110	70-130	
1,2-Dichloropropane	10.0	11.1	111	67-127	
1,4-Dioxane	10.0	9.37	94	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 26165_04.D

Lab ID: LCS 200-119262/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.9	109	69-129	
cis-1,3-Dichloropropene	10.0	11.1	111	70-130	
methyl isobutyl ketone	10.0	12.7	127	62-130	
Toluene	10.0	10.7	107	67-127	
trans-1,3-Dichloropropene	10.0	11.0	110	69-129	
1,1,2-Trichloroethane	10.0	10.9	109	69-129	
Tetrachloroethene	10.0	10.4	104	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	10.2	102	61-127	
Dibromochloromethane	10.0	9.75	98	66-130	
1,2-Dibromoethane	10.0	10.0	100	70-130	
Chlorobenzene	10.0	9.83	98	68-128	
Ethylbenzene	10.0	10.3	103	68-128	
m,p-Xylene	20.0	19.7	98	68-128	
Xylene, o-	10.0	9.83	98	67-127	
Styrene	10.0	9.99	100	68-128	
Bromoform	10.0	9.17	92	34-170	
Cumene	10.0	10.7	107	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	69-129	
n-Propylbenzene	10.0	10.2	102	67-127	
4-Ethyltoluene	10.0	10.5	105	69-129	
1,3,5-Trimethylbenzene	10.0	10.1	101	65-125	
2-Chlorotoluene	10.0	10.4	104	67-127	
tert-Butylbenzene	10.0	10.1	101	63-125	
1,2,4-Trimethylbenzene	10.0	10.1	101	65-125	
sec-Butylbenzene	10.0	10.2	102	66-126	
4-Isopropyltoluene	10.0	10.1	101	67-129	
1,3-Dichlorobenzene	10.0	9.77	98	67-127	
1,4-Dichlorobenzene	10.0	9.54	95	66-126	
Benzyl chloride	10.0	10.1	101	54-135	
n-Butylbenzene	10.0	10.4	104	67-127	
1,2-Dichlorobenzene	10.0	9.64	96	67-127	
1,2,4-Trichlorobenzene	10.0	8.19	82	59-126	
Hexachlorobutadiene	10.0	8.96	90	62-130	
Naphthalene	10.0	6.94	69	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 25849-05.d Lab Sample ID: MB 200-118406/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 07/11/2017 13:17

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118406/4	25849-04.d	07/11/2017 12:24
5081	200-39198-1	25849-10.d	07/11/2017 17:58
4348	200-39198-2	25849-11.d	07/11/2017 19:11
5042	200-39198-3	25849-12.d	07/11/2017 20:21
4067	200-39198-4	25849-13.d	07/11/2017 21:32
4308	200-39198-5	25849-14.d	07/11/2017 22:42
4141	200-39198-6	25849-15.d	07/11/2017 23:51
3708	200-39198-7	25849-16.d	07/12/2017 01:02
2754	200-39198-8	25849-17.d	07/12/2017 02:12

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118406/5

Matrix: Air Lab File ID: 25849-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/11/2017 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118406/5

Matrix: Air | Lab File ID: 25849-05.d

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/11/2017 13:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118406 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118406/5

Matrix: Air Lab File ID: 25849-05.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/11/2017 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-05.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 11-Jul-2017 13:17:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025849-005
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:32:56

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.260					ND	
	2 Dichlorodifluoromethane	85		5.367					ND	
	3 Chlorodifluoromethane	51		5.452					ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.779					ND	
	5 Chloromethane	50		5.977					ND	
	6 Butane	43		6.244					ND	
	7 Vinyl chloride	62		6.298					ND	
	8 Butadiene	54		6.394					ND	
	10 Bromomethane	94		7.196					ND	
	11 Chloroethane	64		7.448					ND	
	12 2-Methylbutane	43		7.517					ND	
	13 Vinyl bromide	106		7.860					ND	
	14 Trichlorofluoromethane	101		7.951					ND	
	16 Pentane	43		8.084					ND	
	17 Ethanol	45		8.454					ND	
T	15 Methyl Acetate TIC	43		8.560					ND	
	18 Ethyl ether	59		8.566					ND	
	19 Acrolein	56		8.951					ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.956					ND	
	21 1,1-Dichloroethene	96		9.026					ND	
	22 Acetone	43	9.235	9.219	0.015	98	21503		0.4431	
	23 Carbon disulfide	76		9.422					ND	
	24 Isopropyl alcohol	45	9.438	9.422	0.016	99	12859		0.2324	
	25 3-Chloro-1-propene	41		9.721					ND	
	26 Acetonitrile	41		9.844					ND	
	27 Methylene Chloride	49	9.983	9.989	-0.006	93	2822		0.0720	
	28 2-Methyl-2-propanol	59		10.112					ND	
S	30 1,2-Dichloroethene, Total	61		10.200					ND	
	29 Methyl tert-butyl ether	73		10.326					ND	
	31 trans-1,2-Dichloroethene	61		10.385					ND	
	32 Acrylonitrile	53		10.519					ND	
	33 Hexane	57		10.716					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		11.193					ND	
35 Vinyl acetate	43		11.214					ND	
37 cis-1,2-Dichloroethene	96		12.204					ND	
38 2-Butanone (MEK)	72		12.220					ND	
39 Ethyl acetate	88		12.225					ND	
41 Tetrahydrofuran	42		12.626					ND	
* 40 Chlorobromomethane	128	12.626	12.632	-0.006	98	189480	10.0	10.0	
42 Chloroform	83		12.723					ND	
43 Cyclohexane	84		12.990					ND	
44 1,1,1-Trichloroethane	97		13.006					ND	
45 Carbon tetrachloride	117		13.231					ND	
46 Isooctane	57		13.584					ND	
47 Benzene	78	13.643	13.648	-0.005	89	2227		0.0189	
48 1,2-Dichloroethane	62		13.798					ND	
49 n-Heptane	43		13.900					ND	
* 50 1,4-Difluorobenzene	114	14.338	14.344	-0.006	96	992159	10.0	10.0	
52 n-Butanol	56		14.595					ND	
53 Trichloroethene	95		14.777					ND	
A 51 GRO	1	14.945	(7.507-22.383)		0	3151578		0	
T 36 Methyl cyclohexane TIC	55		15.012					ND	
54 1,2-Dichloropropane	63		15.269					ND	
55 Methyl methacrylate	69		15.344					ND	
56 1,4-Dioxane	88		15.435					ND	
57 Dibromomethane	174		15.499					ND	
58 Dichlorobromomethane	83		15.735					ND	
60 cis-1,3-Dichloropropene	75		16.558					ND	
A 59 TVOC as Toluene	92	16.681	(5.250-28.113)		0	3362102		36.8	
61 4-Methyl-2-pentanone (MIBK	43		16.788					ND	
64 n-Octane	43		17.099					ND	
65 Toluene	92		17.109					ND	
66 trans-1,3-Dichloropropene	75		17.628					ND	
67 1,1,2-Trichloroethane	83		17.987					ND	
68 Tetrachloroethene	166		18.110					ND	
69 2-Hexanone	43		18.372					ND	
71 Chlorodibromomethane	129		18.714					ND	
72 Ethylene Dibromide	107		18.992					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 74 Chlorobenzene-d5	117	19.832	19.832	0.000	89	857203	10.0	10.0	
75 Chlorobenzene	112		19.891					ND	
76 Ethylbenzene	91		20.020					ND	
77 n-Nonane	57		20.084					ND	
S 73 Xylenes, Total	106		20.100					ND	
78 m-Xylene & p-Xylene	106		20.250					ND	
79 o-Xylene	106		20.999					ND	
80 Styrene	104		21.041					ND	
81 Bromoform	173		21.421					ND	
82 Isopropylbenzene	105		21.587					ND	
84 1,1,2,2-Tetrachloroethane	83		22.176					ND	
85 N-Propylbenzene	91		22.245					ND	
86 1,2,3-Trichloropropane	75		22.277					ND	
87 n-Decane	57		22.373					ND	
88 4-Ethyltoluene	105		22.422					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		22.443					ND	
90 1,3,5-Trimethylbenzene	105		22.518					ND	
91 Alpha Methyl Styrene	118		22.866					ND	
92 tert-Butylbenzene	119		22.989					ND	
93 1,2,4-Trimethylbenzene	105		23.080					ND	
94 sec-Butylbenzene	105		23.304					ND	
95 4-Isopropyltoluene	119		23.502					ND	
96 1,3-Dichlorobenzene	146	23.566	23.556	0.010	89	1323		0.0135	M
97 1,4-Dichlorobenzene	146	23.695	23.695	0.000	89	1679		0.0182	
98 Benzyl chloride	91		23.904					ND	
99 Undecane	57		24.107					ND	
100 n-Butylbenzene	91		24.112					ND	
101 1,2-Dichlorobenzene	146	24.278	24.273	0.005	86	1623		0.0177	
102 Dodecane	57		25.829					ND	
103 1,2,4-Trichlorobenzene	180		27.017					ND	
104 Hexachlorobutadiene	225	27.210	27.215	-0.005	73	1079		0.0186	
105 Naphthalene	128		27.568					ND	
106 1,2,3-Trichlorobenzene	180		28.103					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

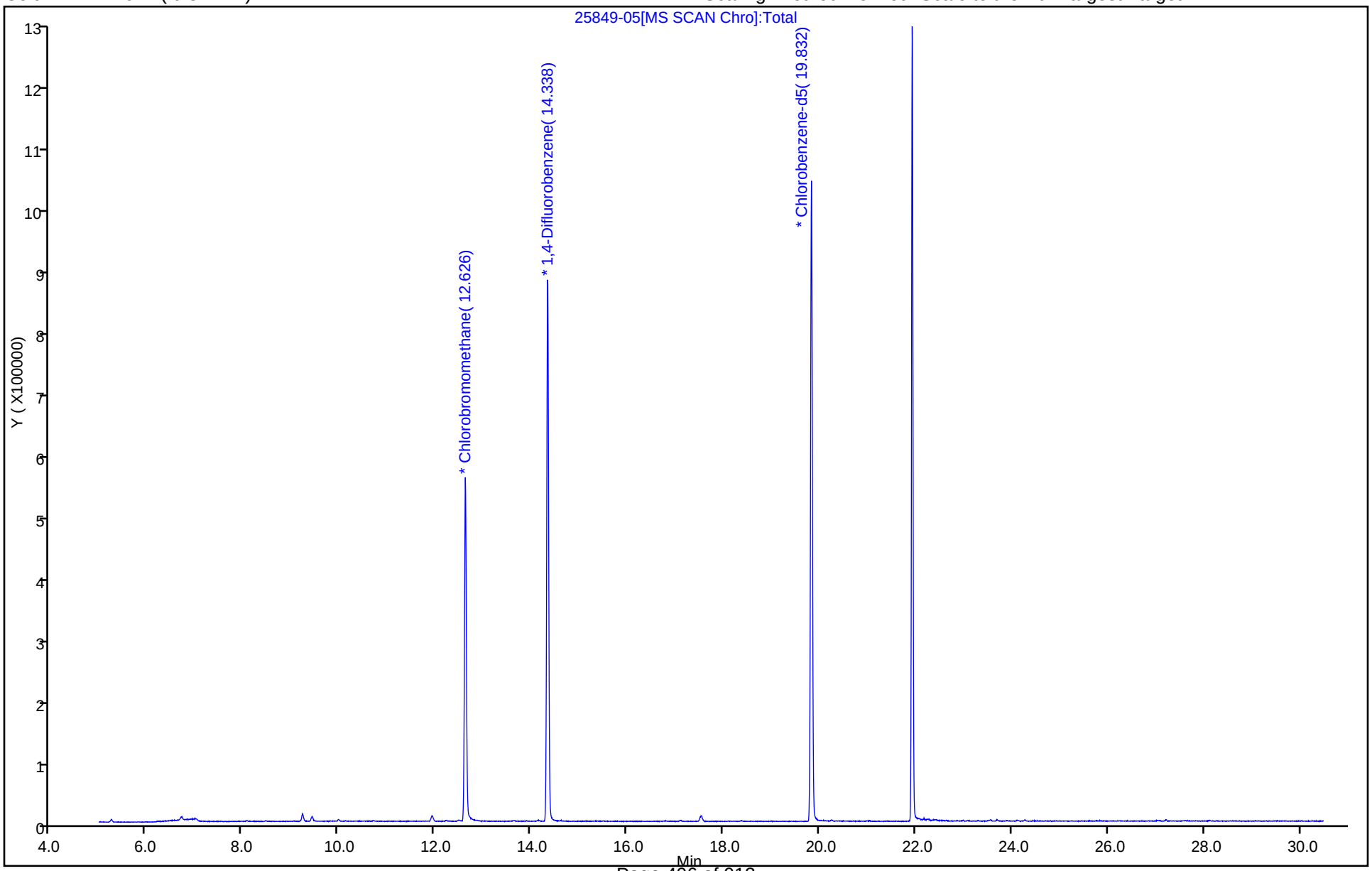
Report Date: 20-Jul-2017 14:32:57 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-05.d

Injection Date:	11-Jul-2017 13:17:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

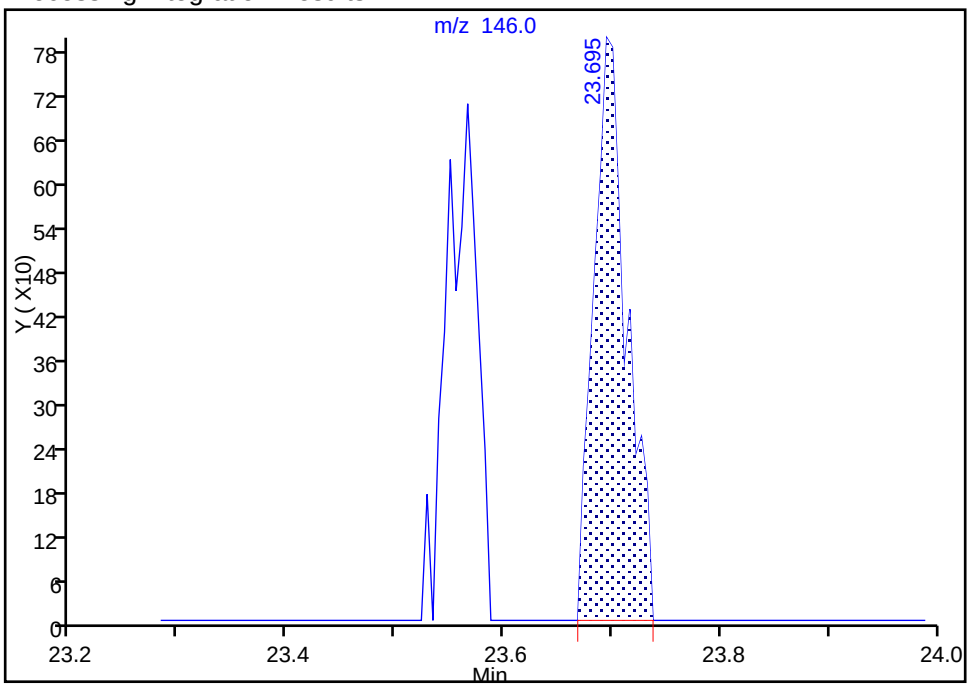
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-05.d
Injection Date: 11-Jul-2017 13:17:30 Instrument ID: CHW.i
Lims ID: mb
Client ID:
Operator ID: ert ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1) Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

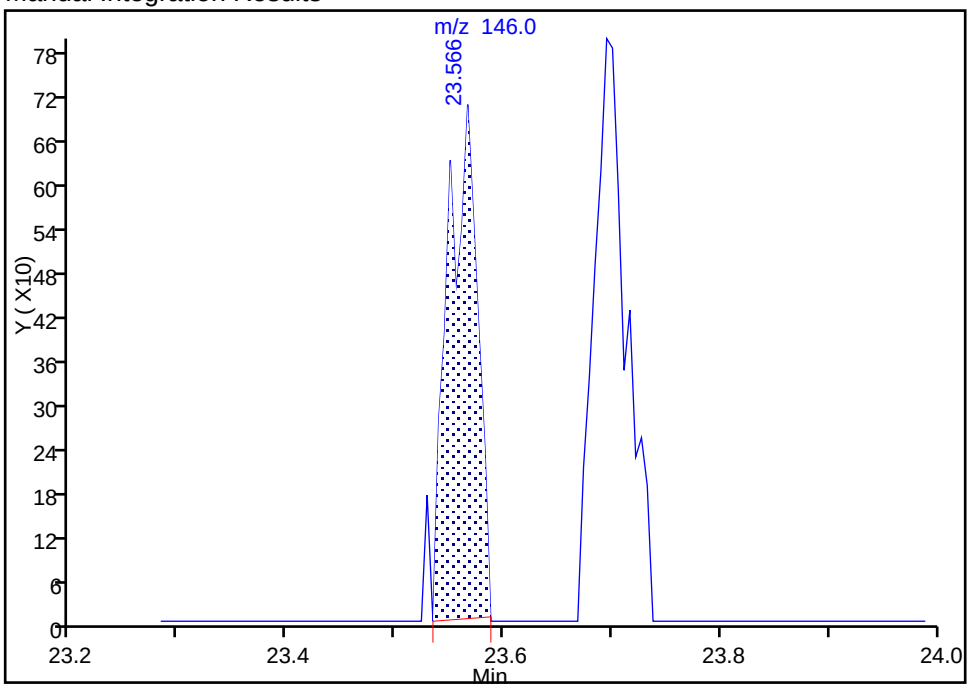
Processing Integration Results

RT: 23.69
Area: 1679
Amount: 0.017192
Amount Units: ppb v/v



Manual Integration Results

RT: 23.57
Area: 1323
Amount: 0.013547
Amount Units: ppb v/v



Reviewer: tobere, 11-Jul-2017 14:07:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

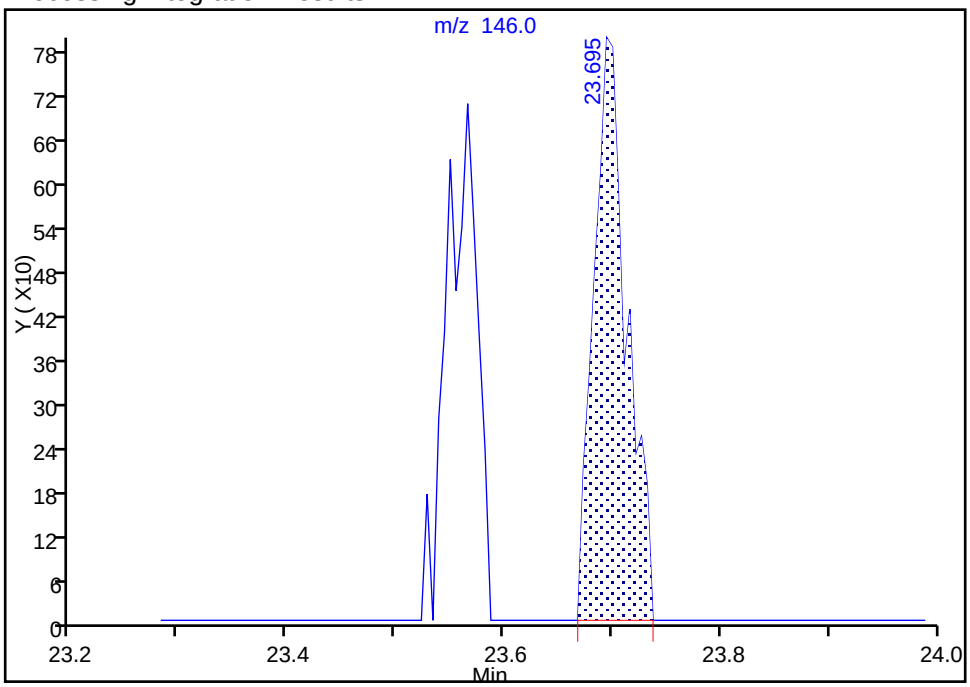
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-05.d				
Injection Date:	11-Jul-2017 13:17:30	Instrument ID:	CHW.i		
Lims ID:	mb				
Client ID:					
Operator ID:	ert	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

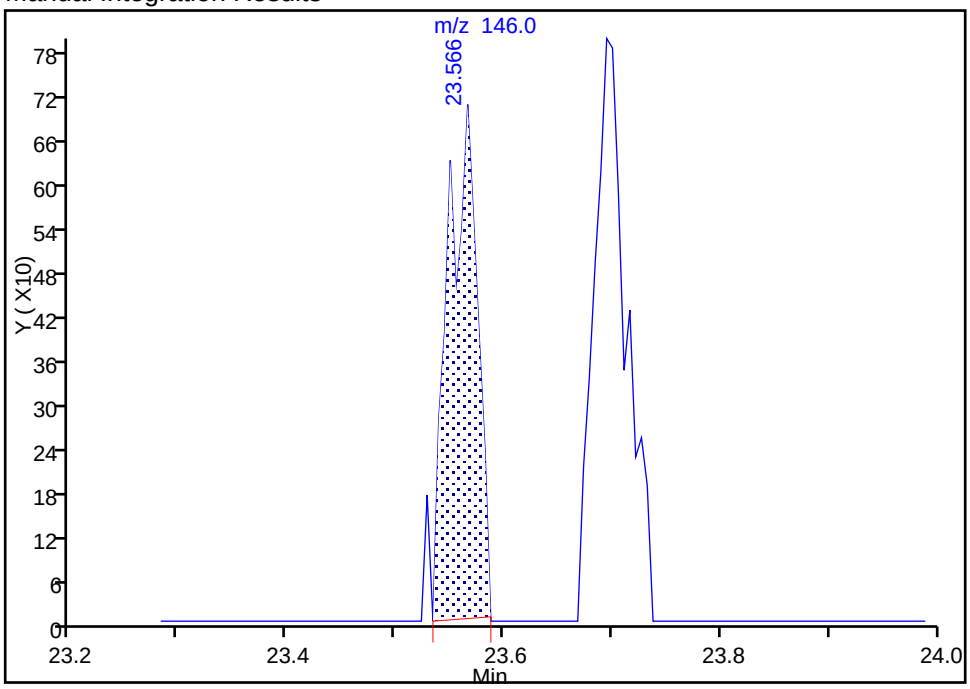
Processing Integration Results

RT: 23.69
Area: 1679
Amount: 0.017192
Amount Units: ppb v/v



Manual Integration Results

RT: 23.57
Area: 1323
Amount: 0.013547
Amount Units: ppb v/v



Reviewer: tobere, 11-Jul-2017 14:14:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 25955-04.d Lab Sample ID: MB 200-118667/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 07/18/2017 16:45

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118667/5	25955-05.d	07/18/2017 17:38
5038	200-39198-12	25955-18.d	07/19/2017 08:29

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118667/4

Matrix: Air Lab File ID: 25955-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 1000(mL) Date Analyzed: 07/18/2017 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118667/4

Matrix: Air Lab File ID: 25955-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 1000(mL) Date Analyzed: 07/18/2017 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118667/4

Matrix: Air Lab File ID: 25955-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 1000(mL) Date Analyzed: 07/18/2017 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-04.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jul-2017 16:45:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025955-04
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 19-Jul-2017 13:35:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		5.249					ND	
2 Dichlorodifluoromethane	85		5.367					ND	
3 Chlorodifluoromethane	51		5.447					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779					ND	
5 Chloromethane	50		5.971					ND	
6 Butane	43		6.244					ND	
7 Vinyl chloride	62		6.303					ND	
8 Butadiene	54		6.399					ND	
10 Bromomethane	94		7.196					ND	
11 Chloroethane	64		7.453					ND	
12 2-Methylbutane	43		7.523					ND	
13 Vinyl bromide	106		7.860					ND	
14 Trichlorofluoromethane	101		7.956					ND	
16 Pentane	43		8.084					ND	
17 Ethanol	45	8.480	8.459	0.021	7	1815		0.1490	
T 15 Methyl Acetate TIC	43		8.560					ND	
18 Ethyl ether	59		8.566					ND	
19 Acrolein	56		8.951					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962					ND	
21 1,1-Dichloroethene	96		9.026					ND	
22 Acetone	43	9.234	9.219	0.015	98	26203		0.6351	
23 Carbon disulfide	76		9.422					ND	
24 Isopropyl alcohol	45	9.438	9.427	0.011	99	12634		0.2685	
25 3-Chloro-1-propene	41		9.727					ND	
26 Acetonitrile	41		9.845					ND	
27 Methylene Chloride	49	9.989	9.989	0.000	94	2923		0.0877	
28 2-Methyl-2-propanol	59		10.112					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
29 Methyl tert-butyl ether	73		10.331					ND	
31 trans-1,2-Dichloroethene	61		10.390					ND	
32 Acrylonitrile	53		10.524					ND	
33 Hexane	57		10.717					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		11.193					ND	
35 Vinyl acetate	43		11.219					ND	
37 cis-1,2-Dichloroethene	96		12.204					ND	
38 2-Butanone (MEK)	72	12.225	12.220	0.005	99	752		0.0472	
39 Ethyl acetate	88		12.231					ND	
41 Tetrahydrofuran	42		12.632					ND	
* 40 Chlorobromomethane	128	12.631	12.637	-0.006	96	161096	10.0	10.0	
42 Chloroform	83		12.723					ND	
43 Cyclohexane	84		12.990					ND	
44 1,1,1-Trichloroethane	97		13.006					ND	
45 Carbon tetrachloride	117		13.236					ND	
46 Isooctane	57		13.584					ND	
47 Benzene	78		13.654					ND	
48 1,2-Dichloroethane	62		13.798					ND	
49 n-Heptane	43		13.900					ND	
* 50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	814846	10.0	10.0	
52 n-Butanol	56		14.595					ND	
53 Trichloroethene	95		14.777					ND	
A 51 GRO	1	14.948	(7.513-22.384)		0	2819547		0	
T 36 Methyl cyclohexane TIC	55		15.012					ND	
54 1,2-Dichloropropane	63		15.274					ND	
55 Methyl methacrylate	69		15.349					ND	
56 1,4-Dioxane	88		15.435					ND	
57 Dibromomethane	174		15.505					ND	
58 Dichlorobromomethane	83		15.729					ND	
60 cis-1,3-Dichloropropene	75		16.558					ND	
A 59 TVOC as Toluene	92	16.673	(5.239-28.108)		0	3023828		40.3	
61 4-Methyl-2-pentanone (MIBK	43		16.788					ND	
64 n-Octane	43		17.099					ND	
65 Toluene	92		17.109					ND	
66 trans-1,3-Dichloropropene	75		17.628					ND	
67 1,1,2-Trichloroethane	83		17.987					ND	
68 Tetrachloroethene	166		18.110					ND	
69 2-Hexanone	43		18.372					ND	
71 Chlorodibromomethane	129		18.714					ND	
72 Ethylene Dibromide	107		18.993					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 74 Chlorobenzene-d5	117	19.832	19.832	0.000	90	708783	10.0	10.0	
75 Chlorobenzene	112		19.891					ND	
76 Ethylbenzene	91		20.020					ND	
77 n-Nonane	57		20.084					ND	
S 73 Xylenes, Total	106		20.100					ND	
78 m-Xylene & p-Xylene	106		20.250					ND	
79 o-Xylene	106		20.999					ND	
80 Styrene	104		21.041					ND	
81 Bromoform	173		21.427					ND	
82 Isopropylbenzene	105		21.587					ND	
84 1,1,2,2-Tetrachloroethane	83		22.176					ND	
85 N-Propylbenzene	91		22.245					ND	
86 1,2,3-Trichloropropane	75		22.277					ND	
87 n-Decane	57		22.374					ND	
88 4-Ethyltoluene	105		22.422					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		22.443					ND	
90 1,3,5-Trimethylbenzene	105		22.518					ND	
91 Alpha Methyl Styrene	118		22.866					ND	
92 tert-Butylbenzene	119		22.989					ND	
93 1,2,4-Trimethylbenzene	105		23.074					ND	
94 sec-Butylbenzene	105		23.304					ND	
95 4-Isopropyltoluene	119		23.502					ND	
96 1,3-Dichlorobenzene	146	23.561	23.556	0.005	1	832		0.0103	
97 1,4-Dichlorobenzene	146	23.695	23.695	0.000	85	853		0.0112	
98 Benzyl chloride	91		23.904					ND	
99 Undecane	57		24.107					ND	
100 n-Butylbenzene	91		24.112					ND	
101 1,2-Dichlorobenzene	146		24.273					ND	
102 Dodecane	57		25.829					ND	
103 1,2,4-Trichlorobenzene	180		27.017					ND	
104 Hexachlorobutadiene	225		27.210					ND	
105 Naphthalene	128		27.568					ND	
106 1,2,3-Trichlorobenzene	180		28.098					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

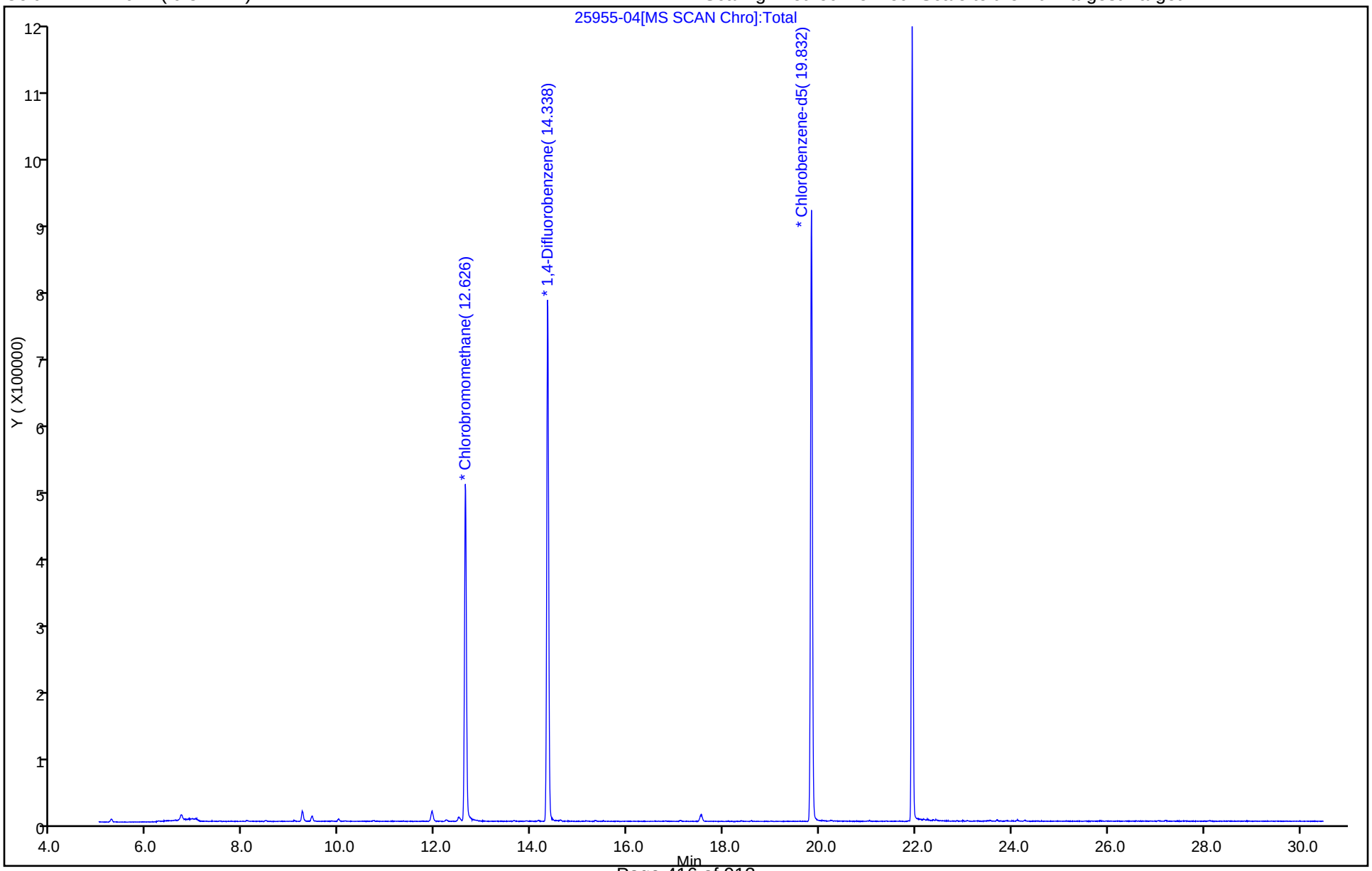
Report Date: 20-Jul-2017 13:29:57 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-04.d

Injection Date:	18-Jul-2017 16:45:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 200-26195-004.D Lab Sample ID: MB 200-119318/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 08/03/2017 12:40

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-119318/7	200-26195-007.D	08/03/2017 15:28
2535	200-39198-9	200-26195-008.D	08/03/2017 16:28
3790	200-39198-10	200-26195-009.D	08/03/2017 17:19
4437	200-39198-11	200-26195-010.D	08/03/2017 18:11

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119318/4

Matrix: Air | Lab File ID: 200-26195-004.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/03/2017 12:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119318 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119318/4

Matrix: Air | Lab File ID: 200-26195-004.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/03/2017 12:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119318 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119318/4

Matrix: Air Lab File ID: 200-26195-004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/03/2017 12:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Aug-2017 12:40:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026195-004
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:05:11 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:05:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139					ND	
2 Dichlorodifluoromethane	85		3.197					ND	
3 Chlorodifluoromethane	51		3.235					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411					ND	
5 Chloromethane	50		3.529					ND	
6 Butane	43		3.690					ND	
7 Vinyl chloride	62		3.727					ND	
8 Butadiene	54		3.786					ND	
10 Bromomethane	94		4.348					ND	
11 Chloroethane	64		4.535					ND	
12 2-Methylbutane	43		4.583					ND	
13 Vinyl bromide	106		4.850					ND	
14 Trichlorofluoromethane	101		4.925					ND	
16 Pentane	43		5.038					ND	
17 Ethanol	45		5.418					ND	
18 Ethyl ether	59		5.487					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813					ND	
19 Acrolein	56	5.824	5.835	-0.011	41	1179		0.2340	
21 1,1-Dichloroethene	96		5.878					ND	
22 Acetone	43	6.107	6.113	-0.006	99	25609		0.6323	
23 Carbon disulfide	76	6.220	6.220	-0.021	68	1994		0.0216	M
24 Isopropyl alcohol	45		6.348					ND	
25 3-Chloro-1-propene	41		6.562					ND	
26 Acetonitrile	41		6.718					ND	
27 Methylene Chloride	49	6.792	6.825	-0.033	93	3483		0.0949	
28 2-Methyl-2-propanol	59		7.044					ND	
29 Methyl tert-butyl ether	73		7.204					ND	
31 trans-1,2-Dichloroethene	61		7.215					ND	
32 Acrylonitrile	53		7.386					ND	
33 Hexane	57		7.541					ND	
34 1,1-Dichloroethane	63		8.028					ND	
35 Vinyl acetate	43		8.092					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		9.055					ND	
38 2-Butanone (MEK)	72	9.141	9.136	0.005	99	1018		0.0745	
39 Ethyl acetate	88		9.152					ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	87	339321	10.0	10.0	
41 Tetrahydrofuran	42		9.542					ND	
42 Chloroform	83	9.590	9.612	-0.022	96	17681		0.1609	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84	9.820	9.831	-0.027	52	1339		0.0255	M
44 1,1,1-Trichloroethane	97		9.885					ND	
45 Carbon tetrachloride	117		10.120					ND	
46 Isooctane	57		10.527					ND	
47 Benzene	78	10.558	10.585	-0.027	32	2575		0.0186	
48 1,2-Dichloroethane	62		10.773					ND	
49 n-Heptane	43		10.901					ND	
* 50 1,4-Difluorobenzene	114	11.382	11.404	-0.022	95	1923248	10.0	10.0	
52 n-Butanol	56		11.853					ND	
53 Trichloroethene	95		11.859					ND	
54 1,2-Dichloropropane	63		12.426					ND	
A 51 GRO	1	12.471	(4.573-20.369)		0	833472		0	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
55 Methyl methacrylate	69		12.597					ND	
57 Dibromomethane	174		12.672					ND	
56 1,4-Dioxane	88		12.677					ND	
58 Dichlorobromomethane	83		12.955					ND	
60 cis-1,3-Dichloropropene	75		13.875					ND	
61 4-Methyl-2-pentanone (MIBK	43		14.196					ND	
A 59 TVOC as Toluene	92	14.384	(3.129-25.639)		0	1230144		0	
A 63 Toluene Range	92	14.453	(14.413-14.493)		0	4647		NC	
65 Toluene	92		14.453					ND	
A 62 C8 Range	1	14.490	(14.452-14.529)		0	4013		NC	
64 n-Octane	43		14.491					ND	
66 trans-1,3-Dichloropropene	75		15.058					ND	
67 1,1,2-Trichloroethane	83		15.432					ND	
68 Tetrachloroethene	166		15.512					ND	
69 2-Hexanone	43		15.914					ND	
71 Chlorodibromomethane	129		16.187					ND	
72 Ethylene Dibromide	107		16.459					ND	
* 74 Chlorobenzene-d5	117	17.353	17.358	-0.006	88	1684089	10.0	10.0	
75 Chlorobenzene	112		17.417					ND	
76 Ethylbenzene	91		17.572					ND	
77 n-Nonane	57		17.695					ND	
78 m-Xylene & p-Xylene	106	17.823	17.829	-0.006	0	2876		0.0374	
79 o-Xylene	106		18.685					ND	
80 Styrene	104		18.744					ND	
81 Bromoform	173		19.188					ND	
82 Isopropylbenzene	105		19.412					ND	
S 73 Xylenes, Total	106				0			0.0374	
* 83 4-Bromofluorobenzene	95	19.792	19.798	-0.006	85	1106865	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.108					ND	
85 N-Propylbenzene	91		20.167					ND	
86 1,2,3-Trichloropropane	75		20.209					ND	
87 n-Decane	57		20.359					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		20.370					ND	
88 4-Ethyltoluene	105		20.370					ND	
90 1,3,5-Trimethylbenzene	105		20.482					ND	
91 Alpha Methyl Styrene	118		20.862					ND	
92 tert-Butylbenzene	119		20.985					ND	
93 1,2,4-Trimethylbenzene	105	21.087	21.087	0.000	88	1817		0.0106	
94 sec-Butylbenzene	105		21.322					ND	
95 4-Isopropyltoluene	119		21.531					ND	
96 1,3-Dichlorobenzene	146	21.547	21.552	-0.005	90	2151		0.0182	
97 1,4-Dichlorobenzene	146	21.691	21.691	0.000	54	2468		0.0214	
98 Benzyl chloride	91	21.900	21.900	0.000	90	2021		0.0138	
100 n-Butylbenzene	91		22.109					ND	
99 Undecane	57		22.141					ND	
101 1,2-Dichlorobenzene	146	22.221	22.226	-0.005	83	1897		0.0172	
102 Dodecane	57		23.708					ND	
103 1,2,4-Trichlorobenzene	180	24.698	24.687	0.011	80	2806		0.0432	
104 Hexachlorobutadiene	225		24.869					ND	
105 Naphthalene	128	25.168	25.169	-0.001	95	5145		0.0368	
106 1,2,3-Trichlorobenzene	180		25.629					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

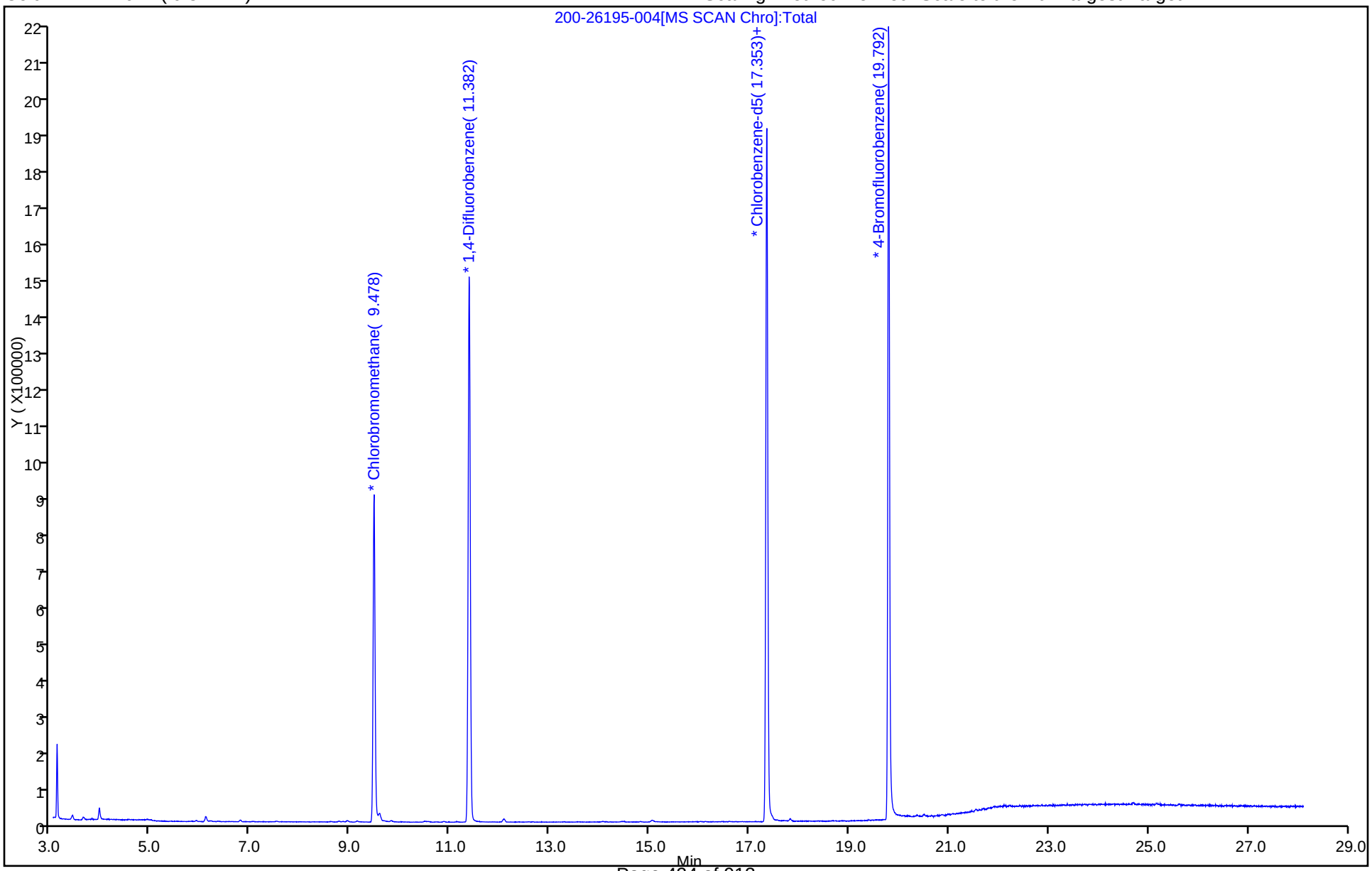
Report Date: 04-Aug-2017 14:05:12 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D

Injection Date:	03-Aug-2017 12:40:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

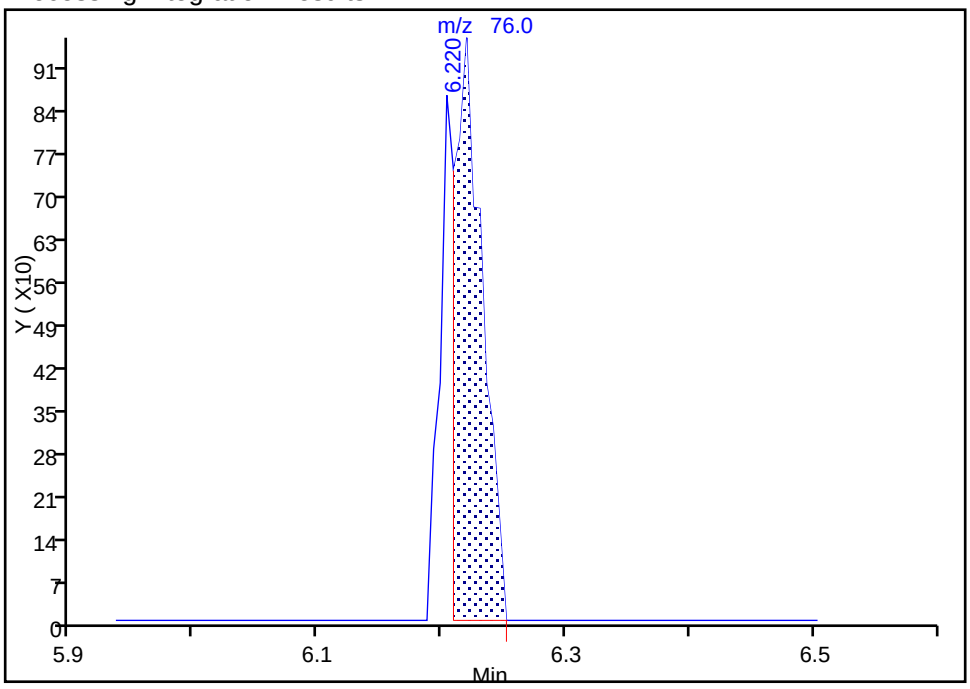
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Injection Date: 03-Aug-2017 12:40:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

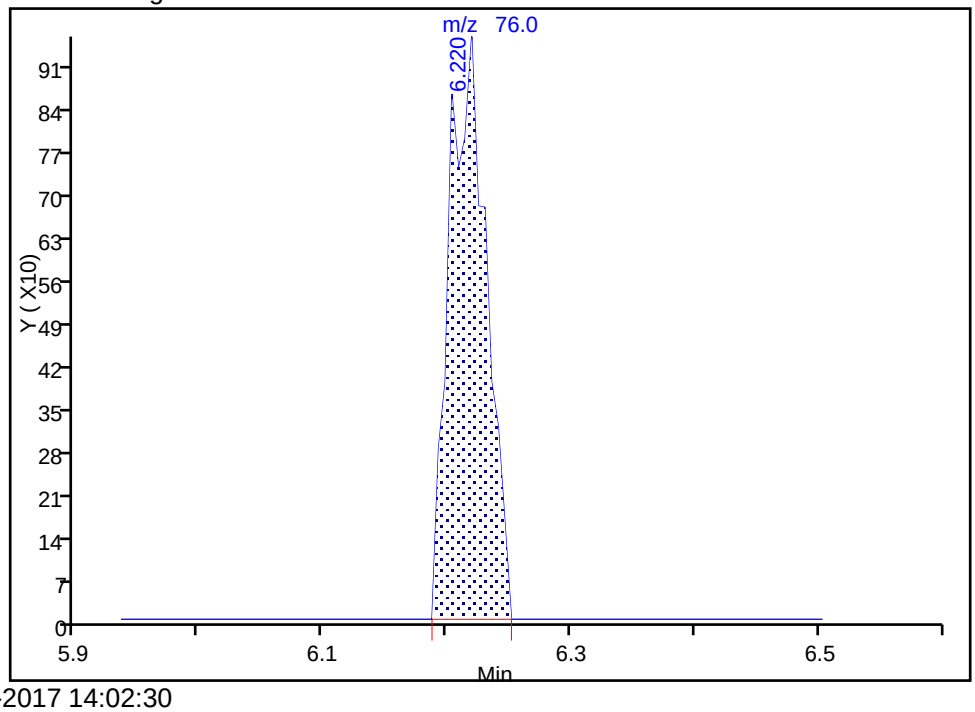
Processing Integration Results

RT: 6.22
Area: 1504
Amount: 0.016314
Amount Units: ppb v/v



Manual Integration Results

RT: 6.22
Area: 1994
Amount: 0.021629
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:02:30
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

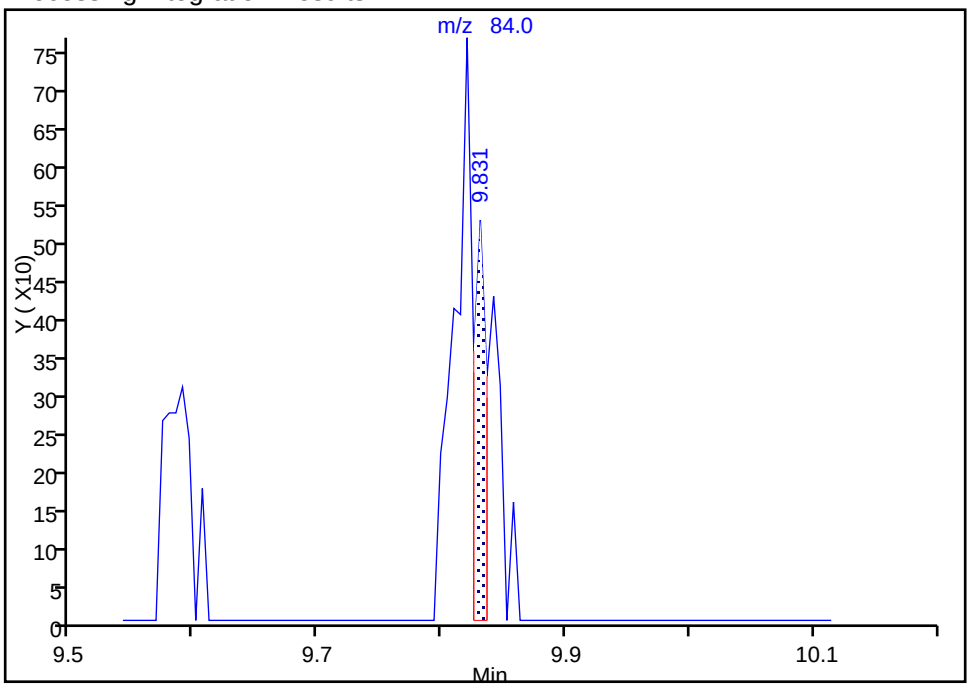
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Injection Date: 03-Aug-2017 12:40:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 1

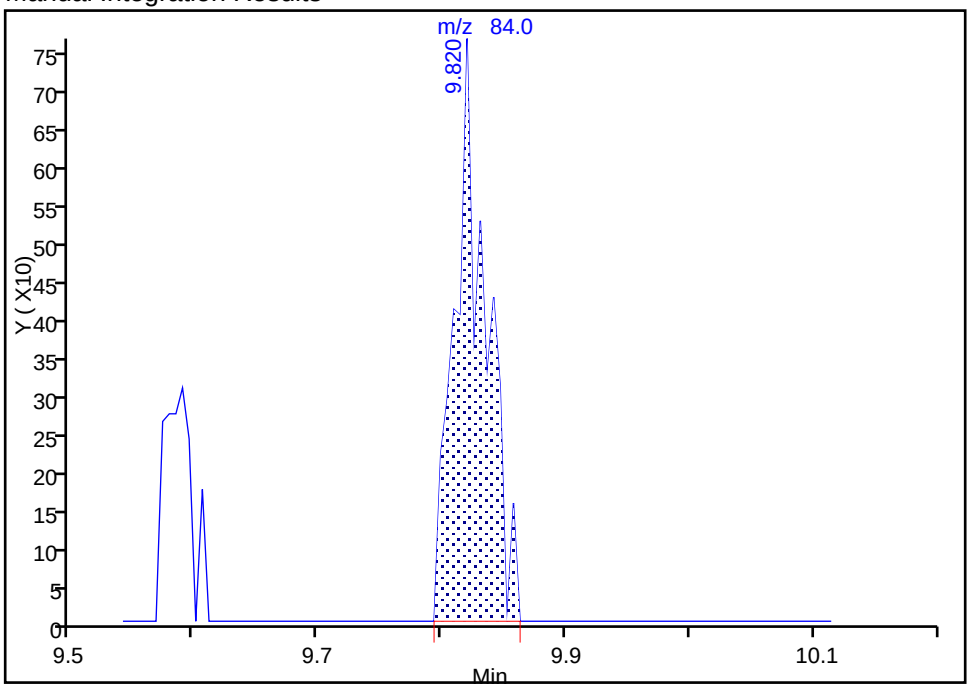
Processing Integration Results

RT: 9.83
Area: 385
Amount: 0.007333
Amount Units: ppb v/v



Manual Integration Results

RT: 9.82
Area: 1339
Amount: 0.025504
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:03:05
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

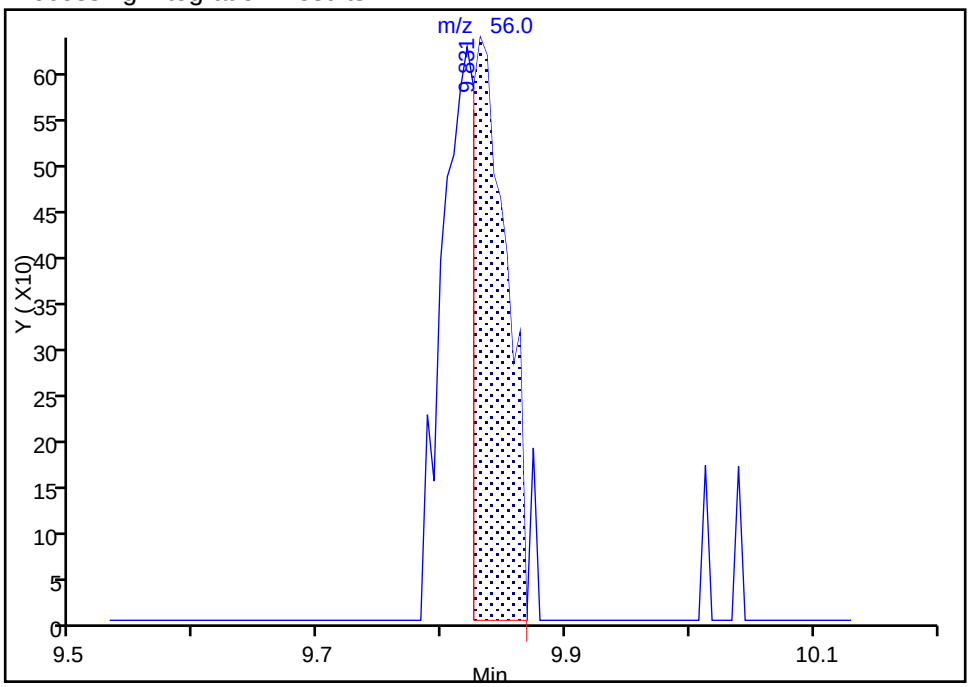
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Injection Date: 03-Aug-2017 12:40:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 2

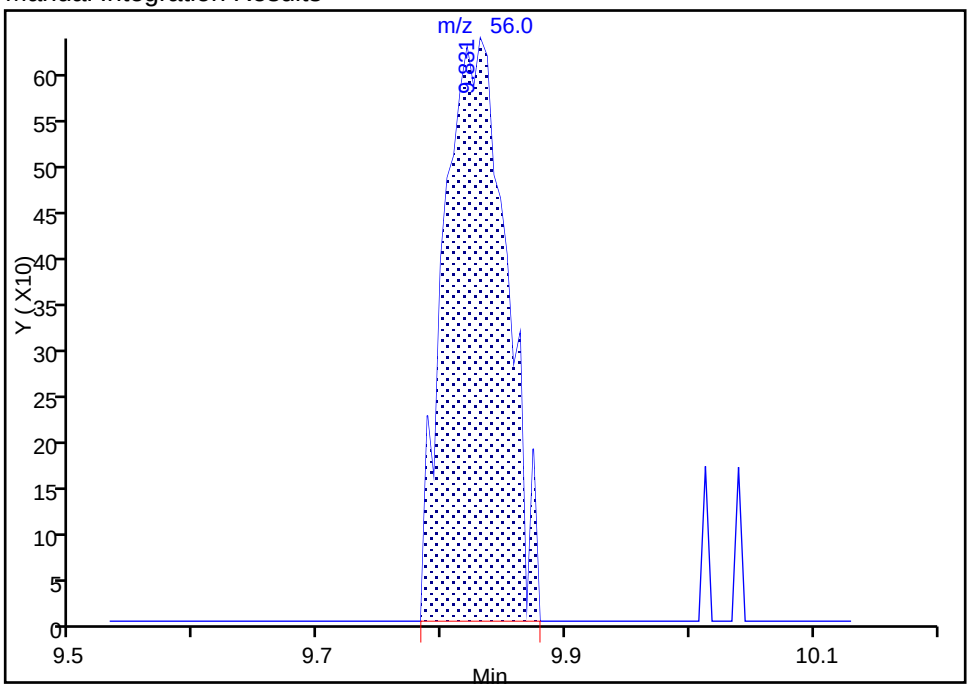
Processing Integration Results

RT: 9.83
Area: 1204
Amount: 0.007333
Amount Units: ppb v/v



Manual Integration Results

RT: 9.83
Area: 2211
Amount: 0.025504
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:03:15
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab File ID: 25955-04.d Lab Sample ID: MB 200-118667/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 07/18/2017 16:45

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118667/5	25955-05.d	07/18/2017 17:38
4376	200-39232-1	25955-19.d	07/19/2017 09:39
5114	200-39232-2	25955-20.d	07/19/2017 10:49
4439	200-39232-3	25955-21.d	07/19/2017 11:59
2538	200-39232-4	25955-22.d	07/19/2017 13:09

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118667/4

Matrix: Air Lab File ID: 25955-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 1000(mL) Date Analyzed: 07/18/2017 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118667/4

Matrix: Air | Lab File ID: 25955-04.d

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 1000(mL) | Date Analyzed: 07/18/2017 16:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118667 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118667/4

Matrix: Air Lab File ID: 25955-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 1000(mL) Date Analyzed: 07/18/2017 16:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-04.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jul-2017 16:45:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025955-04
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 19-Jul-2017 13:35:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		5.249					ND	
2 Dichlorodifluoromethane	85		5.367					ND	
3 Chlorodifluoromethane	51		5.447					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779					ND	
5 Chloromethane	50		5.971					ND	
6 Butane	43		6.244					ND	
7 Vinyl chloride	62		6.303					ND	
8 Butadiene	54		6.399					ND	
10 Bromomethane	94		7.196					ND	
11 Chloroethane	64		7.453					ND	
12 2-Methylbutane	43		7.523					ND	
13 Vinyl bromide	106		7.860					ND	
14 Trichlorofluoromethane	101		7.956					ND	
16 Pentane	43		8.084					ND	
17 Ethanol	45	8.480	8.459	0.021	7	1815		0.1490	
T 15 Methyl Acetate TIC	43		8.560					ND	
18 Ethyl ether	59		8.566					ND	
19 Acrolein	56		8.951					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962					ND	
21 1,1-Dichloroethene	96		9.026					ND	
22 Acetone	43	9.234	9.219	0.015	98	26203		0.6351	
23 Carbon disulfide	76		9.422					ND	
24 Isopropyl alcohol	45	9.438	9.427	0.011	99	12634		0.2685	
25 3-Chloro-1-propene	41		9.727					ND	
26 Acetonitrile	41		9.845					ND	
27 Methylene Chloride	49	9.989	9.989	0.000	94	2923		0.0877	
28 2-Methyl-2-propanol	59		10.112					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
29 Methyl tert-butyl ether	73		10.331					ND	
31 trans-1,2-Dichloroethene	61		10.390					ND	
32 Acrylonitrile	53		10.524					ND	
33 Hexane	57		10.717					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63		11.193					ND	
35 Vinyl acetate	43		11.219					ND	
37 cis-1,2-Dichloroethene	96		12.204					ND	
38 2-Butanone (MEK)	72	12.225	12.220	0.005	99	752		0.0472	
39 Ethyl acetate	88		12.231					ND	
41 Tetrahydrofuran	42		12.632					ND	
* 40 Chlorobromomethane	128	12.631	12.637	-0.006	96	161096	10.0	10.0	
42 Chloroform	83		12.723					ND	
43 Cyclohexane	84		12.990					ND	
44 1,1,1-Trichloroethane	97		13.006					ND	
45 Carbon tetrachloride	117		13.236					ND	
46 Isooctane	57		13.584					ND	
47 Benzene	78		13.654					ND	
48 1,2-Dichloroethane	62		13.798					ND	
49 n-Heptane	43		13.900					ND	
* 50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	814846	10.0	10.0	
52 n-Butanol	56		14.595					ND	
53 Trichloroethene	95		14.777					ND	
A 51 GRO	1	14.948	(7.513-22.384)		0	2819547		0	
T 36 Methyl cyclohexane TIC	55		15.012					ND	
54 1,2-Dichloropropane	63		15.274					ND	
55 Methyl methacrylate	69		15.349					ND	
56 1,4-Dioxane	88		15.435					ND	
57 Dibromomethane	174		15.505					ND	
58 Dichlorobromomethane	83		15.729					ND	
60 cis-1,3-Dichloropropene	75		16.558					ND	
A 59 TVOC as Toluene	92	16.673	(5.239-28.108)		0	3023828		40.3	
61 4-Methyl-2-pentanone (MIBK	43		16.788					ND	
64 n-Octane	43		17.099					ND	
65 Toluene	92		17.109					ND	
66 trans-1,3-Dichloropropene	75		17.628					ND	
67 1,1,2-Trichloroethane	83		17.987					ND	
68 Tetrachloroethene	166		18.110					ND	
69 2-Hexanone	43		18.372					ND	
71 Chlorodibromomethane	129		18.714					ND	
72 Ethylene Dibromide	107		18.993					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 74 Chlorobenzene-d5	117	19.832	19.832	0.000	90	708783	10.0	10.0	
75 Chlorobenzene	112		19.891					ND	
76 Ethylbenzene	91		20.020					ND	
77 n-Nonane	57		20.084					ND	
S 73 Xylenes, Total	106		20.100					ND	
78 m-Xylene & p-Xylene	106		20.250					ND	
79 o-Xylene	106		20.999					ND	
80 Styrene	104		21.041					ND	
81 Bromoform	173		21.427					ND	
82 Isopropylbenzene	105		21.587					ND	
84 1,1,2,2-Tetrachloroethane	83		22.176					ND	
85 N-Propylbenzene	91		22.245					ND	
86 1,2,3-Trichloropropane	75		22.277					ND	
87 n-Decane	57		22.374					ND	
88 4-Ethyltoluene	105		22.422					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		22.443					ND	
90 1,3,5-Trimethylbenzene	105		22.518					ND	
91 Alpha Methyl Styrene	118		22.866					ND	
92 tert-Butylbenzene	119		22.989					ND	
93 1,2,4-Trimethylbenzene	105		23.074					ND	
94 sec-Butylbenzene	105		23.304					ND	
95 4-Isopropyltoluene	119		23.502					ND	
96 1,3-Dichlorobenzene	146	23.561	23.556	0.005	1	832		0.0103	
97 1,4-Dichlorobenzene	146	23.695	23.695	0.000	85	853		0.0112	
98 Benzyl chloride	91		23.904					ND	
99 Undecane	57		24.107					ND	
100 n-Butylbenzene	91		24.112					ND	
101 1,2-Dichlorobenzene	146		24.273					ND	
102 Dodecane	57		25.829					ND	
103 1,2,4-Trichlorobenzene	180		27.017					ND	
104 Hexachlorobutadiene	225		27.210					ND	
105 Naphthalene	128		27.568					ND	
106 1,2,3-Trichlorobenzene	180		28.098					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

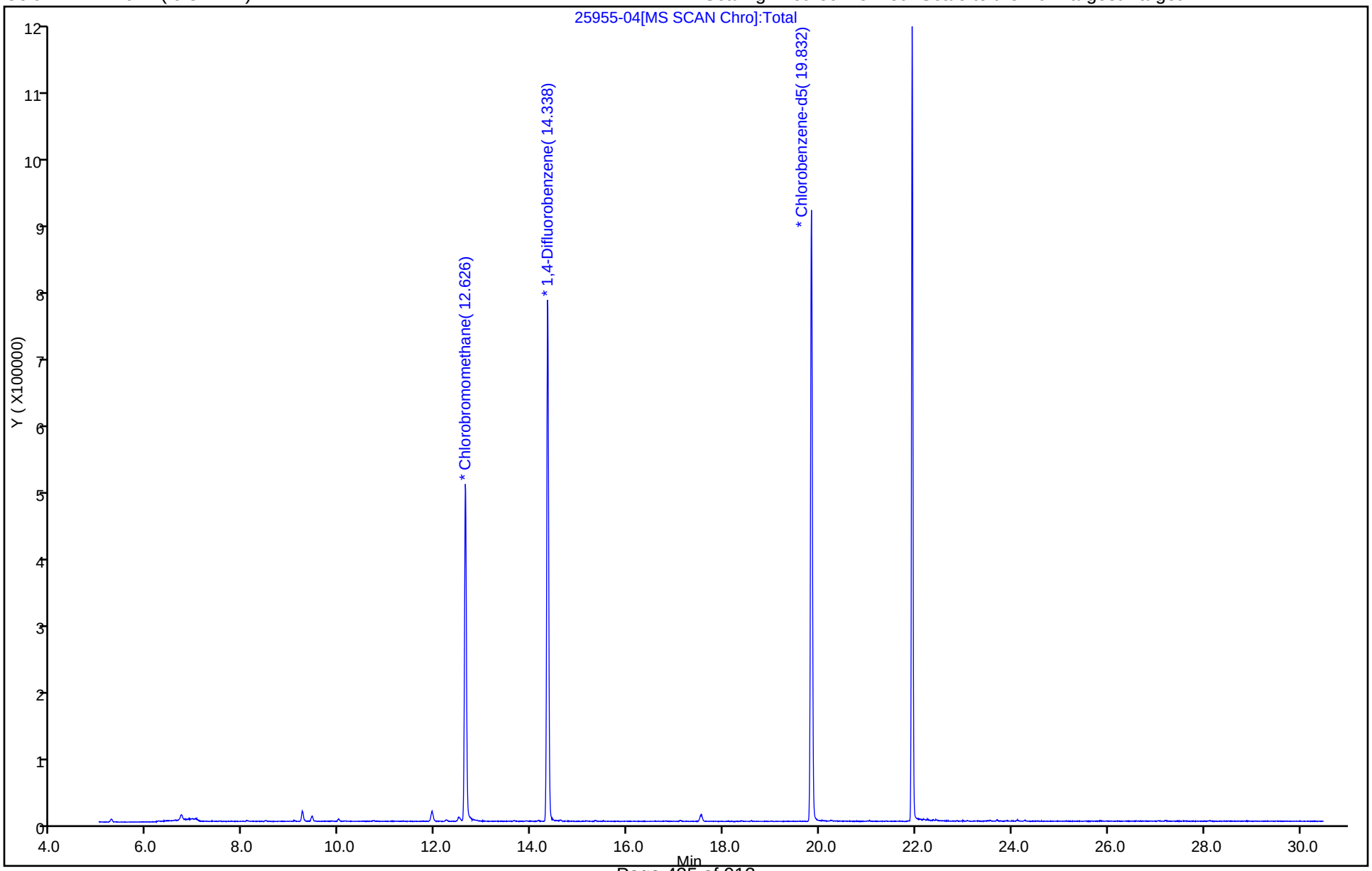
Report Date: 20-Jul-2017 13:29:57 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-04.d

Injection Date:	18-Jul-2017 16:45:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab File ID: 200-26195-004.D Lab Sample ID: MB 200-119318/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 08/03/2017 12:40

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-119318/7	200-26195-007.D	08/03/2017 15:28
3346	200-39232-5	200-26195-012.D	08/03/2017 19:52
3419	200-39232-7	200-26195-014.D	08/03/2017 21:34
4925	200-39232-9	200-26195-016.D	08/03/2017 23:17
3259	200-39232-10	200-26195-017.D	08/04/2017 00:08
2515	200-39232-11	200-26195-018.D	08/04/2017 01:00
4344	200-39232-12	200-26195-019.D	08/04/2017 01:51

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119318/4

Matrix: Air | Lab File ID: 200-26195-004.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/03/2017 12:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119318 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119318/4

Matrix: Air | Lab File ID: 200-26195-004.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/03/2017 12:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119318 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119318/4

Matrix: Air Lab File ID: 200-26195-004.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/03/2017 12:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Aug-2017 12:40:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026195-004
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:05:11 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:05:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139					ND	
2 Dichlorodifluoromethane	85		3.197					ND	
3 Chlorodifluoromethane	51		3.235					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411					ND	
5 Chloromethane	50		3.529					ND	
6 Butane	43		3.690					ND	
7 Vinyl chloride	62		3.727					ND	
8 Butadiene	54		3.786					ND	
10 Bromomethane	94		4.348					ND	
11 Chloroethane	64		4.535					ND	
12 2-Methylbutane	43		4.583					ND	
13 Vinyl bromide	106		4.850					ND	
14 Trichlorofluoromethane	101		4.925					ND	
16 Pentane	43		5.038					ND	
17 Ethanol	45		5.418					ND	
18 Ethyl ether	59		5.487					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813					ND	
19 Acrolein	56	5.824	5.835	-0.011	41	1179		0.2340	
21 1,1-Dichloroethene	96		5.878					ND	
22 Acetone	43	6.107	6.113	-0.006	99	25609		0.6323	
23 Carbon disulfide	76	6.220	6.220	-0.021	68	1994		0.0216	M
24 Isopropyl alcohol	45		6.348					ND	
25 3-Chloro-1-propene	41		6.562					ND	
26 Acetonitrile	41		6.718					ND	
27 Methylene Chloride	49	6.792	6.825	-0.033	93	3483		0.0949	
28 2-Methyl-2-propanol	59		7.044					ND	
29 Methyl tert-butyl ether	73		7.204					ND	
31 trans-1,2-Dichloroethene	61		7.215					ND	
32 Acrylonitrile	53		7.386					ND	
33 Hexane	57		7.541					ND	
34 1,1-Dichloroethane	63		8.028					ND	
35 Vinyl acetate	43		8.092					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		9.055					ND	
38 2-Butanone (MEK)	72	9.141	9.136	0.005	99	1018		0.0745	
39 Ethyl acetate	88		9.152					ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	87	339321	10.0	10.0	
41 Tetrahydrofuran	42		9.542					ND	
42 Chloroform	83	9.590	9.612	-0.022	96	17681		0.1609	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84	9.820	9.831	-0.027	52	1339		0.0255	M
44 1,1,1-Trichloroethane	97		9.885					ND	
45 Carbon tetrachloride	117		10.120					ND	
46 Isooctane	57		10.527					ND	
47 Benzene	78	10.558	10.585	-0.027	32	2575		0.0186	
48 1,2-Dichloroethane	62		10.773					ND	
49 n-Heptane	43		10.901					ND	
* 50 1,4-Difluorobenzene	114	11.382	11.404	-0.022	95	1923248	10.0	10.0	
52 n-Butanol	56		11.853					ND	
53 Trichloroethene	95		11.859					ND	
54 1,2-Dichloropropane	63		12.426					ND	
A 51 GRO	1	12.471	(4.573-20.369)		0	833472		0	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
55 Methyl methacrylate	69		12.597					ND	
57 Dibromomethane	174		12.672					ND	
56 1,4-Dioxane	88		12.677					ND	
58 Dichlorobromomethane	83		12.955					ND	
60 cis-1,3-Dichloropropene	75		13.875					ND	
61 4-Methyl-2-pentanone (MIBK	43		14.196					ND	
A 59 TVOC as Toluene	92	14.384	(3.129-25.639)		0	1230144		0	
A 63 Toluene Range	92	14.453	(14.413-14.493)		0	4647		NC	
65 Toluene	92		14.453					ND	
A 62 C8 Range	1	14.490	(14.452-14.529)		0	4013		NC	
64 n-Octane	43		14.491					ND	
66 trans-1,3-Dichloropropene	75		15.058					ND	
67 1,1,2-Trichloroethane	83		15.432					ND	
68 Tetrachloroethene	166		15.512					ND	
69 2-Hexanone	43		15.914					ND	
71 Chlorodibromomethane	129		16.187					ND	
72 Ethylene Dibromide	107		16.459					ND	
* 74 Chlorobenzene-d5	117	17.353	17.358	-0.006	88	1684089	10.0	10.0	
75 Chlorobenzene	112		17.417					ND	
76 Ethylbenzene	91		17.572					ND	
77 n-Nonane	57		17.695					ND	
78 m-Xylene & p-Xylene	106	17.823	17.829	-0.006	0	2876		0.0374	
79 o-Xylene	106		18.685					ND	
80 Styrene	104		18.744					ND	
81 Bromoform	173		19.188					ND	
82 Isopropylbenzene	105		19.412					ND	
S 73 Xylenes, Total	106				0			0.0374	
* 83 4-Bromofluorobenzene	95	19.792	19.798	-0.006	85	1106865	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.108					ND	
85 N-Propylbenzene	91		20.167					ND	
86 1,2,3-Trichloropropane	75		20.209					ND	
87 n-Decane	57		20.359					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 2-Chlorotoluene	91		20.370					ND	
88 4-Ethyltoluene	105		20.370					ND	
90 1,3,5-Trimethylbenzene	105		20.482					ND	
91 Alpha Methyl Styrene	118		20.862					ND	
92 tert-Butylbenzene	119		20.985					ND	
93 1,2,4-Trimethylbenzene	105	21.087	21.087	0.000	88	1817		0.0106	
94 sec-Butylbenzene	105		21.322					ND	
95 4-Isopropyltoluene	119		21.531					ND	
96 1,3-Dichlorobenzene	146	21.547	21.552	-0.005	90	2151		0.0182	
97 1,4-Dichlorobenzene	146	21.691	21.691	0.000	54	2468		0.0214	
98 Benzyl chloride	91	21.900	21.900	0.000	90	2021		0.0138	
100 n-Butylbenzene	91		22.109					ND	
99 Undecane	57		22.141					ND	
101 1,2-Dichlorobenzene	146	22.221	22.226	-0.005	83	1897		0.0172	
102 Dodecane	57		23.708					ND	
103 1,2,4-Trichlorobenzene	180	24.698	24.687	0.011	80	2806		0.0432	
104 Hexachlorobutadiene	225		24.869					ND	
105 Naphthalene	128	25.168	25.169	-0.001	95	5145		0.0368	
106 1,2,3-Trichlorobenzene	180		25.629					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

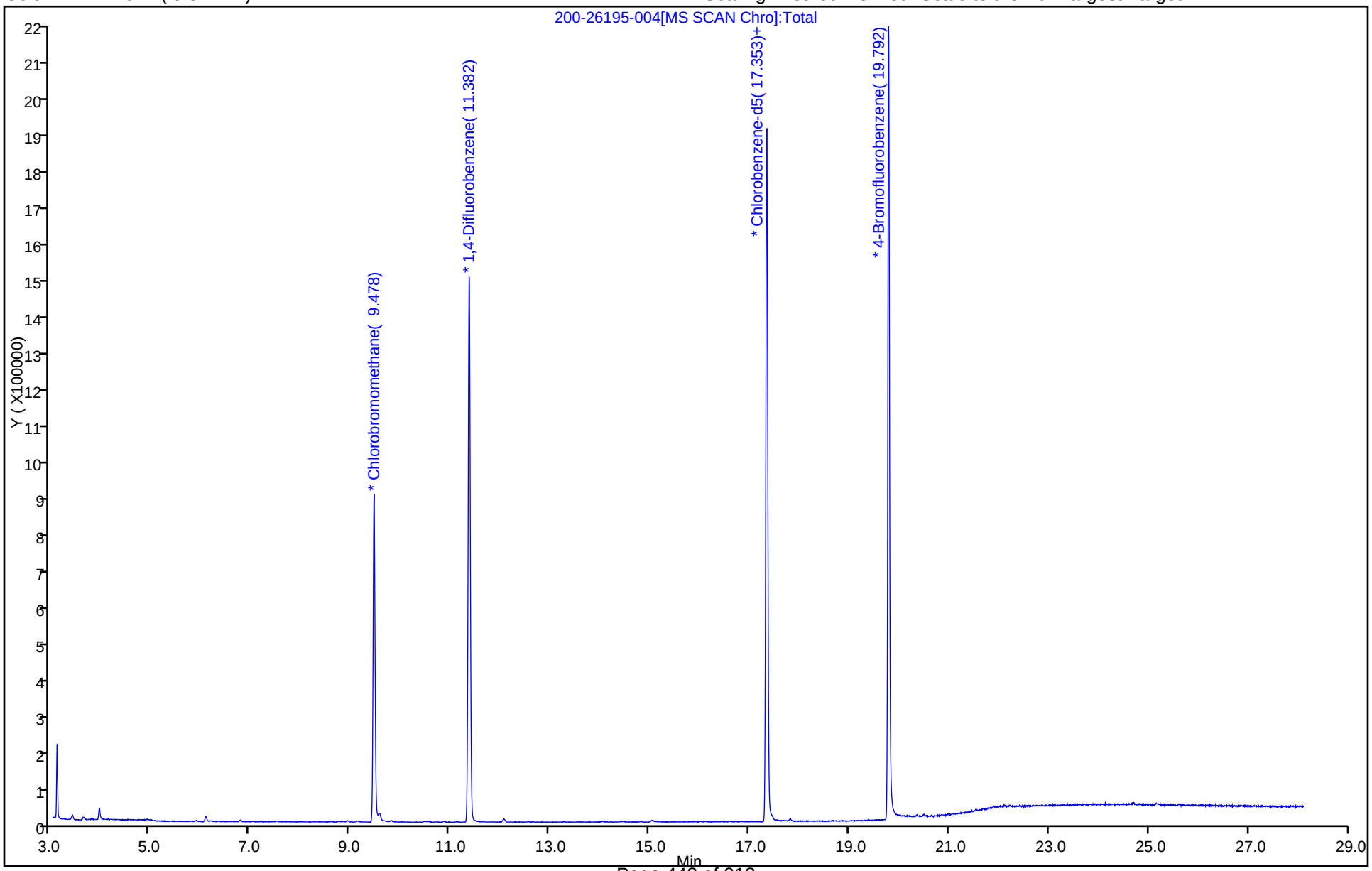
Report Date: 04-Aug-2017 14:05:12 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D

Injection Date:	03-Aug-2017 12:40:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

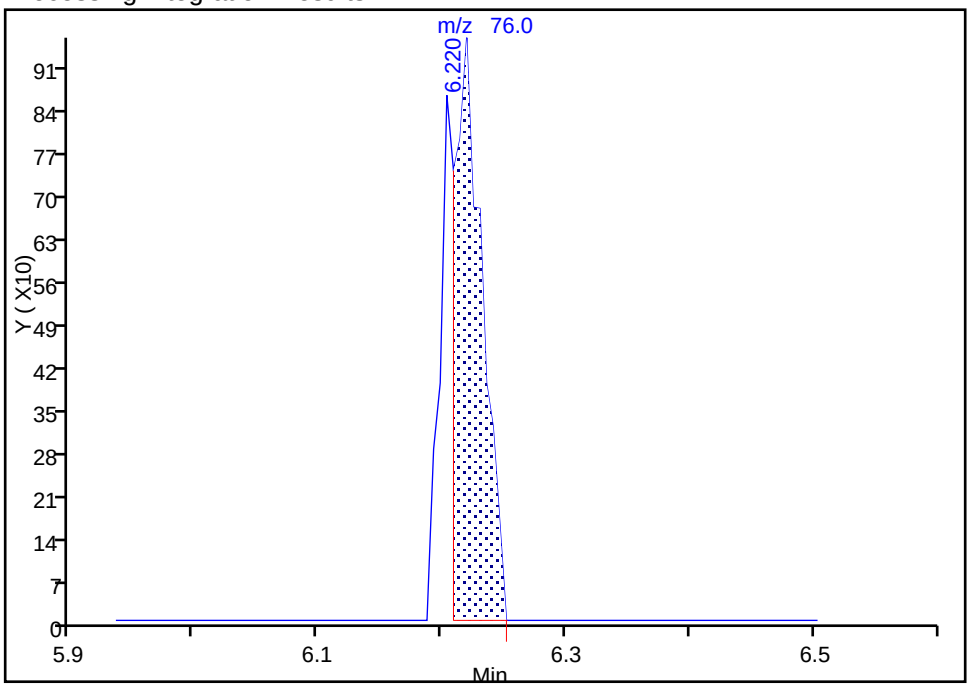
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Injection Date: 03-Aug-2017 12:40:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

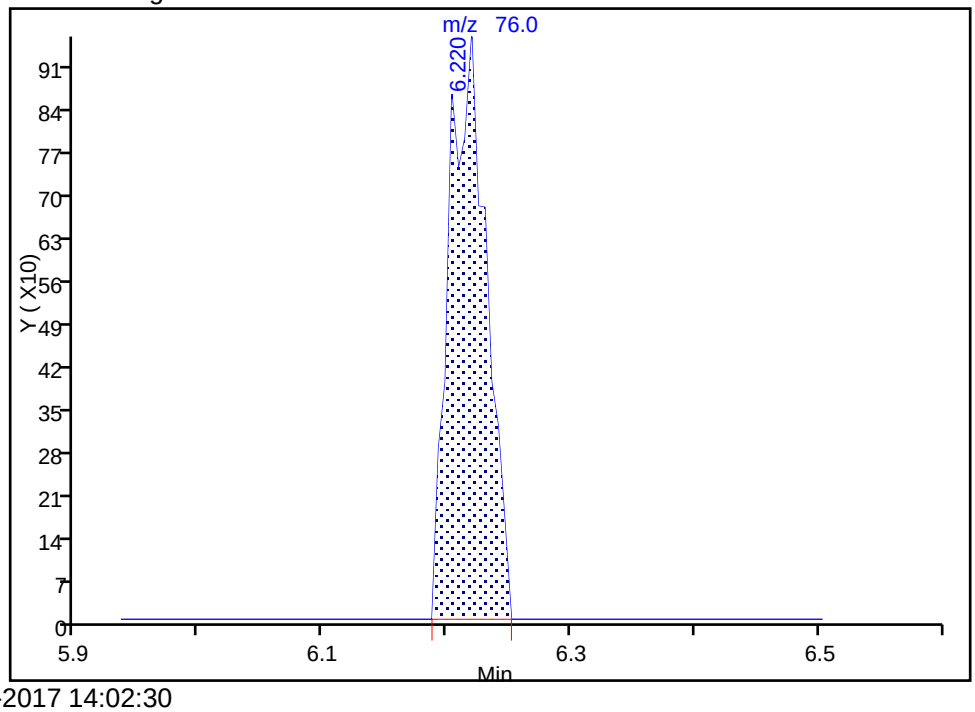
Processing Integration Results

RT: 6.22
Area: 1504
Amount: 0.016314
Amount Units: ppb v/v



Manual Integration Results

RT: 6.22
Area: 1994
Amount: 0.021629
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:02:30
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

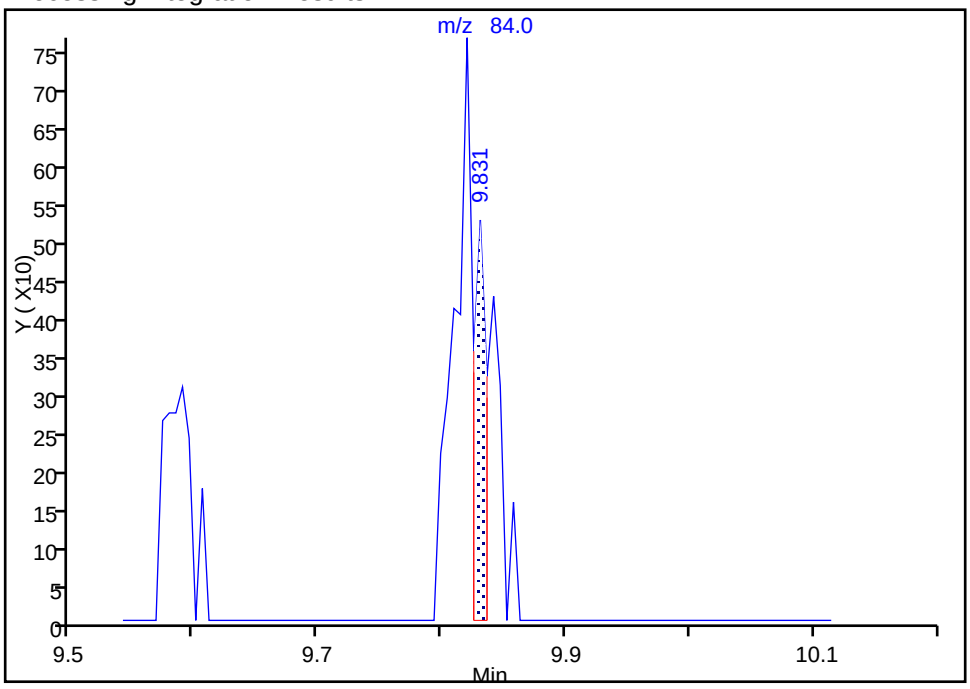
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D				
Injection Date:	03-Aug-2017 12:40:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

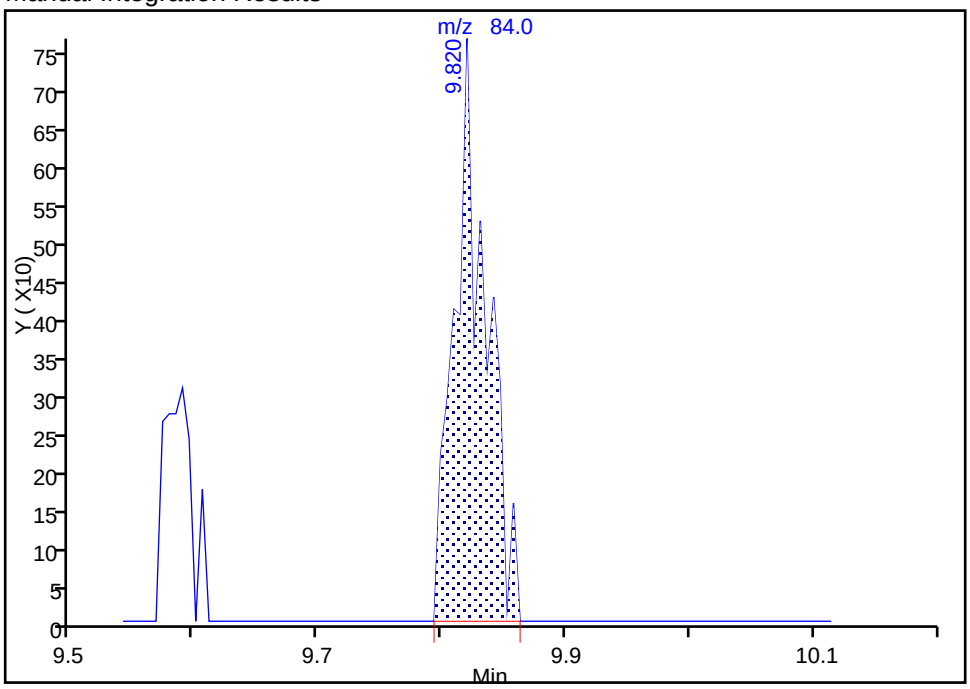
Processing Integration Results

RT: 9.83
Area: 385
Amount: 0.007333
Amount Units: ppb v/v



Manual Integration Results

RT: 9.82
Area: 1339
Amount: 0.025504
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:03:05

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

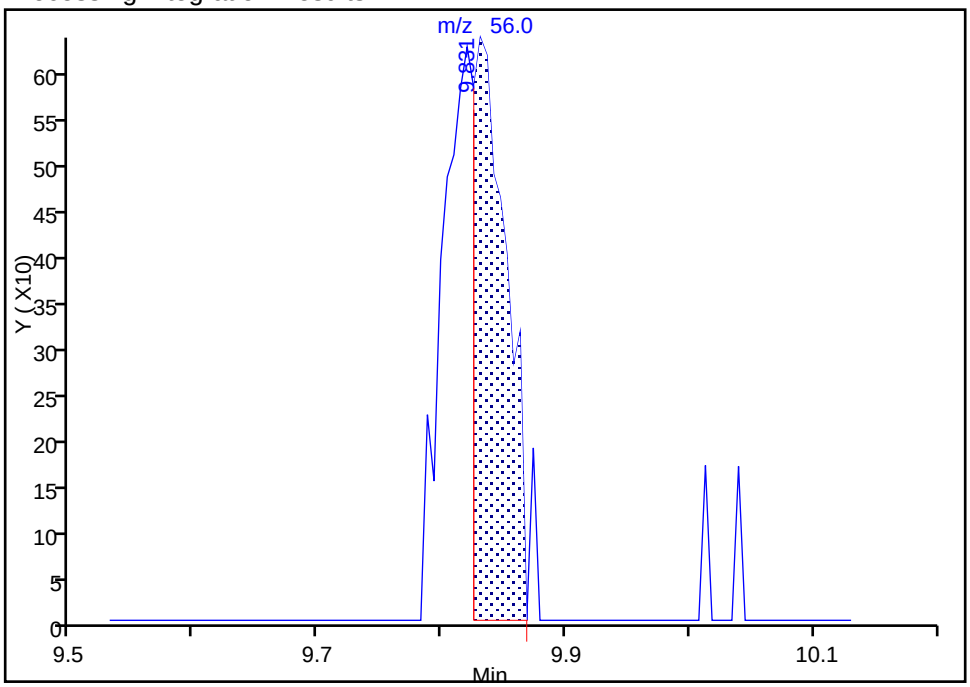
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-004.D
Injection Date: 03-Aug-2017 12:40:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 2

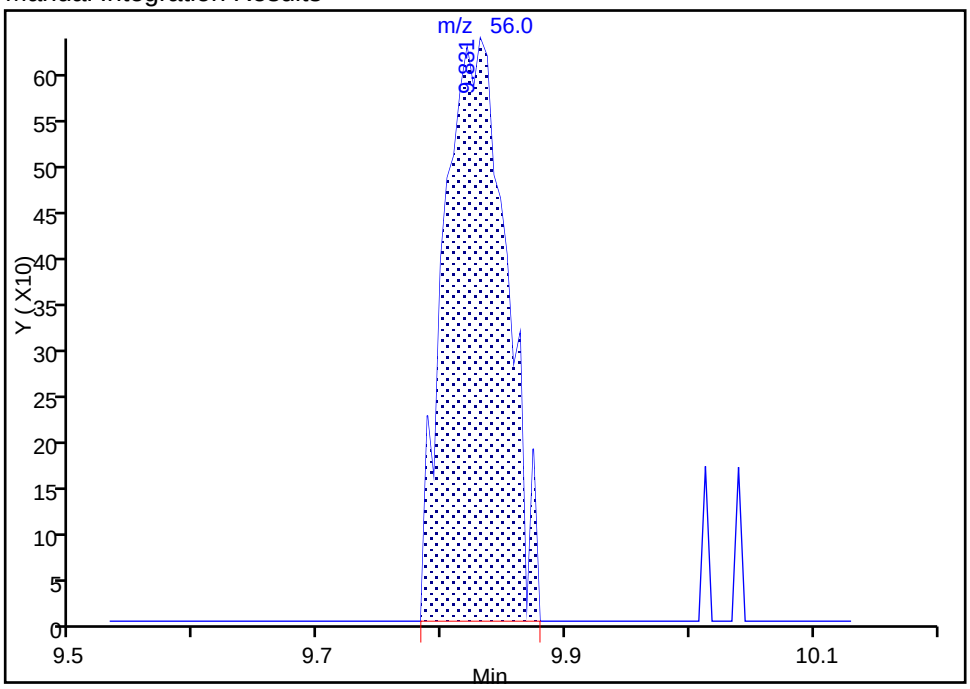
Processing Integration Results

RT: 9.83
Area: 1204
Amount: 0.007333
Amount Units: ppb v/v



Manual Integration Results

RT: 9.83
Area: 2211
Amount: 0.025504
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:03:15
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Lab File ID: 26065_04.D Lab Sample ID: MB 200-118979/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHX.i Date Analyzed: 07/26/2017 12:29

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118979/3	26065_03.D	07/26/2017 11:38
2563	200-39423-10	26065_14.D	07/26/2017 21:45

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118979/4

Matrix: Air Lab File ID: 26065_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/26/2017 12:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39423-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118979/4

Matrix: Air | Lab File ID: 26065_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/26/2017 12:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118979 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118979/4

Matrix: Air Lab File ID: 26065_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/26/2017 12:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-Jul-2017 12:29:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026065-004
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 31-Jul-2017 15:17:01 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: desjardinsb Date: 31-Jul-2017 15:17:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.060					ND	
2 Dichlorodifluoromethane	85		3.124					ND	
3 Chlorodifluoromethane	51		3.172					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.376					ND	
5 Chloromethane	50		3.509					ND	
6 Butane	43		3.691					ND	
7 Vinyl chloride	62		3.734					ND	
8 Butadiene	54		3.804					ND	
10 Bromomethane	94		4.451					ND	
11 Chloroethane	64		4.670					ND	
12 2-Methylbutane	43		4.729					ND	
13 Vinyl bromide	106		5.039					ND	
14 Trichlorofluoromethane	101		5.130					ND	
16 Pentane	43		5.259					ND	
17 Ethanol	45	5.740	5.708	0.032	96	1911		0.1400	
18 Ethyl ether	59		5.772					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.157					ND	
19 Acrolein	56		6.163					ND	
21 1,1-Dichloroethene	96		6.211					ND	
22 Acetone	43		6.473					ND	
23 Carbon disulfide	76		6.601					ND	
24 Isopropyl alcohol	45	6.815	6.762	0.053	98	3883		0.0813	
25 3-Chloro-1-propene	41		6.987					ND	
26 Acetonitrile	41		7.152					ND	
27 Methylene Chloride	49		7.286					ND	
28 2-Methyl-2-propanol	59		7.538					ND	
29 Methyl tert-butyl ether	73		7.698					ND	
31 trans-1,2-Dichloroethene	61		7.719					ND	
32 Acrylonitrile	53		7.901					ND	
33 Hexane	57		8.089					ND	
34 1,1-Dichloroethane	63		8.608					ND	
35 Vinyl acetate	43		8.693					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
37 cis-1,2-Dichloroethene	96		9.747					ND	
38 2-Butanone (MEK)	72		9.833					ND	
39 Ethyl acetate	88		9.859					ND	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	98	229705	10.0	10.0	
41 Tetrahydrofuran	42		10.266					ND	
42 Chloroform	83		10.373					ND	
43 Cyclohexane	84		10.608					ND	
44 1,1,1-Trichloroethane	97		10.651					ND	
45 Carbon tetrachloride	117		10.908					ND	
46 Isooctane	57		11.363					ND	
47 Benzene	78		11.416					ND	
48 1,2-Dichloroethane	62		11.625					ND	
49 n-Heptane	43		11.780					ND	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	96	1313340	10.0	10.0	
52 n-Butanol	56		12.791					ND	
53 Trichloroethene	95		12.807					ND	
A 51 GRO	1	13.246	(4.719-21.772)		0	4502550		0	
54 1,2-Dichloropropane	63		13.417					ND	
55 Methyl methacrylate	69		13.610					ND	
56 1,4-Dioxane	88		13.679					ND	
57 Dibromomethane	174		13.684					ND	
58 Dichlorobromomethane	83		13.995					ND	
60 cis-1,3-Dichloropropene	75		14.979					ND	
A 59 TVOC as Toluene	92	15.156	(3.050-27.261)		0	4641558		0	
61 4-Methyl-2-pentanone (MIBK	43		15.305					ND	
65 Toluene	92		15.589					ND	
64 n-Octane	43		15.637					ND	
66 trans-1,3-Dichloropropene	75		16.231					ND	
67 1,1,2-Trichloroethane	83		16.627					ND	
68 Tetrachloroethene	166		16.712					ND	
69 2-Hexanone	43		17.119					ND	
71 Chlorodibromomethane	129		17.424					ND	
72 Ethylene Dibromide	107		17.707					ND	
* 74 Chlorobenzene-d5	117	18.649	18.654	-0.005	90	1145259	10.0	10.0	
75 Chlorobenzene	112		18.713					ND	
76 Ethylbenzene	91		18.879					ND	
77 n-Nonane	57		19.007					ND	
78 m-Xylene & p-Xylene	106		19.146					ND	
S 73 Xylenes, Total	106		19.600					ND	
79 o-Xylene	106		20.040					ND	
80 Styrene	104		20.104					ND	
81 Bromoform	173		20.564					ND	
82 Isopropylbenzene	105		20.794					ND	
84 1,1,2,2-Tetrachloroethane	83		21.511					ND	
85 N-Propylbenzene	91		21.575					ND	
86 1,2,3-Trichloropropane	75		21.613					ND	
87 n-Decane	57		21.762					ND	
88 4-Ethyltoluene	105		21.779					ND	
89 2-Chlorotoluene	91		21.779					ND	
90 1,3,5-Trimethylbenzene	105		21.891					ND	
91 Alpha Methyl Styrene	118		22.281					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119		22.410					ND	
93 1,2,4-Trimethylbenzene	105		22.506					ND	
94 sec-Butylbenzene	105		22.747					ND	
95 4-Isopropyltoluene	119		22.966					ND	
96 1,3-Dichlorobenzene	146		22.988					ND	
97 1,4-Dichlorobenzene	146		23.132					ND	
98 Benzyl chloride	91		23.346					ND	
100 n-Butylbenzene	91		23.560					ND	
99 Undecane	57		23.581					ND	
101 1,2-Dichlorobenzene	146		23.683					ND	
102 Dodecane	57		25.218					ND	
103 1,2,4-Trichlorobenzene	180		26.267					ND	
104 Hexachlorobutadiene	225		26.454					ND	
105 Naphthalene	128		26.770					ND	
106 1,2,3-Trichlorobenzene	180		27.251					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 36 Methyl cyclohexane TIC	55		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

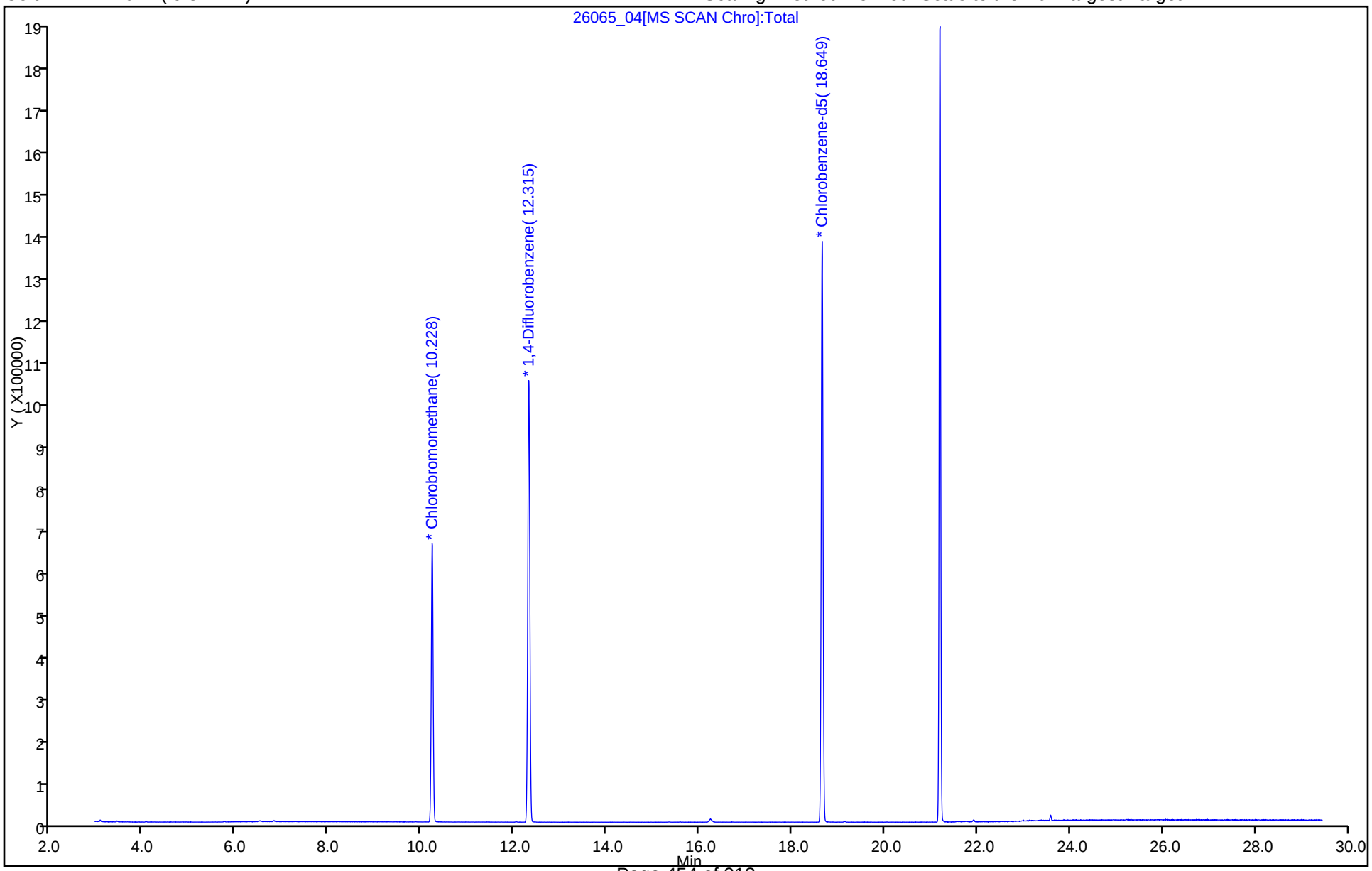
Report Date: 31-Jul-2017 15:17:03 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_04.D

Injection Date:	26-Jul-2017 12:29:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab File ID: 26065_04.D Lab Sample ID: MB 200-118979/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHX.i Date Analyzed: 07/26/2017 12:29

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118979/3	26065_03.D	07/26/2017 11:38
3659	200-39424-12	26065_13.D	07/26/2017 20:47

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118979/4

Matrix: Air Lab File ID: 26065_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/26/2017 12:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39424-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118979/4

Matrix: Air | Lab File ID: 26065_04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/26/2017 12:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118979 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118979/4

Matrix: Air Lab File ID: 26065_04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/26/2017 12:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 26-Jul-2017 12:29:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026065-004
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 31-Jul-2017 15:17:01 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: desjardinsb Date: 31-Jul-2017 15:17:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.060					ND	
2 Dichlorodifluoromethane	85		3.124					ND	
3 Chlorodifluoromethane	51		3.172					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.376					ND	
5 Chloromethane	50		3.509					ND	
6 Butane	43		3.691					ND	
7 Vinyl chloride	62		3.734					ND	
8 Butadiene	54		3.804					ND	
10 Bromomethane	94		4.451					ND	
11 Chloroethane	64		4.670					ND	
12 2-Methylbutane	43		4.729					ND	
13 Vinyl bromide	106		5.039					ND	
14 Trichlorofluoromethane	101		5.130					ND	
16 Pentane	43		5.259					ND	
17 Ethanol	45	5.740	5.708	0.032	96	1911		0.1400	
18 Ethyl ether	59		5.772					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.157					ND	
19 Acrolein	56		6.163					ND	
21 1,1-Dichloroethene	96		6.211					ND	
22 Acetone	43		6.473					ND	
23 Carbon disulfide	76		6.601					ND	
24 Isopropyl alcohol	45	6.815	6.762	0.053	98	3883		0.0813	
25 3-Chloro-1-propene	41		6.987					ND	
26 Acetonitrile	41		7.152					ND	
27 Methylene Chloride	49		7.286					ND	
28 2-Methyl-2-propanol	59		7.538					ND	
29 Methyl tert-butyl ether	73		7.698					ND	
31 trans-1,2-Dichloroethene	61		7.719					ND	
32 Acrylonitrile	53		7.901					ND	
33 Hexane	57		8.089					ND	
34 1,1-Dichloroethane	63		8.608					ND	
35 Vinyl acetate	43		8.693					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
37 cis-1,2-Dichloroethene	96		9.747					ND	
38 2-Butanone (MEK)	72		9.833					ND	
39 Ethyl acetate	88		9.859					ND	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	98	229705	10.0	10.0	
41 Tetrahydrofuran	42		10.266					ND	
42 Chloroform	83		10.373					ND	
43 Cyclohexane	84		10.608					ND	
44 1,1,1-Trichloroethane	97		10.651					ND	
45 Carbon tetrachloride	117		10.908					ND	
46 Isooctane	57		11.363					ND	
47 Benzene	78		11.416					ND	
48 1,2-Dichloroethane	62		11.625					ND	
49 n-Heptane	43		11.780					ND	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	96	1313340	10.0	10.0	
52 n-Butanol	56		12.791					ND	
53 Trichloroethene	95		12.807					ND	
A 51 GRO	1	13.246	(4.719-21.772)		0	4502550		0	
54 1,2-Dichloropropane	63		13.417					ND	
55 Methyl methacrylate	69		13.610					ND	
56 1,4-Dioxane	88		13.679					ND	
57 Dibromomethane	174		13.684					ND	
58 Dichlorobromomethane	83		13.995					ND	
60 cis-1,3-Dichloropropene	75		14.979					ND	
A 59 TVOC as Toluene	92	15.156	(3.050-27.261)		0	4641558		0	
61 4-Methyl-2-pentanone (MIBK	43		15.305					ND	
65 Toluene	92		15.589					ND	
64 n-Octane	43		15.637					ND	
66 trans-1,3-Dichloropropene	75		16.231					ND	
67 1,1,2-Trichloroethane	83		16.627					ND	
68 Tetrachloroethene	166		16.712					ND	
69 2-Hexanone	43		17.119					ND	
71 Chlorodibromomethane	129		17.424					ND	
72 Ethylene Dibromide	107		17.707					ND	
* 74 Chlorobenzene-d5	117	18.649	18.654	-0.005	90	1145259	10.0	10.0	
75 Chlorobenzene	112		18.713					ND	
76 Ethylbenzene	91		18.879					ND	
77 n-Nonane	57		19.007					ND	
78 m-Xylene & p-Xylene	106		19.146					ND	
S 73 Xylenes, Total	106		19.600					ND	
79 o-Xylene	106		20.040					ND	
80 Styrene	104		20.104					ND	
81 Bromoform	173		20.564					ND	
82 Isopropylbenzene	105		20.794					ND	
84 1,1,2,2-Tetrachloroethane	83		21.511					ND	
85 N-Propylbenzene	91		21.575					ND	
86 1,2,3-Trichloropropane	75		21.613					ND	
87 n-Decane	57		21.762					ND	
88 4-Ethyltoluene	105		21.779					ND	
89 2-Chlorotoluene	91		21.779					ND	
90 1,3,5-Trimethylbenzene	105		21.891					ND	
91 Alpha Methyl Styrene	118		22.281					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119		22.410					ND	
93 1,2,4-Trimethylbenzene	105		22.506					ND	
94 sec-Butylbenzene	105		22.747					ND	
95 4-Isopropyltoluene	119		22.966					ND	
96 1,3-Dichlorobenzene	146		22.988					ND	
97 1,4-Dichlorobenzene	146		23.132					ND	
98 Benzyl chloride	91		23.346					ND	
100 n-Butylbenzene	91		23.560					ND	
99 Undecane	57		23.581					ND	
101 1,2-Dichlorobenzene	146		23.683					ND	
102 Dodecane	57		25.218					ND	
103 1,2,4-Trichlorobenzene	180		26.267					ND	
104 Hexachlorobutadiene	225		26.454					ND	
105 Naphthalene	128		26.770					ND	
106 1,2,3-Trichlorobenzene	180		27.251					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 36 Methyl cyclohexane TIC	55		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

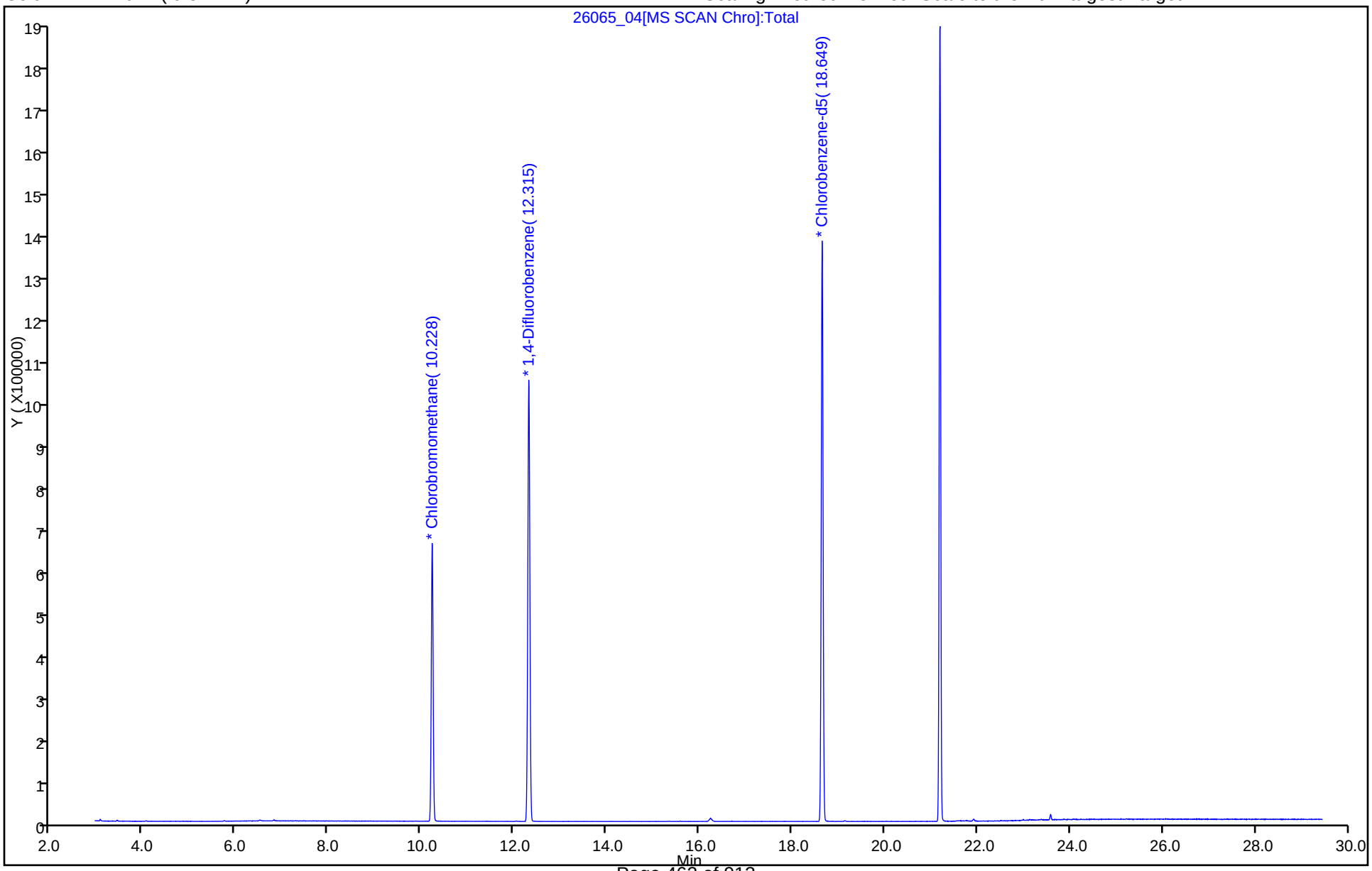
Report Date: 31-Jul-2017 15:17:03 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_04.D

Injection Date:	26-Jul-2017 12:29:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab File ID: 26165_05.D Lab Sample ID: MB 200-119262/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 08/02/2017 13:13

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-119262/4	26165_04.D	08/02/2017 12:20
4382	200-39486-1	26165_12.D	08/02/2017 19:53

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119262/5

Matrix: Air Lab File ID: 26165_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/02/2017 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39486-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119262/5

Matrix: Air | Lab File ID: 26165_05.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/02/2017 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119262 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119262/5

Matrix: Air Lab File ID: 26165_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/02/2017 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_05.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Aug-2017 13:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026165-005
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 03-Aug-2017 11:10:00 Calib Date: 08-Jun-2017 10:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20170607-25386.b\25386_18.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: puangmaleek Date: 03-Aug-2017 11:10:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		2.978					ND	
2 Dichlorodifluoromethane	85		3.047					ND	
3 Chlorodifluoromethane	51		3.101					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.309					ND	
5 Chloromethane	50		3.442					ND	
6 Butane	43		3.645					ND	
7 Vinyl chloride	62		3.688					ND	
8 Butadiene	54		3.763					ND	
10 Bromomethane	94		4.440					ND	
11 Chloroethane	64		4.680					ND	
12 2-Methylbutane	43		4.761					ND	
13 Vinyl bromide	106		5.075					ND	
14 Trichlorofluoromethane	101		5.182					ND	
16 Pentane	43		5.332					ND	
17 Ethanol	45		5.775					ND	
18 Ethyl ether	59		5.855					ND	
19 Acrolein	56		6.228					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.282					ND	
21 1,1-Dichloroethene	96		6.314					ND	
22 Acetone	43		6.543					ND	
23 Carbon disulfide	76		6.692					ND	
24 Isopropyl alcohol	45		6.869					ND	
25 3-Chloro-1-propene	41		7.109					ND	
26 Acetonitrile	41		7.226					ND	
T 15 Methyl Acetate TIC	43		7.308					ND	
27 Methylene Chloride	49		7.413					ND	
28 2-Methyl-2-propanol	59		7.648					ND	
29 Methyl tert-butyl ether	73		7.819					ND	
31 trans-1,2-Dichloroethene	61		7.856					ND	
32 Acrylonitrile	53		7.995					ND	
33 Hexane	57		8.256					ND	
34 1,1-Dichloroethane	63		8.737					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.822					ND	
37 cis-1,2-Dichloroethene	96		9.857					ND	
38 2-Butanone (MEK)	72		9.900					ND	
39 Ethyl acetate	88		9.969					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.322	10.327	-0.005	90	226632	10.0	10.0	
41 Tetrahydrofuran	42		10.322					ND	
42 Chloroform	83		10.471					ND	
43 Cyclohexane	84		10.711					ND	
44 1,1,1-Trichloroethane	97		10.733					ND	
45 Carbon tetrachloride	117		10.994					ND	
46 Isooctane	57		11.437					ND	
47 Benzene	78		11.453					ND	
48 1,2-Dichloroethane	62		11.634					ND	
49 n-Heptane	43		11.843					ND	
* 50 1,4-Difluorobenzene	114	12.312	12.318	-0.006	98	1217493	10.0	10.0	
52 n-Butanol	56		12.729					ND	
53 Trichloroethene	95		12.782					ND	
A 51 GRO	1	13.025	(4.751-21.299)		0	223686		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.337					ND	
55 Methyl methacrylate	69		13.529					ND	
56 1,4-Dioxane	88		13.572					ND	
57 Dibromomethane	174		13.604					ND	
58 Dichlorobromomethane	83		13.913					ND	
A 59 TVOC as Toluene	1	14.716	(2.968-26.465)		0	516300		0	
60 cis-1,3-Dichloropropene	75		14.863					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.146					ND	
A 63 Toluene Range	1	15.450	(15.410-15.490)		0	4764		NC	
65 Toluene	92		15.450					ND	
A 62 C8 Range	1		(16.037-15.586)					ND	
64 n-Octane	43		15.536					ND	
66 trans-1,3-Dichloropropene	75		16.059					ND	
67 1,1,2-Trichloroethane	83		16.432					ND	
68 Tetrachloroethene	166		16.544					ND	
69 2-Hexanone	43		16.881					ND	
71 Chlorodibromomethane	129		17.195					ND	
72 Ethylene Dibromide	107		17.457					ND	
* 74 Chlorobenzene-d5	117	18.359	18.359	0.000	95	1074757	10.0	10.0	
75 Chlorobenzene	112		18.418					ND	
76 Ethylbenzene	91		18.572					ND	
77 n-Nonane	57		18.722					ND	
78 m-Xylene & p-Xylene	106		18.823					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.980					ND	
79 o-Xylene	106		19.661					ND	
80 Styrene	104		19.715					ND	
S 73 Xylenes, Total	106		20.100					ND	
81 Bromoform	173		20.141					ND	
82 Isopropylbenzene	105		20.360					ND	
* 83 4-Bromofluorobenzene	95	20.734	20.734	0.000	82	677729	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		21.027					ND	
85 N-Propylbenzene	91		21.097					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75		21.118					ND	
88 4-Ethyltoluene	105		21.284					ND	
89 2-Chlorotoluene	91	21.294	21.289	0.005	83	1706		0.0163	
87 n-Decane	57		21.289					ND	
90 1,3,5-Trimethylbenzene	105	21.396	21.396	0.000	1	895		0.009323	7
91 Alpha Methyl Styrene	118	21.764	21.764	0.000	70	412		0.009532	
92 tert-Butylbenzene	119		21.887					ND	
93 1,2,4-Trimethylbenzene	105	21.988	21.983	0.005	91	1512		0.0156	
94 sec-Butylbenzene	105	22.212	22.212	0.000	15	1193		0.008525	7
95 4-Isopropyltoluene	119	22.415	22.420	-0.005	94	1401		0.0124	
96 1,3-Dichlorobenzene	146	22.447	22.447	0.000	86	1729		0.0283	
97 1,4-Dichlorobenzene	146	22.586	22.580	0.006	85	1967		0.0324	
98 Benzyl chloride	91	22.778	22.773	0.005	91	2435		0.0274	
100 n-Butylbenzene	91	22.986	22.986	0.000	96	2724		0.0228	
99 Undecane	57		23.018					ND	
101 1,2-Dichlorobenzene	146	23.104	23.103	0.001	89	2130		0.0371	
102 Dodecane	57		24.560					ND	
103 1,2,4-Trichlorobenzene	180	25.532	25.532	0.000	88	2611		0.0947	
104 Hexachlorobutadiene	225	25.719	25.724	-0.005	82	945		0.0277	
105 Naphthalene	128	25.996	25.996	0.000	97	6856		0.1167	
106 1,2,3-Trichlorobenzene	180	26.450	26.455	-0.005	87	1572		0.1099	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

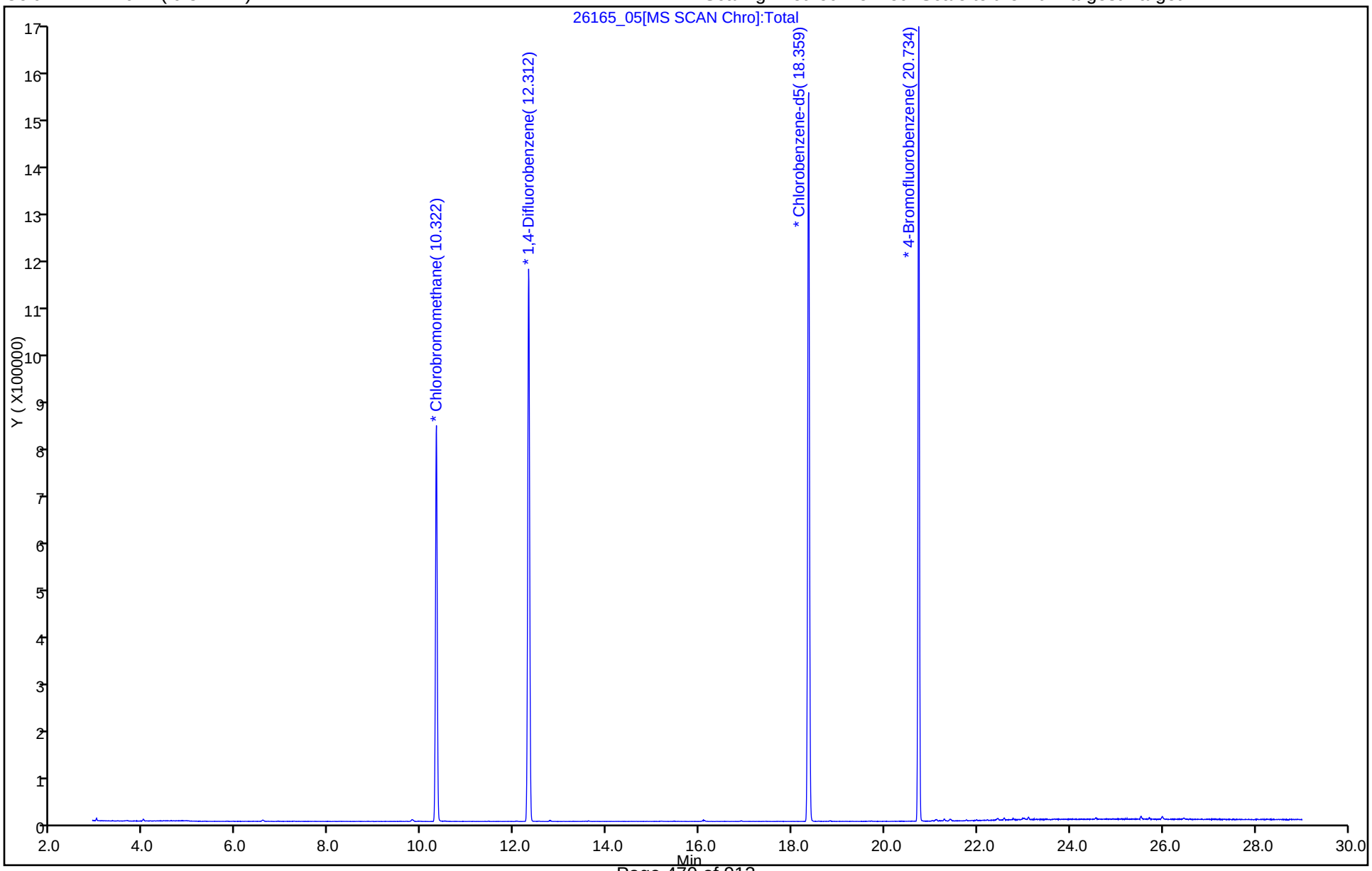
Report Date: 03-Aug-2017 11:10:01 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_05.D

Injection Date:	02-Aug-2017 13:13:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab File ID: 26148-04.D Lab Sample ID: MB 200-119211/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHB.i Date Analyzed: 08/01/2017 12:51

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-119211/3	26148-03.D	08/01/2017 11:58
4794	200-39500-1	26148-23.D	08/02/2017 06:10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119211/4

Matrix: Air Lab File ID: 26148-04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/01/2017 12:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119211 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39500-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119211/4

Matrix: Air | Lab File ID: 26148-04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/01/2017 12:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119211 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119211/4

Matrix: Air Lab File ID: 26148-04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/01/2017 12:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119211 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170801-26148.b\26148-04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Aug-2017 12:51:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026148-004
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20170801-26148.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 02-Aug-2017 08:34:30 Calib Date: 09-Jun-2017 10:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20170608-25406.b\25406-17.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: puangmaleek Date: 02-Aug-2017 08:38:08

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1	Propene	41		3.140					ND	
2	Dichlorodifluoromethane	85		3.193					ND	
3	Chlorodifluoromethane	51		3.230					ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.417					ND	
5	Chloromethane	50		3.540					ND	
6	Butane	43		3.716					ND	
7	Vinyl chloride	62		3.753					ND	
8	Butadiene	54		3.818					ND	
10	Bromomethane	94		4.485					ND	
11	Chloroethane	64		4.719					ND	
12	2-Methylbutane	43		4.800					ND	
13	Vinyl bromide	106		5.130					ND	
14	Trichlorofluoromethane	101		5.232					ND	
15	Pentane	43		5.365					ND	
16	Ethanol	45		5.707					ND	
17	Ethyl ether	59		5.846					ND	
18	Acrolein	56		6.214					ND	
19	1,1,2-Trichloro-1,2,2-trif	101		6.262					ND	
20	1,1-Dichloroethene	96		6.331					ND	
21	Acetone	43		6.486					ND	
22	Isopropyl alcohol	45		6.715					ND	
23	Carbon disulfide	76		6.763					ND	
24	3-Chloro-1-propene	41		7.036					ND	
26	Acetonitrile	41		7.094					ND	
T 25	Methyl Acetate TIC	43		7.200					ND	
27	Methylene Chloride	49		7.292					ND	
28	2-Methyl-2-propanol	59		7.420					ND	
29	Methyl tert-butyl ether	73		7.644					ND	
30	trans-1,2-Dichloroethene	61		7.703					ND	
31	Acrylonitrile	53		7.778					ND	
32	Hexane	57		8.034					ND	
33	1,1-Dichloroethane	63		8.445					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 Vinyl acetate	43		8.450					ND	
36 2-Butanone (MEK)	72		9.341					ND	
37 cis-1,2-Dichloroethene	96		9.347					ND	
35 Ethyl acetate	88		9.352					ND	
* 39 Chlorobromomethane	128	9.715	9.715	0.000	76	272880	10.0	10.0	
38 Tetrahydrofuran	42		9.731					ND	
40 Chloroform	83		9.790					ND	
S 41 1,2-Dichloroethene, Total	61		10.000					ND	
42 1,1,1-Trichloroethane	97		10.051					ND	
43 Cyclohexane	84		10.062					ND	
44 Carbon tetrachloride	117		10.254					ND	
45 Isooctane	57		10.537					ND	
46 Benzene	78		10.579					ND	
47 1,2-Dichloroethane	62		10.681					ND	
48 n-Heptane	43		10.788					ND	
A 49 GRO	1	10.873	(4.790-16.956)		0	2611856		0	
* 50 1,4-Difluorobenzene	114	11.118	11.124	-0.006	92	1346242	10.0	10.0	
51 n-Butanol	56		11.316					ND	
53 Trichloroethene	95		11.492					ND	
T 52 Methyl cyclohexane TIC	55		11.500					ND	
54 1,2-Dichloropropane	63		11.860					ND	
55 Methyl methacrylate	69		11.898					ND	
56 1,4-Dioxane	88		11.988					ND	
57 Dibromomethane	174		12.047					ND	
58 Dichlorobromomethane	83		12.218					ND	
A 59 TVOC as Toluene	1	12.498	(3.130-21.866)		0	2859138		0	
60 cis-1,3-Dichloropropene	75		12.848					ND	
61 4-Methyl-2-pentanone (MIBK	43		12.997					ND	
63 n-Octane	43		13.259					ND	
64 Toluene	92		13.275					ND	
66 trans-1,3-Dichloropropene	75		13.637					ND	
67 1,1,2-Trichloroethane	83		13.910					ND	
68 Tetrachloroethene	166		14.048					ND	
69 2-Hexanone	43		14.171					ND	
70 Chlorodibromomethane	129		14.465					ND	
71 Ethylene Dibromide	107		14.667					ND	
* 72 Chlorobenzene-d5	117	15.223	15.228	-0.005	82	1121993	10.0	10.0	
73 Chlorobenzene	112		15.265					ND	
74 Ethylbenzene	91		15.335					ND	
75 n-Nonane	57		15.351					ND	
76 m-Xylene & p-Xylene	106		15.479					ND	
78 o-Xylene	106		15.991					ND	
S 77 Xylenes, Total	106		16.000					ND	
79 Styrene	104		16.018					ND	
80 Bromoform	173		16.306					ND	
81 Isopropylbenzene	105		16.402					ND	
83 1,1,2,2-Tetrachloroethane	83		16.813					ND	
84 N-Propylbenzene	91		16.882					ND	
85 1,2,3-Trichloropropane	75		16.893					ND	
86 n-Decane	57		16.946					ND	
87 4-Ethyltoluene	105		17.005					ND	
88 2-Chlorotoluene	91		17.048					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 1,3,5-Trimethylbenzene	105		17.074					ND	
90 Alpha Methyl Styrene	118		17.347					ND	
91 tert-Butylbenzene	119		17.448					ND	
92 1,2,4-Trimethylbenzene	105		17.517					ND	
93 sec-Butylbenzene	105		17.704					ND	
94 4-Isopropyltoluene	119		17.859					ND	
95 1,3-Dichlorobenzene	146		17.939					ND	
96 1,4-Dichlorobenzene	146		18.051					ND	
97 Benzyl chloride	91		18.200					ND	
98 Undecane	57		18.329					ND	
99 n-Butylbenzene	91		18.366					ND	
100 1,2-Dichlorobenzene	146		18.537					ND	
T 101 1,2-Dibromo-3-Chloropropan	75		19.300					ND	
102 Dodecane	57		19.786					ND	
103 1,2,4-Trichlorobenzene	180		20.901					ND	
104 Hexachlorobutadiene	225		21.066					ND	
105 Naphthalene	128		21.381					ND	
106 1,2,3-Trichlorobenzene	180		21.856					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 117 Chlorotrifluoroethene TIC	1		0.000					ND	
T 118 Difluoroethane TIC	1		0.000					ND	
T 119 Freon 115 TIC	1		0.000					ND	
T 120 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 121 1,3-Dichloropropane TIC	1		0.000					ND	

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

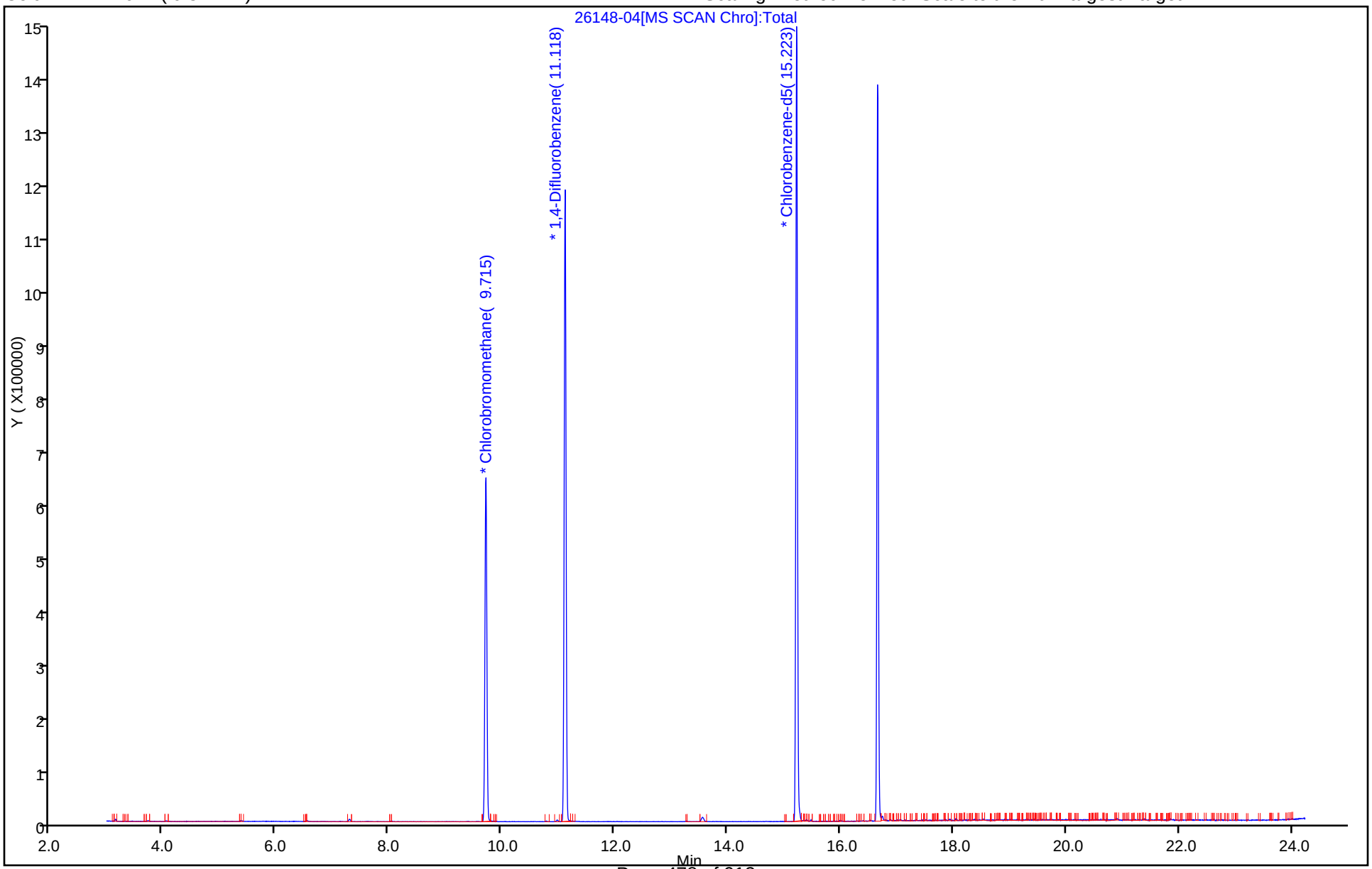
Report Date: 02-Aug-2017 08:38:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170801-26148.b\26148-04.D

Injection Date:	01-Aug-2017 12:51:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab File ID: 26165_05.D Lab Sample ID: MB 200-119262/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHC.i Date Analyzed: 08/02/2017 13:13

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-119262/4	26165_04.D	08/02/2017 12:20
4343	200-39531-3	26165_13.D	08/02/2017 20:51

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39531-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119262/5

Matrix: Air | Lab File ID: 26165_05.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/02/2017 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119262 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39531-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-119262/5

Matrix: Air | Lab File ID: 26165_05.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 08/02/2017 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119262 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-119262/5

Matrix: Air Lab File ID: 26165_05.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/02/2017 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_05.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Aug-2017 13:13:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026165-005
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 03-Aug-2017 11:10:00 Calib Date: 08-Jun-2017 10:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20170607-25386.b\25386_18.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: puangmaleek Date: 03-Aug-2017 11:10:00

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1	Propene	41		2.978					ND	
2	Dichlorodifluoromethane	85		3.047					ND	
3	Chlorodifluoromethane	51		3.101					ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.309					ND	
5	Chloromethane	50		3.442					ND	
6	Butane	43		3.645					ND	
7	Vinyl chloride	62		3.688					ND	
8	Butadiene	54		3.763					ND	
10	Bromomethane	94		4.440					ND	
11	Chloroethane	64		4.680					ND	
12	2-Methylbutane	43		4.761					ND	
13	Vinyl bromide	106		5.075					ND	
14	Trichlorofluoromethane	101		5.182					ND	
16	Pentane	43		5.332					ND	
17	Ethanol	45		5.775					ND	
18	Ethyl ether	59		5.855					ND	
19	Acrolein	56		6.228					ND	
20	1,1,2-Trichloro-1,2,2-trif	101		6.282					ND	
21	1,1-Dichloroethene	96		6.314					ND	
22	Acetone	43		6.543					ND	
23	Carbon disulfide	76		6.692					ND	
24	Isopropyl alcohol	45		6.869					ND	
25	3-Chloro-1-propene	41		7.109					ND	
26	Acetonitrile	41		7.226					ND	
T 15	Methyl Acetate TIC	43		7.308					ND	
27	Methylene Chloride	49		7.413					ND	
28	2-Methyl-2-propanol	59		7.648					ND	
29	Methyl tert-butyl ether	73		7.819					ND	
31	trans-1,2-Dichloroethene	61		7.856					ND	
32	Acrylonitrile	53		7.995					ND	
33	Hexane	57		8.256					ND	
34	1,1-Dichloroethane	63		8.737					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		8.822					ND	
37 cis-1,2-Dichloroethene	96		9.857					ND	
38 2-Butanone (MEK)	72		9.900					ND	
39 Ethyl acetate	88		9.969					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
* 40 Chlorobromomethane	128	10.322	10.327	-0.005	90	226632	10.0	10.0	
41 Tetrahydrofuran	42		10.322					ND	
42 Chloroform	83		10.471					ND	
43 Cyclohexane	84		10.711					ND	
44 1,1,1-Trichloroethane	97		10.733					ND	
45 Carbon tetrachloride	117		10.994					ND	
46 Isooctane	57		11.437					ND	
47 Benzene	78		11.453					ND	
48 1,2-Dichloroethane	62		11.634					ND	
49 n-Heptane	43		11.843					ND	
* 50 1,4-Difluorobenzene	114	12.312	12.318	-0.006	98	1217493	10.0	10.0	
52 n-Butanol	56		12.729					ND	
53 Trichloroethene	95		12.782					ND	
A 51 GRO	1	13.025	(4.751-21.299)		0	223686		0	
T 36 Methyl cyclohexane TIC	55		13.179					ND	
54 1,2-Dichloropropane	63		13.337					ND	
55 Methyl methacrylate	69		13.529					ND	
56 1,4-Dioxane	88		13.572					ND	
57 Dibromomethane	174		13.604					ND	
58 Dichlorobromomethane	83		13.913					ND	
A 59 TVOC as Toluene	1	14.716	(2.968-26.465)		0	516300		0	
60 cis-1,3-Dichloropropene	75		14.863					ND	
61 4-Methyl-2-pentanone (MIBK	43		15.146					ND	
A 63 Toluene Range	1	15.450	(15.410-15.490)		0	4764		NC	
65 Toluene	92		15.450					ND	
A 62 C8 Range	1		(16.037-15.586)					ND	
64 n-Octane	43		15.536					ND	
66 trans-1,3-Dichloropropene	75		16.059					ND	
67 1,1,2-Trichloroethane	83		16.432					ND	
68 Tetrachloroethene	166		16.544					ND	
69 2-Hexanone	43		16.881					ND	
71 Chlorodibromomethane	129		17.195					ND	
72 Ethylene Dibromide	107		17.457					ND	
* 74 Chlorobenzene-d5	117	18.359	18.359	0.000	95	1074757	10.0	10.0	
75 Chlorobenzene	112		18.418					ND	
76 Ethylbenzene	91		18.572					ND	
77 n-Nonane	57		18.722					ND	
78 m-Xylene & p-Xylene	106		18.823					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		18.980					ND	
79 o-Xylene	106		19.661					ND	
80 Styrene	104		19.715					ND	
S 73 Xylenes, Total	106		20.100					ND	
81 Bromoform	173		20.141					ND	
82 Isopropylbenzene	105		20.360					ND	
* 83 4-Bromofluorobenzene	95	20.734	20.734	0.000	82	677729	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		21.027					ND	
85 N-Propylbenzene	91		21.097					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 1,2,3-Trichloropropane	75		21.118					ND	
88 4-Ethyltoluene	105		21.284					ND	
89 2-Chlorotoluene	91	21.294	21.289	0.005	83	1706		0.0163	
87 n-Decane	57		21.289					ND	
90 1,3,5-Trimethylbenzene	105	21.396	21.396	0.000	1	895		0.009323	7
91 Alpha Methyl Styrene	118	21.764	21.764	0.000	70	412		0.009532	
92 tert-Butylbenzene	119		21.887					ND	
93 1,2,4-Trimethylbenzene	105	21.988	21.983	0.005	91	1512		0.0156	
94 sec-Butylbenzene	105	22.212	22.212	0.000	15	1193		0.008525	7
95 4-Isopropyltoluene	119	22.415	22.420	-0.005	94	1401		0.0124	
96 1,3-Dichlorobenzene	146	22.447	22.447	0.000	86	1729		0.0283	
97 1,4-Dichlorobenzene	146	22.586	22.580	0.006	85	1967		0.0324	
98 Benzyl chloride	91	22.778	22.773	0.005	91	2435		0.0274	
100 n-Butylbenzene	91	22.986	22.986	0.000	96	2724		0.0228	
99 Undecane	57		23.018					ND	
101 1,2-Dichlorobenzene	146	23.104	23.103	0.001	89	2130		0.0371	
102 Dodecane	57		24.560					ND	
103 1,2,4-Trichlorobenzene	180	25.532	25.532	0.000	88	2611		0.0947	
104 Hexachlorobutadiene	225	25.719	25.724	-0.005	82	945		0.0277	
105 Naphthalene	128	25.996	25.996	0.000	97	6856		0.1167	
106 1,2,3-Trichlorobenzene	180	26.450	26.455	-0.005	87	1572		0.1099	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

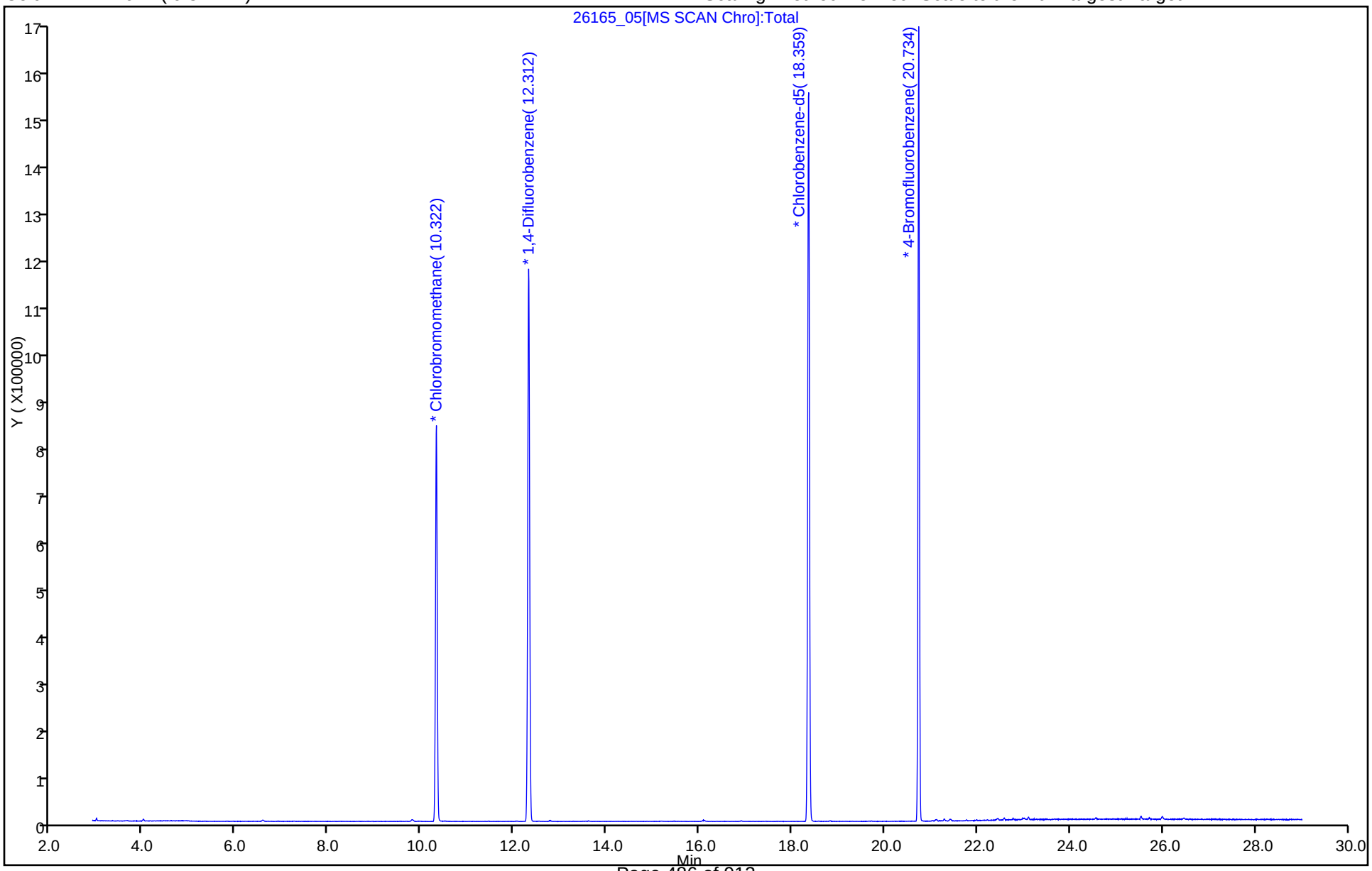
Report Date: 03-Aug-2017 11:10:01 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_05.D

Injection Date:	02-Aug-2017 13:13:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 200-25865-001.D BFB Injection Date: 07/11/2017

Instrument ID: CHG.i BFB Injection Time: 15:33

Analysis Batch No.: 118437

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.2	
75	30.0 - 66.0% of mass 95	49.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	74.0	
175	4.0 - 9.0 % of mass 174	5.1	(6.9) 1
176	93.0 - 101.0% of mass 174	72.2	(97.7) 1
177	5.0 - 9.0% of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-118437/3	200-25865-003.D	07/11/2017	17:26
	IC 200-118437/4	200-25865-004.D	07/11/2017	18:16
	IC 200-118437/5	200-25865-005.D	07/11/2017	19:07
	IC 200-118437/6	200-25865-006.D	07/11/2017	19:57
	ICIS 200-118437/7	200-25865-007.D	07/11/2017	20:48
	IC 200-118437/8	200-25865-008.D	07/11/2017	21:38
	IC 200-118437/9	200-25865-009.D	07/11/2017	22:29
	IC 200-118437/10	200-25865-010.D	07/11/2017	23:20
	ICV 200-118437/14	200-25865-014.D	07/12/2017	02:42

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 200-26195-001.D BFB Injection Date: 08/03/2017

Instrument ID: CHG.i BFB Injection Time: 10:10

Analysis Batch No.: 119318

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	23.1	
75	30.0 - 66.0% of mass 95	56.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.3	(0.5) 1
174	50.0 - 120.0% of mass 95	68.8	
175	4.0 - 9.0 % of mass 174	4.8	(7.0) 1
176	93.0 - 101.0% of mass 174	66.6	(96.9) 1
177	5.0 - 9.0% of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-119318/2	200-26195-002.D	08/03/2017	10:59
	MB 200-119318/4	200-26195-004.D	08/03/2017	12:40
	LCS 200-119318/7	200-26195-007.D	08/03/2017	15:28
2535	200-39198-9	200-26195-008.D	08/03/2017	16:28
3790	200-39198-10	200-26195-009.D	08/03/2017	17:19
4437	200-39198-11	200-26195-010.D	08/03/2017	18:11

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 25526-01.d BFB Injection Date: 06/19/2017

Instrument ID: CHW.i BFB Injection Time: 12:59

Analysis Batch No.: 117699

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.4	
75	30.0 - 66.0% of mass 95	48.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.6	(0.7) 1
174	50.0 - 120.0% of mass 95	85.8	
175	4.0 - 9.0 % of mass 174	6.4	(7.5) 1
176	93.0 - 101.0% of mass 174	82.5	(96.2) 1
177	5.0 - 9.0% of mass 176	5.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117699/3	25526-03.d	06/19/2017	14:42
	IC 200-117699/4	25526-04.d	06/19/2017	15:34
	IC 200-117699/5	25526-05.d	06/19/2017	16:26
	IC 200-117699/6	25526-06.d	06/19/2017	17:19
	ICIS 200-117699/7	25526-07.d	06/19/2017	18:11
	IC 200-117699/8	25526-08.d	06/19/2017	19:04
	IC 200-117699/9	25526-09.d	06/19/2017	19:56
	IC 200-117699/10	25526-10.d	06/19/2017	20:48
	ICV 200-117699/13	25526-13.d	06/19/2017	23:25

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 25849-01.d BFB Injection Date: 07/11/2017

Instrument ID: CHW.i BFB Injection Time: 09:33

Analysis Batch No.: 118406

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	22.0	
75	30.0 - 66.0% of mass 95	52.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.7	(0.8) 1
174	50.0 - 120.0% of mass 95	86.9	
175	4.0 - 9.0 % of mass 174	6.3	(7.2) 1
176	93.0 - 101.0% of mass 174	85.1	(98.0) 1
177	5.0 - 9.0% of mass 176	5.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118406/3	25849-03.d	07/11/2017	11:31
	LCS 200-118406/4	25849-04.d	07/11/2017	12:24
	MB 200-118406/5	25849-05.d	07/11/2017	13:17
5081	200-39198-1	25849-10.d	07/11/2017	17:58
4348	200-39198-2	25849-11.d	07/11/2017	19:11
5042	200-39198-3	25849-12.d	07/11/2017	20:21
4067	200-39198-4	25849-13.d	07/11/2017	21:32
4308	200-39198-5	25849-14.d	07/11/2017	22:42
4141	200-39198-6	25849-15.d	07/11/2017	23:51
3708	200-39198-7	25849-16.d	07/12/2017	01:02
2754	200-39198-8	25849-17.d	07/12/2017	02:12

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab File ID: 25955-01.d BFB Injection Date: 07/18/2017

Instrument ID: CHW.i BFB Injection Time: 13:59

Analysis Batch No.: 118667

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	22.9	
75	30.0 - 66.0% of mass 95	54.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.8	(0.9) 1
174	50.0 - 120.0% of mass 95	88.3	
175	4.0 - 9.0 % of mass 174	6.4	(7.3) 1
176	93.0 - 101.0% of mass 174	84.8	(96.0) 1
177	5.0 - 9.0% of mass 176	5.8	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118667/2	25955-02.d	07/18/2017	14:59
	MB 200-118667/4	25955-04.d	07/18/2017	16:45
	LCS 200-118667/5	25955-05.d	07/18/2017	17:38
5038	200-39198-12	25955-18.d	07/19/2017	08:29

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab File ID: 200-25865-001.D BFB Injection Date: 07/11/2017

Instrument ID: CHG.i BFB Injection Time: 15:33

Analysis Batch No.: 118437

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.2	
75	30.0 - 66.0% of mass 95	49.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	74.0	
175	4.0 - 9.0 % of mass 174	5.1	(6.9) 1
176	93.0 - 101.0% of mass 174	72.2	(97.7) 1
177	5.0 - 9.0% of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-118437/3	200-25865-003.D	07/11/2017	17:26
	IC 200-118437/4	200-25865-004.D	07/11/2017	18:16
	IC 200-118437/5	200-25865-005.D	07/11/2017	19:07
	IC 200-118437/6	200-25865-006.D	07/11/2017	19:57
	ICIS 200-118437/7	200-25865-007.D	07/11/2017	20:48
	IC 200-118437/8	200-25865-008.D	07/11/2017	21:38
	IC 200-118437/9	200-25865-009.D	07/11/2017	22:29
	IC 200-118437/10	200-25865-010.D	07/11/2017	23:20
	ICV 200-118437/14	200-25865-014.D	07/12/2017	02:42

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab File ID: 200-26195-001.D BFB Injection Date: 08/03/2017

Instrument ID: CHG.i BFB Injection Time: 10:10

Analysis Batch No.: 119318

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	23.1	
75	30.0 - 66.0% of mass 95	56.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.3	(0.5) 1
174	50.0 - 120.0% of mass 95	68.8	
175	4.0 - 9.0 % of mass 174	4.8	(7.0) 1
176	93.0 - 101.0% of mass 174	66.6	(96.9) 1
177	5.0 - 9.0% of mass 176	4.3	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-119318/2	200-26195-002.D	08/03/2017	10:59
	MB 200-119318/4	200-26195-004.D	08/03/2017	12:40
	LCS 200-119318/7	200-26195-007.D	08/03/2017	15:28
3346	200-39232-5	200-26195-012.D	08/03/2017	19:52
3419	200-39232-7	200-26195-014.D	08/03/2017	21:34
4925	200-39232-9	200-26195-016.D	08/03/2017	23:17
3259	200-39232-10	200-26195-017.D	08/04/2017	00:08
2515	200-39232-11	200-26195-018.D	08/04/2017	01:00
4344	200-39232-12	200-26195-019.D	08/04/2017	01:51

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab File ID: 25526-01.d BFB Injection Date: 06/19/2017

Instrument ID: CHW.i BFB Injection Time: 12:59

Analysis Batch No.: 117699

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.4	
75	30.0 - 66.0% of mass 95	48.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.6	(0.7) 1
174	50.0 - 120.0% of mass 95	85.8	
175	4.0 - 9.0 % of mass 174	6.4	(7.5) 1
176	93.0 - 101.0% of mass 174	82.5	(96.2) 1
177	5.0 - 9.0% of mass 176	5.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117699/3	25526-03.d	06/19/2017	14:42
	IC 200-117699/4	25526-04.d	06/19/2017	15:34
	IC 200-117699/5	25526-05.d	06/19/2017	16:26
	IC 200-117699/6	25526-06.d	06/19/2017	17:19
	ICIS 200-117699/7	25526-07.d	06/19/2017	18:11
	IC 200-117699/8	25526-08.d	06/19/2017	19:04
	IC 200-117699/9	25526-09.d	06/19/2017	19:56
	IC 200-117699/10	25526-10.d	06/19/2017	20:48
	ICV 200-117699/13	25526-13.d	06/19/2017	23:25

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab File ID: 25955-01.d BFB Injection Date: 07/18/2017

Instrument ID: CHW.i BFB Injection Time: 13:59

Analysis Batch No.: 118667

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	22.9	
75	30.0 - 66.0% of mass 95	54.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.8	(0.9) 1
174	50.0 - 120.0% of mass 95	88.3	
175	4.0 - 9.0 % of mass 174	6.4	(7.3) 1
176	93.0 - 101.0% of mass 174	84.8	(96.0) 1
177	5.0 - 9.0% of mass 176	5.8	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118667/2	25955-02.d	07/18/2017	14:59
	MB 200-118667/4	25955-04.d	07/18/2017	16:45
	LCS 200-118667/5	25955-05.d	07/18/2017	17:38
4376	200-39232-1	25955-19.d	07/19/2017	09:39
5114	200-39232-2	25955-20.d	07/19/2017	10:49
4439	200-39232-3	25955-21.d	07/19/2017	11:59
2538	200-39232-4	25955-22.d	07/19/2017	13:09

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Lab File ID: 25833_01.D BFB Injection Date: 07/10/2017

Instrument ID: CHX.i BFB Injection Time: 12:41

Analysis Batch No.: 118373

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.4	
75	30.0 - 66.0% of mass 95	48.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.7	(0.9) 1
174	50.0 - 120.0% of mass 95	77.3	
175	4.0 - 9.0 % of mass 174	5.6	(7.2) 1
176	93.0 - 101.0% of mass 174	75.1	(97.2) 1
177	5.0 - 9.0% of mass 176	4.7	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-118373/4	25833_04.D	07/10/2017	15:17
	IC 200-118373/5	25833_05.D	07/10/2017	16:07
	IC 200-118373/6	25833_06.D	07/10/2017	16:58
	IC 200-118373/7	25833_07.D	07/10/2017	17:48
	ICIS 200-118373/8	25833_08.D	07/10/2017	18:38
	IC 200-118373/9	25833_09.D	07/10/2017	19:28
	IC 200-118373/10	25833_10.D	07/10/2017	20:19
	IC 200-118373/11	25833_11.D	07/10/2017	21:09

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Lab File ID: 26065_01.D BFB Injection Date: 07/26/2017

Instrument ID: CHX.i BFB Injection Time: 10:02

Analysis Batch No.: 118979

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	20.2	
75	30.0 - 66.0% of mass 95	49.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.6	(0.8) 1
174	50.0 - 120.0% of mass 95	74.7	
175	4.0 - 9.0 % of mass 174	5.4	(7.2) 1
176	93.0 - 101.0% of mass 174	72.0	(96.4) 1
177	5.0 - 9.0% of mass 176	4.6	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118979/2	26065_02.D	07/26/2017	10:48
	LCS 200-118979/3	26065_03.D	07/26/2017	11:38
	MB 200-118979/4	26065_04.D	07/26/2017	12:29
2563	200-39423-10	26065_14.D	07/26/2017	21:45

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab File ID: 25833_01.D BFB Injection Date: 07/10/2017

Instrument ID: CHX.i BFB Injection Time: 12:41

Analysis Batch No.: 118373

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.4	
75	30.0 - 66.0% of mass 95	48.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.7	(0.9) 1
174	50.0 - 120.0% of mass 95	77.3	
175	4.0 - 9.0 % of mass 174	5.6	(7.2) 1
176	93.0 - 101.0% of mass 174	75.1	(97.2) 1
177	5.0 - 9.0% of mass 176	4.7	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-118373/4	25833_04.D	07/10/2017	15:17
	IC 200-118373/5	25833_05.D	07/10/2017	16:07
	IC 200-118373/6	25833_06.D	07/10/2017	16:58
	IC 200-118373/7	25833_07.D	07/10/2017	17:48
	ICIS 200-118373/8	25833_08.D	07/10/2017	18:38
	IC 200-118373/9	25833_09.D	07/10/2017	19:28
	IC 200-118373/10	25833_10.D	07/10/2017	20:19
	IC 200-118373/11	25833_11.D	07/10/2017	21:09
	ICV 200-118373/15	25833_15.D	07/11/2017	00:30

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab File ID: 26065_01.D BFB Injection Date: 07/26/2017

Instrument ID: CHX.i BFB Injection Time: 10:02

Analysis Batch No.: 118979

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	20.2	
75	30.0 - 66.0% of mass 95	49.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.6	(0.8) 1
174	50.0 - 120.0% of mass 95	74.7	
175	4.0 - 9.0 % of mass 174	5.4	(7.2) 1
176	93.0 - 101.0% of mass 174	72.0	(96.4) 1
177	5.0 - 9.0% of mass 176	4.6	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118979/2	26065_02.D	07/26/2017	10:48
	LCS 200-118979/3	26065_03.D	07/26/2017	11:38
	MB 200-118979/4	26065_04.D	07/26/2017	12:29
3659	200-39424-12	26065_13.D	07/26/2017	20:47

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab File ID: 25386_01.D BFB Injection Date: 06/07/2017

Instrument ID: CHC.i BFB Injection Time: 13:04

Analysis Batch No.: 117345

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	25.6	
75	30.0 - 66.0% of mass 95	53.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	79.8	
175	4.0 - 9.0 % of mass 174	5.8	(7.2) 1
176	93.0 - 101.0% of mass 174	77.6	(97.2) 1
177	5.0 - 9.0% of mass 176	5.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117345/3	25386_03.D	06/07/2017	14:43
	IC 200-117345/6	25386_06.D	06/07/2017	17:23
	ICIS 200-117345/7	25386_07.D	06/07/2017	18:16
	IC 200-117345/8	25386_08.D	06/07/2017	19:10
	IC 200-117345/9	25386_09.D	06/07/2017	20:03
	IC 200-117345/10	25386_10.D	06/07/2017	20:56
	IC 200-117345/17	25386_17.D	06/08/2017	09:08
	IC 200-117345/18	25386_18.D	06/08/2017	10:01
	ICV 200-117345/19	25386_19.D	06/08/2017	10:51

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab File ID: 26165_01.D BFB Injection Date: 08/02/2017

Instrument ID: CHC.i BFB Injection Time: 09:48

Analysis Batch No.: 119262

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	31.6	
75	30.0 - 66.0% of mass 95	59.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	76.0	
175	4.0 - 9.0 % of mass 174	5.3	(7.0) 1
176	93.0 - 101.0% of mass 174	74.8	(98.4) 1
177	5.0 - 9.0% of mass 176	5.0	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-119262/3	26165_03.D	08/02/2017	11:26
	LCS 200-119262/4	26165_04.D	08/02/2017	12:20
	MB 200-119262/5	26165_05.D	08/02/2017	13:13
4382	200-39486-1	26165_12.D	08/02/2017	19:53

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab File ID: 25406-01.D BFB Injection Date: 06/08/2017

Instrument ID: CHB.i BFB Injection Time: 15:13

Analysis Batch No.: 117412

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.2	
75	30.0 - 66.0% of mass 95	39.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	99.6	
175	4.0 - 9.0 % of mass 174	7.0	(7.0) 1
176	93.0 - 101.0% of mass 174	97.5	(97.9) 1
177	5.0 - 9.0% of mass 176	6.4	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117412/3	25406-03.D	06/08/2017	16:56
	IC 200-117412/4	25406-04.D	06/08/2017	17:49
	IC 200-117412/5	25406-05.D	06/08/2017	18:41
	IC 200-117412/6	25406-06.D	06/08/2017	19:34
	ICIS 200-117412/7	25406-07.D	06/08/2017	20:27
	IC 200-117412/8	25406-08.D	06/08/2017	21:20
	IC 200-117412/9	25406-09.D	06/08/2017	22:13
	IC 200-117412/17	25406-17.D	06/09/2017	10:03
	ICV 200-117412/19	25406-19.D	06/09/2017	12:24

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab File ID: 26148-01.D BFB Injection Date: 08/01/2017

Instrument ID: CHB.i BFB Injection Time: 10:15

Analysis Batch No.: 119211

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.4	
75	30.0 - 66.0% of mass 95	40.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	100.2	
175	4.0 - 9.0 % of mass 174	7.1	(7.1) 1
176	93.0 - 101.0% of mass 174	97.6	(97.4) 1
177	5.0 - 9.0% of mass 176	6.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-119211/2	26148-02.D	08/01/2017	11:06
	LCS 200-119211/3	26148-03.D	08/01/2017	11:58
	MB 200-119211/4	26148-04.D	08/01/2017	12:51
4794	200-39500-1	26148-23.D	08/02/2017	06:10

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab File ID: 25386_01.D BFB Injection Date: 06/07/2017

Instrument ID: CHC.i BFB Injection Time: 13:04

Analysis Batch No.: 117345

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	25.6	
75	30.0 - 66.0% of mass 95	53.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	79.8	
175	4.0 - 9.0 % of mass 174	5.8	(7.2) 1
176	93.0 - 101.0% of mass 174	77.6	(97.2) 1
177	5.0 - 9.0% of mass 176	5.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117345/3	25386_03.D	06/07/2017	14:43
	IC 200-117345/6	25386_06.D	06/07/2017	17:23
	ICIS 200-117345/7	25386_07.D	06/07/2017	18:16
	IC 200-117345/8	25386_08.D	06/07/2017	19:10
	IC 200-117345/9	25386_09.D	06/07/2017	20:03
	IC 200-117345/10	25386_10.D	06/07/2017	20:56
	IC 200-117345/17	25386_17.D	06/08/2017	09:08
	IC 200-117345/18	25386_18.D	06/08/2017	10:01
	ICV 200-117345/19	25386_19.D	06/08/2017	10:51

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab File ID: 26165_01.D BFB Injection Date: 08/02/2017

Instrument ID: CHC.i BFB Injection Time: 09:48

Analysis Batch No.: 119262

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	31.6	
75	30.0 - 66.0% of mass 95	59.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	76.0	
175	4.0 - 9.0 % of mass 174	5.3	(7.0) 1
176	93.0 - 101.0% of mass 174	74.8	(98.4) 1
177	5.0 - 9.0% of mass 176	5.0	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-119262/3	26165_03.D	08/02/2017	11:26
	LCS 200-119262/4	26165_04.D	08/02/2017	12:20
	MB 200-119262/5	26165_05.D	08/02/2017	13:13
4343	200-39531-3	26165_13.D	08/02/2017	20:51

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Sample No.: ICIS 200-118437/7 Date Analyzed: 07/11/2017 20:48

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-25865-007.D Heated Purge: (Y/N) N

Calibration ID: 37510

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		433066	9.50	2135591	11.41	1986498	17.37
UPPER LIMIT		606292	9.83	2989827	11.74	2781097	17.70
LOWER LIMIT		259840	9.17	1281355	11.08	1191899	17.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-118437/14		473792	9.50	2364687	11.41	2238205	17.37

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Sample No.: CCVIS 200-119318/2 Date Analyzed: 08/03/2017 10:59

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-26195-002.D Heated Purge: (Y/N) N

Calibration ID: 37510

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		349729	9.50	1835101	11.40	1653197	17.36
UPPER LIMIT		489621	9.83	2569141	11.73	2314476	17.69
LOWER LIMIT		209837	9.17	1101061	11.07	991918	17.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-119318/4		339321	9.48	1923248	11.38	1684089	17.35
LCS 200-119318/7		342125	9.48	1795625	11.39	1641148	17.35
200-39198-9	2535	325635	9.48	1818627	11.39	1616017	17.35
200-39198-10	3790	331723	9.48	1823043	11.39	1610099	17.35
200-39198-11	4437	333909	9.48	1802544	11.39	1572863	17.35

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Sample No.: ICIS 200-117699/7 Date Analyzed: 06/19/2017 18:11

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25526-07.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		204313	12.63	1027163	14.34	989484	19.83
UPPER LIMIT		286038	12.96	1438028	14.67	1385278	20.16
LOWER LIMIT		122588	12.30	616298	14.01	593690	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117699/13		273297	12.64	1348834	14.34	1232220	19.84

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Sample No.: CCVIS 200-118406/3 Date Analyzed: 07/11/2017 11:31

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25849-03.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		195721	12.63	994818	14.34	901657	19.83
UPPER LIMIT		274009	12.96	1392745	14.67	1262320	20.16
LOWER LIMIT		117433	12.30	596891	14.01	540994	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118406/4		197709	12.63	988295	14.34	918475	19.83
MB 200-118406/5		189480	12.63	992159	14.34	857203	19.83
200-39198-1	5081	137759	12.63	721310	14.34	626147	19.83
200-39198-2	4348	134205	12.63	683521	14.34	627530	19.84
200-39198-3	5042	134003	12.64	686565	14.34	593584	19.83
200-39198-4	4067	145372	12.63	759026	14.34	663633	19.83
200-39198-5	4308	128338	12.63	645874	14.34	567861	19.83
200-39198-6	4141	128510	12.63	642834	14.34	559577	19.83
200-39198-7	3708	123579	12.63	631187	14.34	550719	19.84
200-39198-8	2754	123443	12.63	630869	14.34	551646	19.84

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Sample No.: CCVIS 200-118667/2 Date Analyzed: 07/18/2017 14:59

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25955-02.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		152197	12.64	765554	14.34	707072	19.83
UPPER LIMIT		213076	12.97	1071776	14.67	989901	20.16
LOWER LIMIT		91318	12.31	459332	14.01	424243	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-118667/4		161096	12.63	814846	14.34	708783	19.83
LCS 200-118667/5		158582	12.63	805612	14.34	744423	19.83
200-39198-12	5038	112626	12.63	567606	14.34	496652	19.84

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Sample No.: ICIS 200-118437/7 Date Analyzed: 07/11/2017 20:48

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-25865-007.D Heated Purge: (Y/N) N

Calibration ID: 37510

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		433066	9.50	2135591	11.41	1986498	17.37
UPPER LIMIT		606292	9.83	2989827	11.74	2781097	17.70
LOWER LIMIT		259840	9.17	1281355	11.08	1191899	17.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-118437/14		473792	9.50	2364687	11.41	2238205	17.37

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Sample No.: CCVIS 200-119318/2 Date Analyzed: 08/03/2017 10:59

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-26195-002.D Heated Purge: (Y/N) N

Calibration ID: 37510

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		349729	9.50	1835101	11.40	1653197	17.36
UPPER LIMIT		489621	9.83	2569141	11.73	2314476	17.69
LOWER LIMIT		209837	9.17	1101061	11.07	991918	17.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-119318/4		339321	9.48	1923248	11.38	1684089	17.35
LCS 200-119318/7		342125	9.48	1795625	11.39	1641148	17.35
200-39232-5	3346	323010	9.48	1679272	11.38	1473233	17.35
200-39232-7	3419	317868	9.48	1665390	11.39	1463813	17.35
200-39232-9	4925	306291	9.48	1547541	11.38	1434314	17.35
200-39232-10	3259	309763	9.48	1601105	11.39	1403893	17.35
200-39232-11	2515	310216	9.48	1601051	11.39	1398381	17.35
200-39232-12	4344	308644	9.48	1583923	11.38	1363407	17.35

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Sample No.: ICIS 200-117699/7 Date Analyzed: 06/19/2017 18:11

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25526-07.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		204313	12.63	1027163	14.34	989484	19.83
UPPER LIMIT		286038	12.96	1438028	14.67	1385278	20.16
LOWER LIMIT		122588	12.30	616298	14.01	593690	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117699/13		273297	12.64	1348834	14.34	1232220	19.84

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Sample No.: CCVIS 200-118667/2 Date Analyzed: 07/18/2017 14:59

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25955-02.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		152197	12.64	765554	14.34	707072	19.83
UPPER LIMIT		213076	12.97	1071776	14.67	989901	20.16
LOWER LIMIT		91318	12.31	459332	14.01	424243	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-118667/4		161096	12.63	814846	14.34	708783	19.83
LCS 200-118667/5		158582	12.63	805612	14.34	744423	19.83
200-39232-1	4376	113155	12.63	565872	14.34	496990	19.84
200-39232-2	5114	113543	12.63	568752	14.34	498369	19.83
200-39232-3	4439	111342	12.63	561491	14.34	486620	19.84
200-39232-4	2538	109837	12.63	552331	14.34	483853	19.83

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Sample No.: CCVIS 200-118979/2 Date Analyzed: 07/26/2017 10:48

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 26065_02.D Heated Purge: (Y/N) N

Calibration ID: 37504

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		219674	10.23	1220615	12.32	1096356	18.65
UPPER LIMIT		307544	10.56	1708861	12.65	1534898	18.98
LOWER LIMIT		131804	9.90	732369	11.99	657814	18.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118979/3		236402	10.24	1309259	12.32	1198598	18.65
MB 200-118979/4		229705	10.23	1313340	12.32	1145259	18.65
200-39423-10	2563	284161	10.23	1683272	12.32	1530541	18.65

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Sample No.: ICIS 200-118373/8 Date Analyzed: 07/10/2017 18:38

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25833_08.D Heated Purge: (Y/N) N

Calibration ID: 37504

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		263752	10.24	1460225	12.33	1369325	18.65
UPPER LIMIT		369253	10.57	2044315	12.66	1917055	18.98
LOWER LIMIT		158251	9.91	876135	12.00	821595	18.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-118373/15		278127	10.24	1551870	12.33	1393390	18.66

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Sample No.: CCVIS 200-118979/2 Date Analyzed: 07/26/2017 10:48

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 26065_02.D Heated Purge: (Y/N) N

Calibration ID: 37504

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		219674	10.23	1220615	12.32	1096356	18.65
UPPER LIMIT		307544	10.56	1708861	12.65	1534898	18.98
LOWER LIMIT		131804	9.90	732369	11.99	657814	18.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118979/3		236402	10.24	1309259	12.32	1198598	18.65
MB 200-118979/4		229705	10.23	1313340	12.32	1145259	18.65
200-39424-12	3659	270866	10.23	1621317	12.32	1462574	18.65

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Sample No.: ICIS 200-117345/7 Date Analyzed: 06/07/2017 18:16

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25386_07.D Heated Purge: (Y/N) N

Calibration ID: 37350

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		248981	10.33	1303968	12.33	1426303	18.37
UPPER LIMIT		348573	10.66	1825555	12.66	1996824	18.70
LOWER LIMIT		149389	10.00	782381	12.00	855782	18.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117345/19		292319	10.33	1540250	12.33	1448718	18.37

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Sample No.: CCVIS 200-119262/3 Date Analyzed: 08/02/2017 11:26

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 26165_03.D Heated Purge: (Y/N) N

Calibration ID: 37350

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		186355	10.33	1022952	12.32	1004607	18.36
UPPER LIMIT		260897	10.66	1432133	12.65	1406450	18.69
LOWER LIMIT		111813	10.00	613771	11.99	602764	18.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-119262/4		218146	10.33	1150544	12.32	1121991	18.36
MB 200-119262/5		226632	10.32	1217493	12.31	1074757	18.36
200-39486-1	4382	179384	10.32	998139	12.31	919040	18.36

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Sample No.: ICIS 200-117412/7 Date Analyzed: 06/08/2017 20:27

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25406-07.D Heated Purge: (Y/N) N

Calibration ID: 37388

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		266084	9.72	1292169	11.12	1160346	15.23
UPPER LIMIT		372518	10.05	1809037	11.45	1624484	15.56
LOWER LIMIT		159650	9.39	775301	10.79	696208	14.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117412/19		309106	9.72	1514922	11.13	1348144	15.23

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Sample No.: CCVIS 200-119211/2 Date Analyzed: 08/01/2017 11:06

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 26148-02.D Heated Purge: (Y/N) N

Calibration ID: 37388

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		281923	9.72	1372132	11.12	1291007	15.23
UPPER LIMIT		394692	10.05	1920985	11.45	1807410	15.56
LOWER LIMIT		169154	9.39	823279	10.79	774604	14.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-119211/3		280830	9.72	1360564	11.12	1282305	15.23
MB 200-119211/4		272880	9.72	1346242	11.12	1121993	15.22
200-39500-1	4794	298989	9.72	1504284	11.12	1181684	15.22

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Sample No.: ICIS 200-117345/7 Date Analyzed: 06/07/2017 18:16

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25386_07.D Heated Purge: (Y/N) N

Calibration ID: 37350

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		248981	10.33	1303968	12.33	1426303	18.37
UPPER LIMIT		348573	10.66	1825555	12.66	1996824	18.70
LOWER LIMIT		149389	10.00	782381	12.00	855782	18.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117345/19		292319	10.33	1540250	12.33	1448718	18.37

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Sample No.: CCVIS 200-119262/3 Date Analyzed: 08/02/2017 11:26

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 26165_03.D Heated Purge: (Y/N) N

Calibration ID: 37350

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		186355	10.33	1022952	12.32	1004607	18.36
UPPER LIMIT		260897	10.66	1432133	12.65	1406450	18.69
LOWER LIMIT		111813	10.00	613771	11.99	602764	18.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-119262/4		218146	10.33	1150544	12.32	1121991	18.36
MB 200-119262/5		226632	10.32	1217493	12.31	1074757	18.36
200-39531-3	4343	182831	10.32	1002949	12.31	928462	18.35

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5081 Lab Sample ID: 200-39198-1

Matrix: Air Lab File ID: 25849-10.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 17:58

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5081 Lab Sample ID: 200-39198-1

Matrix: Air Lab File ID: 25849-10.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 17:58

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5081 Lab Sample ID: 200-39198-1

Matrix: Air Lab File ID: 25849-10.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 17:58

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-10.d
Lims ID: 200-39198-A-1
Client ID: 5081
Sample Type: Client
Inject. Date: 11-Jul-2017 17:58:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-010
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:33:55

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.260				ND	
	2 Dichlorodifluoromethane	85		5.367				ND	
	3 Chlorodifluoromethane	51		5.452				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
	5 Chloromethane	50		5.977				ND	
	6 Butane	43		6.244				ND	
	7 Vinyl chloride	62		6.298				ND	
	8 Butadiene	54		6.394				ND	
	10 Bromomethane	94		7.196				ND	
	11 Chloroethane	64		7.448				ND	
	13 Vinyl bromide	106		7.860				ND	
	14 Trichlorofluoromethane	101		7.951				ND	
	17 Ethanol	45		8.454				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
	21 1,1-Dichloroethene	96		9.026				ND	
	22 Acetone	43		9.219				ND	
	23 Carbon disulfide	76		9.422				ND	
	24 Isopropyl alcohol	45	9.443	9.422	0.021	96	8486	0.2109	
	25 3-Chloro-1-propene	41		9.721				ND	
	27 Methylene Chloride	49	9.994	9.989	0.005	93	2113	0.0741	
	28 2-Methyl-2-propanol	59		10.112				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	29 Methyl tert-butyl ether	73		10.326				ND	
	31 trans-1,2-Dichloroethene	61		10.385				ND	
	33 Hexane	57		10.716				ND	
	34 1,1-Dichloroethane	63		11.193				ND	
	35 Vinyl acetate	43		11.214				ND	
	37 cis-1,2-Dichloroethene	96		12.204				ND	
	38 2-Butanone (MEK)	72		12.220				ND	
	39 Ethyl acetate	88		12.225				ND	
	41 Tetrahydrofuran	42		12.626				ND	
*	40 Chlorobromomethane	128	12.632	12.632	0.000	97	137759	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.344	14.344	0.000	96	721310	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.832	19.832	0.000	90	626147	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

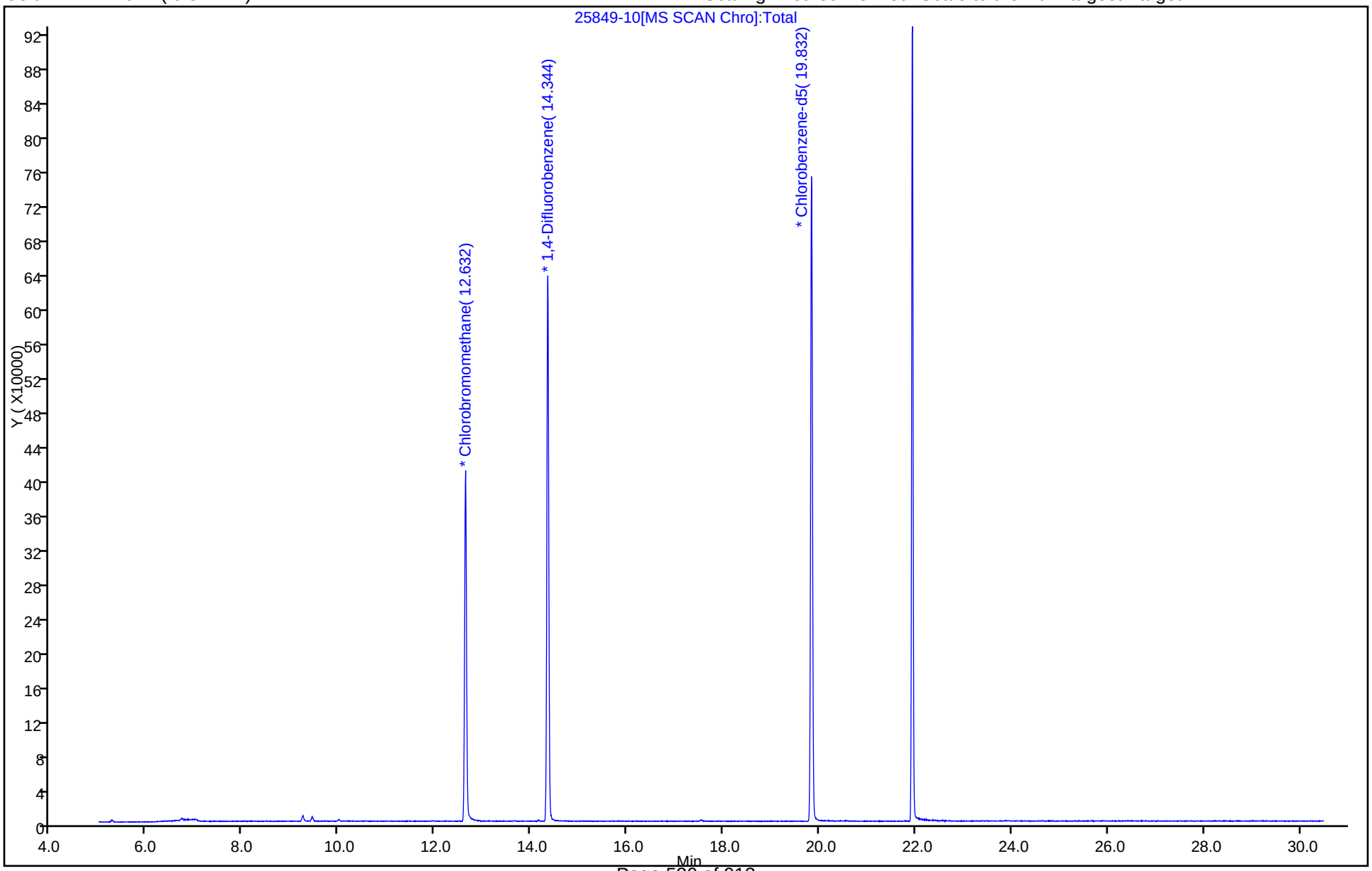
Report Date: 20-Jul-2017 14:33:56 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-10.d

Injection Date:	11-Jul-2017 17:58:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-1	Lab Sample ID:	200-39198-1	Worklist Smp#:	10
Client ID:	5081				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4348 | Lab Sample ID: 200-39198-2

Matrix: Air | Lab File ID: 25849-11.d

Analysis Method: TO-15 | Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/11/2017 19:11

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118406 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.30		0.10	0.10
75-45-6	Freon 22	0.38		0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.46		0.10	0.10
106-97-8	n-Butane	0.11		0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.17		0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.058		0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	3.7		1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.53		0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.044		0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.21		0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.059		0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4348 Lab Sample ID: 200-39198-2

Matrix: Air Lab File ID: 25849-11.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 19:11

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.052		0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4348 Lab Sample ID: 200-39198-2

Matrix: Air Lab File ID: 25849-11.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 19:11

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d
Lims ID: 200-39198-A-2
Client ID: 4348
Sample Type: Client
Inject. Date: 11-Jul-2017 19:11:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-011
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:34:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	5.254	5.260	-0.006	70	9051	0.7384	
2 Dichlorodifluoromethane	85	5.367	5.367	0.000	99	76782	1.52	
3 Chlorodifluoromethane	51	5.447	5.452	-0.005	97	52809	1.90	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50	5.971	5.977	-0.006	99	37715	2.31	
6 Butane	43	6.244	6.244	0.000	97	16929	0.5361	
7 Vinyl chloride	62		6.298				ND	
8 Butadiene	54		6.394				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.448				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101	7.945	7.951	-0.006	98	46027	0.8510	
17 Ethanol	45	8.464	8.454	0.010	98	24451	2.41	
20 1,1,2-Trichloro-1,2,2-trif	101	8.951	8.956	-0.005	94	13118	0.2911	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43	9.213	9.219	-0.006	98	641097	18.7	
23 Carbon disulfide	76		9.422				ND	
24 Isopropyl alcohol	45	9.427	9.422	0.005	100	30447	0.7768	
25 3-Chloro-1-propene	41		9.721				ND	
27 Methylene Chloride	49	9.984	9.989	-0.005	99	74048	2.67	
28 2-Methyl-2-propanol	59	10.123	10.112	0.011	94	4270	0.0867	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.326				ND	
31 trans-1,2-Dichloroethene	61		10.385				ND	
33 Hexane	57	10.711	10.716	-0.005	93	8432	0.2193	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.214				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72	12.225	12.220	0.005	98	14215	1.07	
39 Ethyl acetate	88		12.225				ND	
41 Tetrahydrofuran	42		12.626				ND	
* 40 Chlorobromomethane	128	12.632	12.632	0.000	96	134205	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	12.723	12.723	0.000	95	4060	0.0826	
	43 Cyclohexane	84	13.193	12.990	0.203	1	175	0.005073	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117	13.231	13.231	0.000	94	13901	0.2930	
	46 Isooctane	57	13.589	13.584	0.005	95	4960	0.0375	
	47 Benzene	78	13.648	13.648	0.000	98	21127	0.2596	
	48 1,2-Dichloroethane	62	13.787	13.798	-0.011	86	1382	0.0435	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.344	14.344	0.000	96	683521	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92	17.109	17.109	0.000	92	7887	0.1365	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43	18.580	18.372	0.208	43	12139	0.2031	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.838	19.832	0.006	90	627530	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91	20.255	20.020	0.235	93	2090	0.0171	
S	73 Xylenes, Total	106				0		0.0270	
	78 m-Xylene & p-Xylene	106	20.260	20.250	0.010	0	662	0.0140	
	79 o-Xylene	106	20.999	20.999	0.000	1	594	0.0130	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91	22.577	22.443	0.134	62	1903	0.0163	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105	23.224	23.080	0.144	57	5063	0.0456	
	94 sec-Butylbenzene	105	23.224	23.304	-0.080	60	5063	0.0308	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146	23.700	23.556	0.144	87	1223	0.0171	
	97 1,4-Dichlorobenzene	146	23.700	23.695	0.005	84	1223	0.0181	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

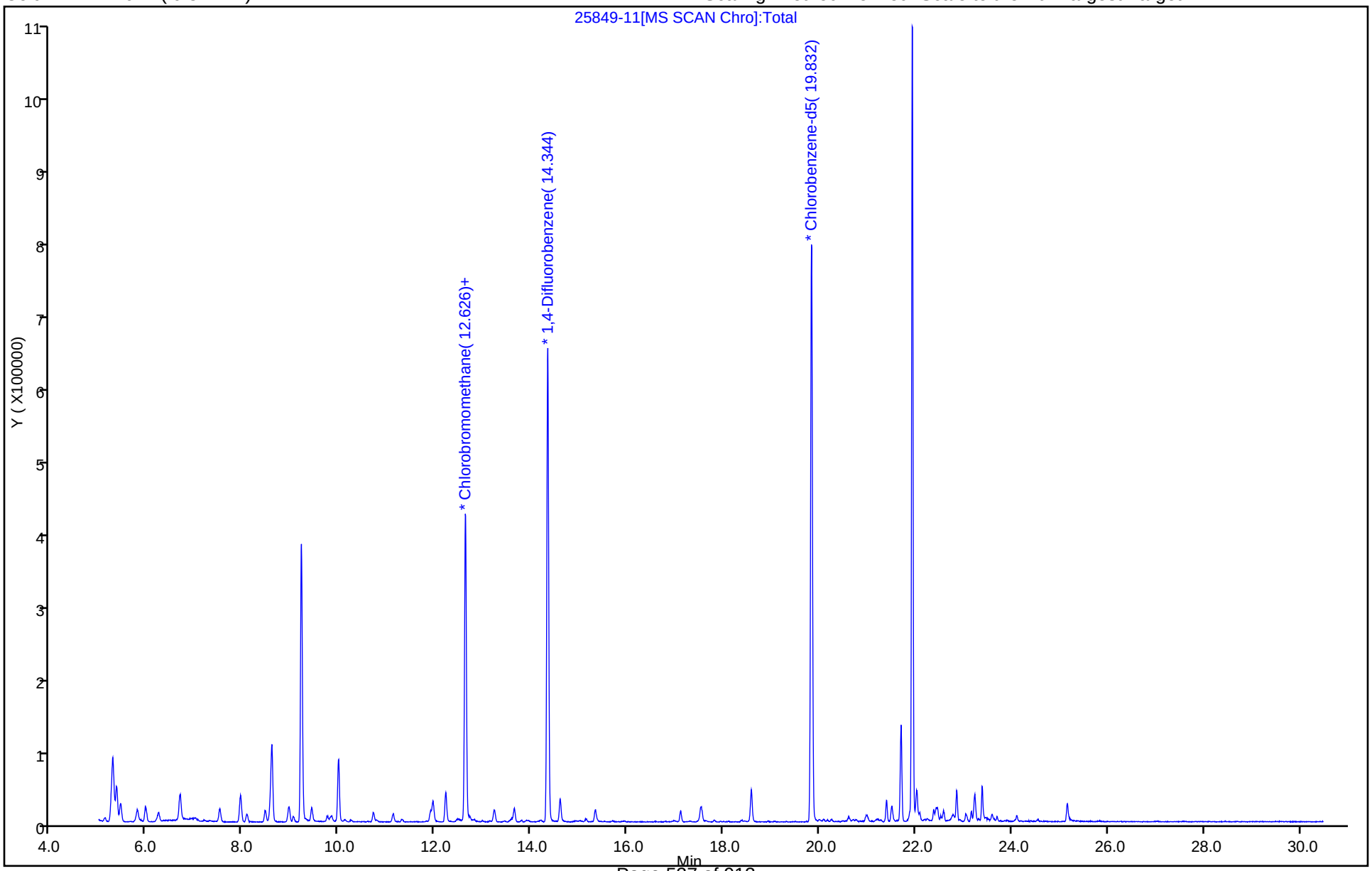
Report Date: 20-Jul-2017 14:34:11 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2	Worklist Smp#:	11
Client ID:	4348				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



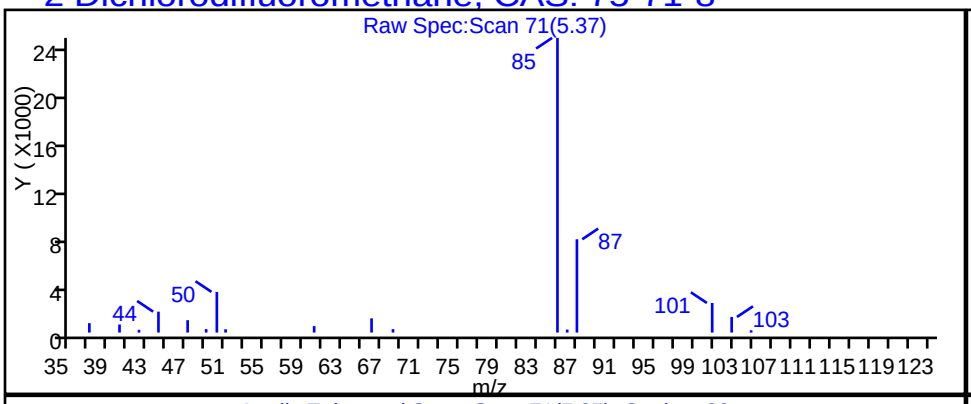
Report Date: 20-Jul-2017 14:34:11 Chrom Revision: 2.2 26-Jun-2017 09:07:56

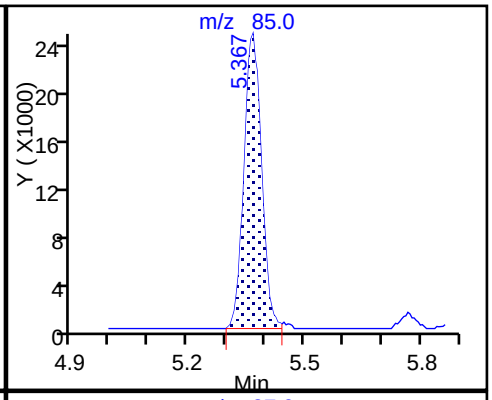
TestAmerica Burlington

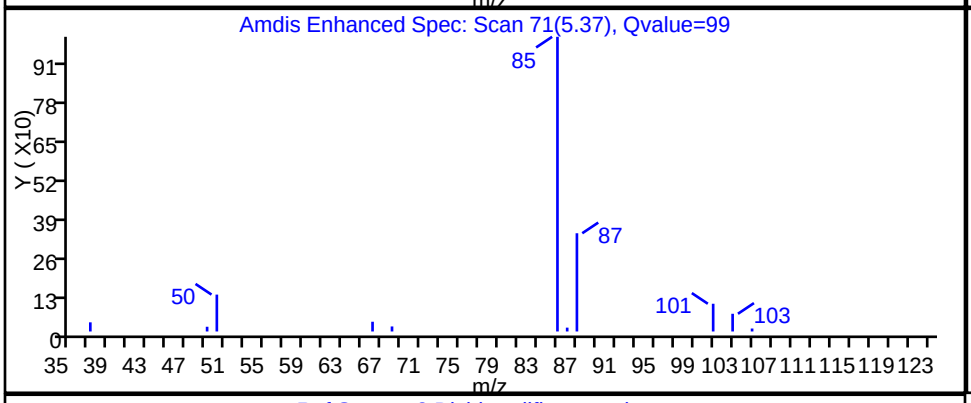
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

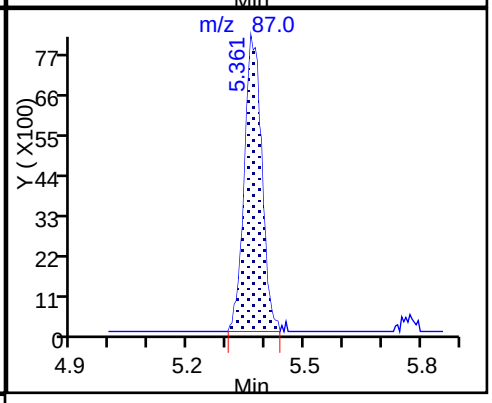
Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

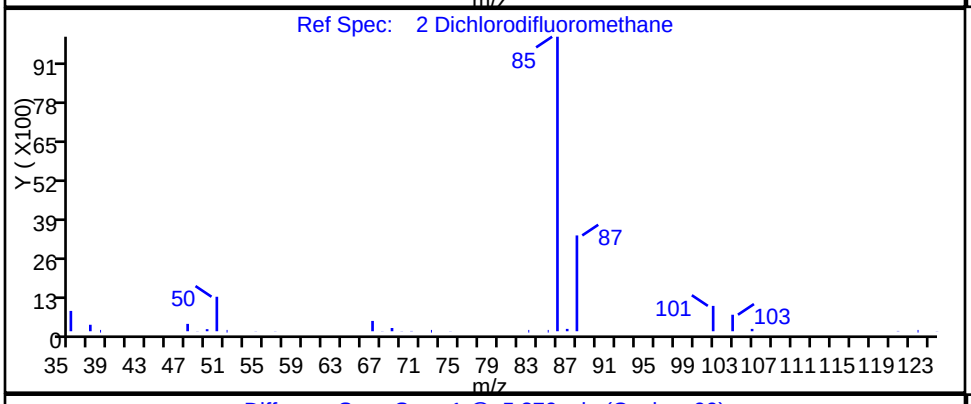
2 Dichlorodifluoromethane, CAS: 75-71-8

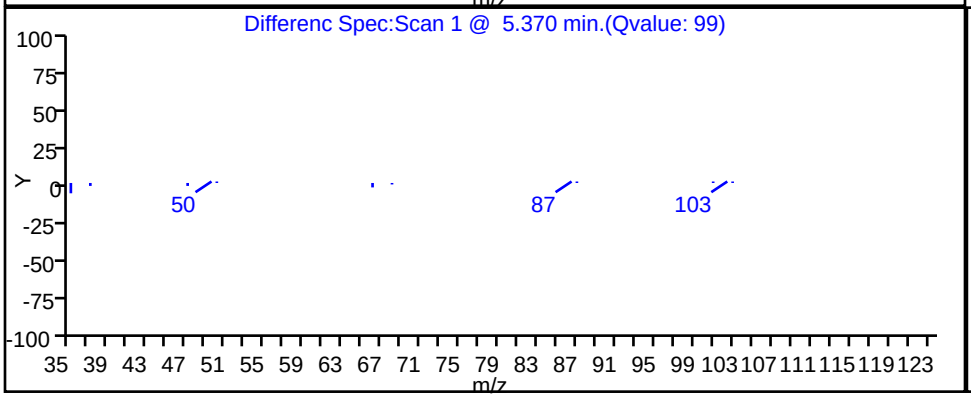


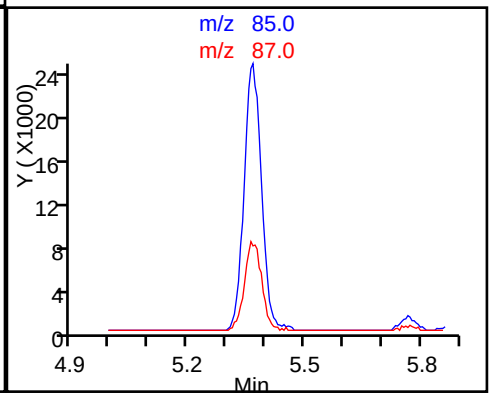












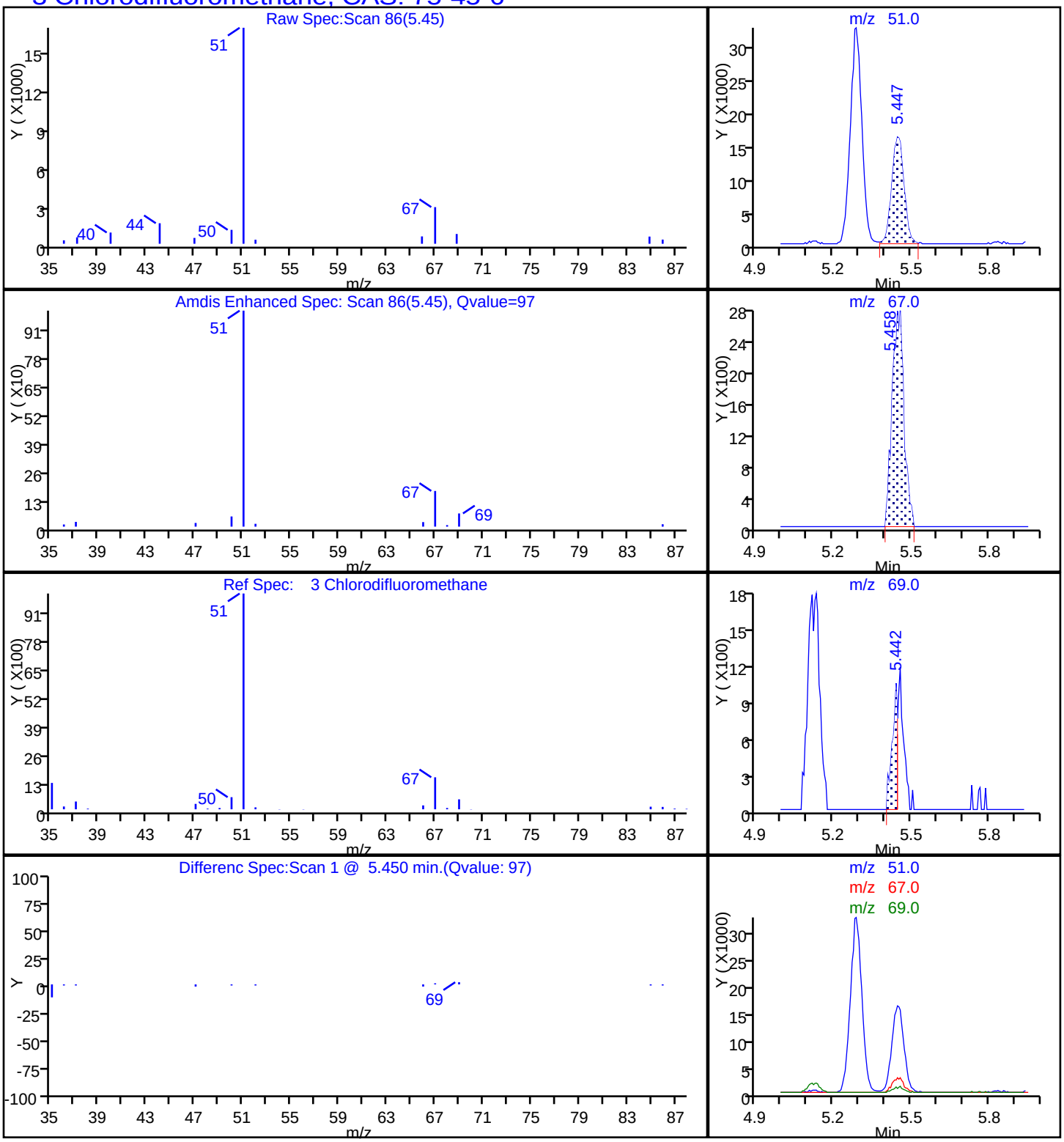
Report Date: 20-Jul-2017 14:34:11 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6



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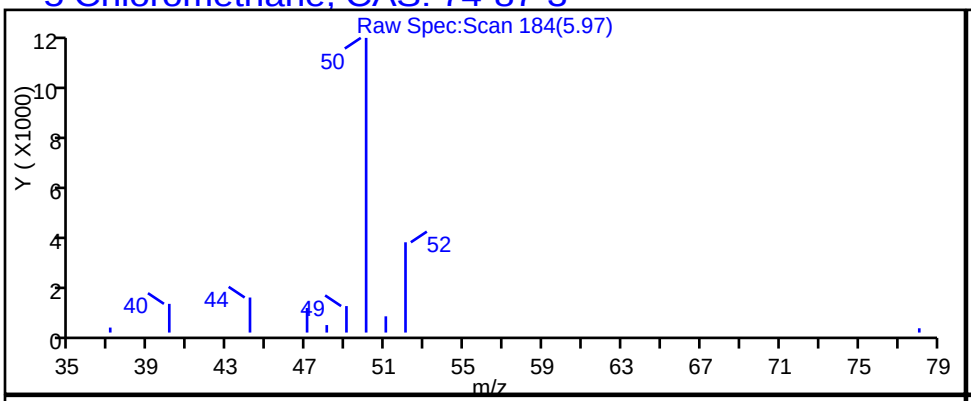
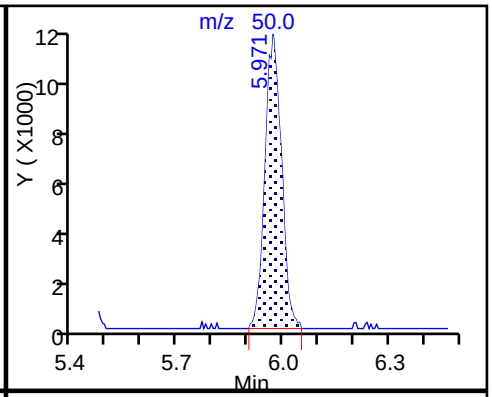
TestAmerica Burlington

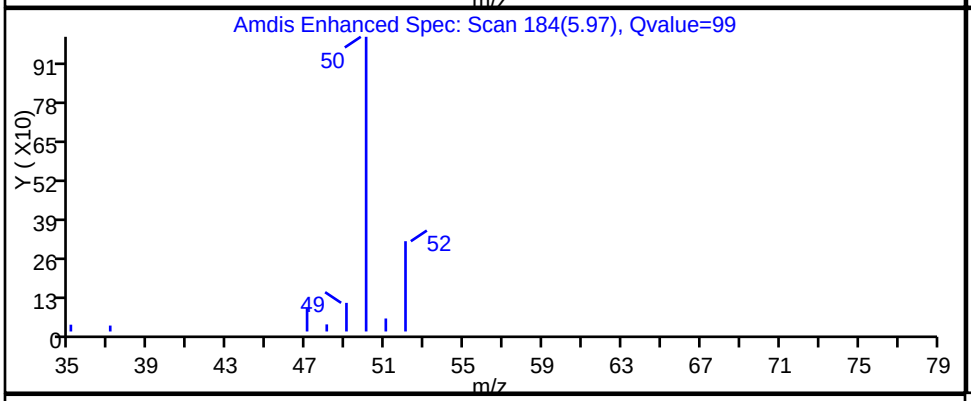
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

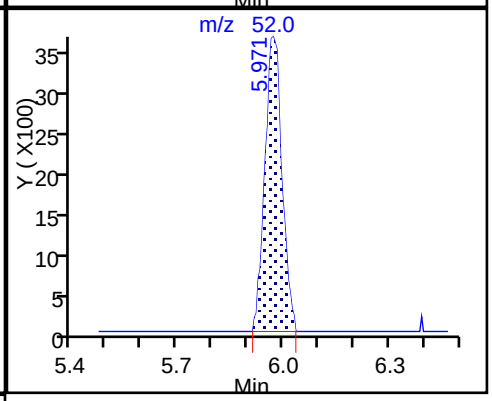
Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

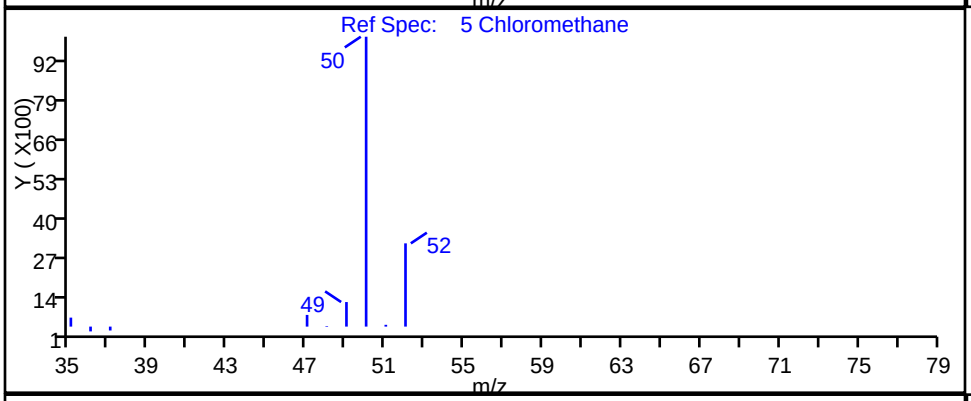
5 Chloromethane, CAS: 74-87-3

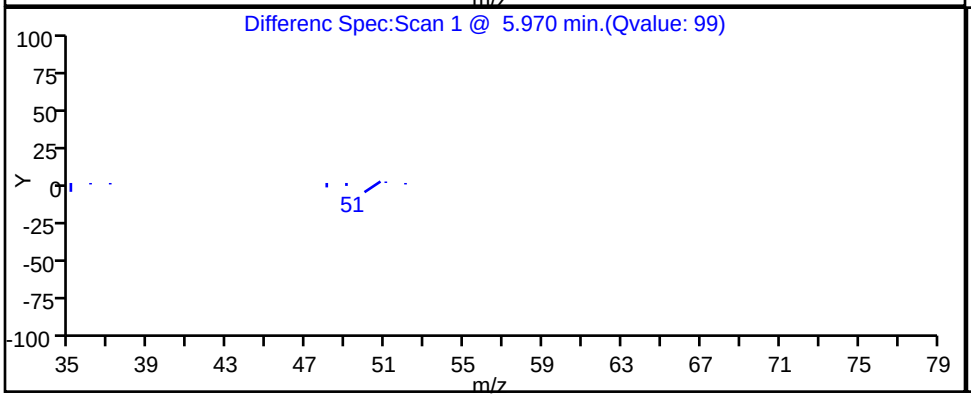


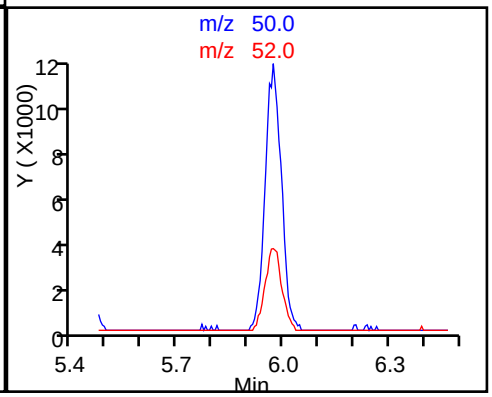












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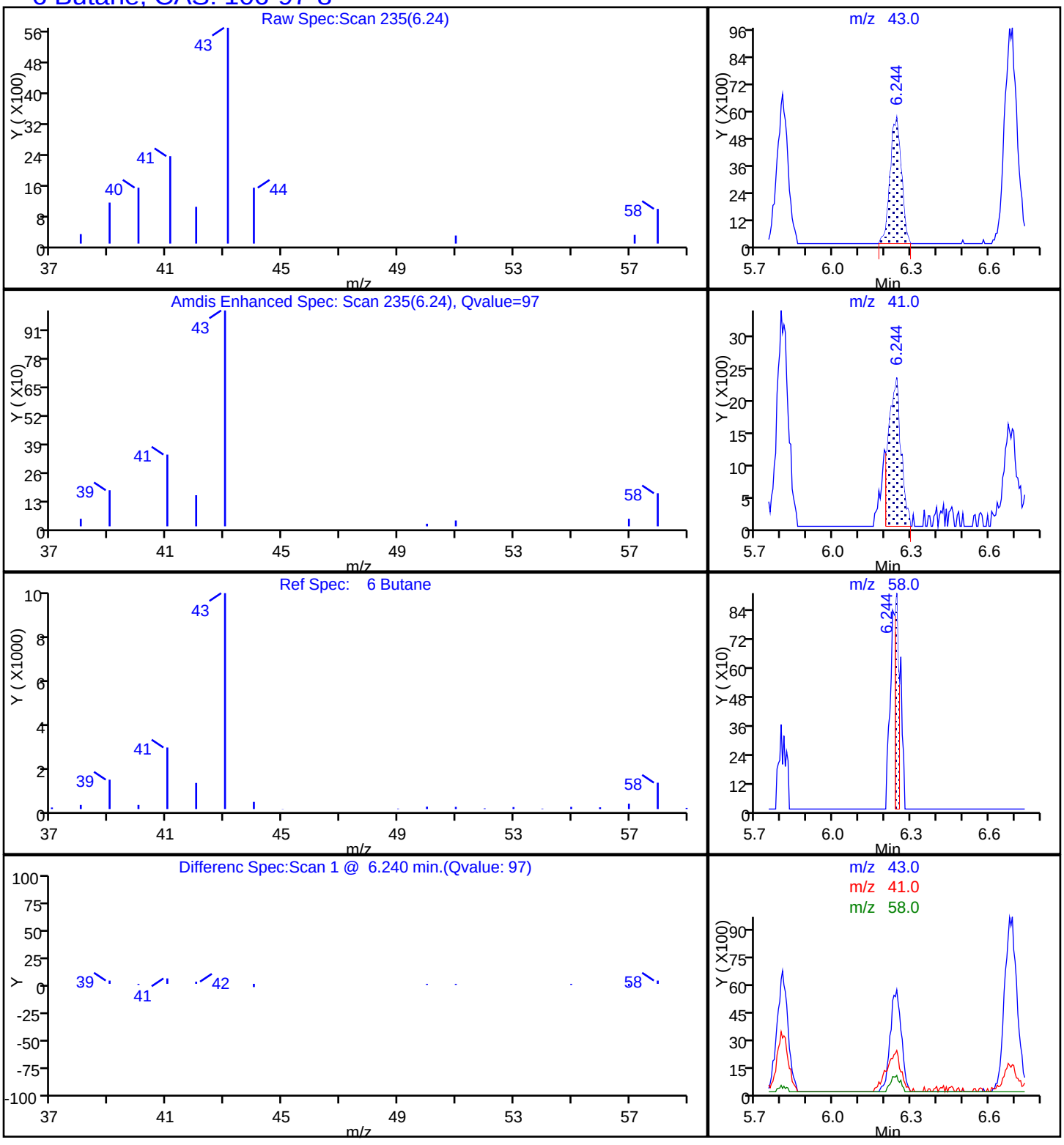
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8



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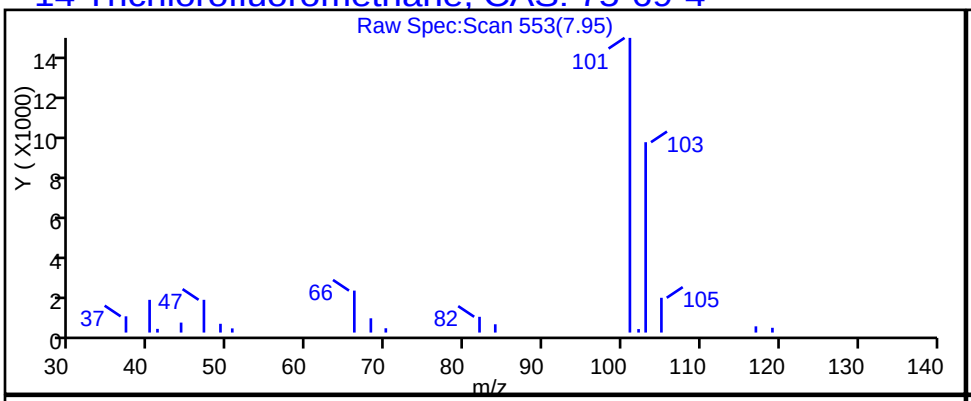
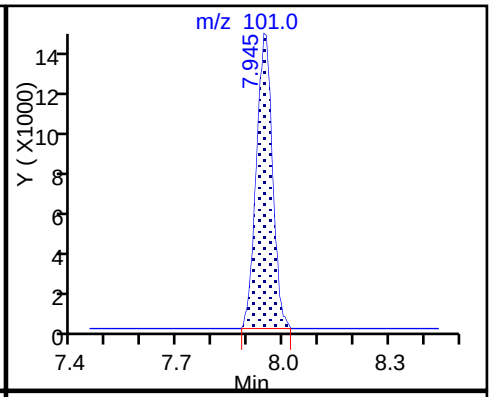
TestAmerica Burlington

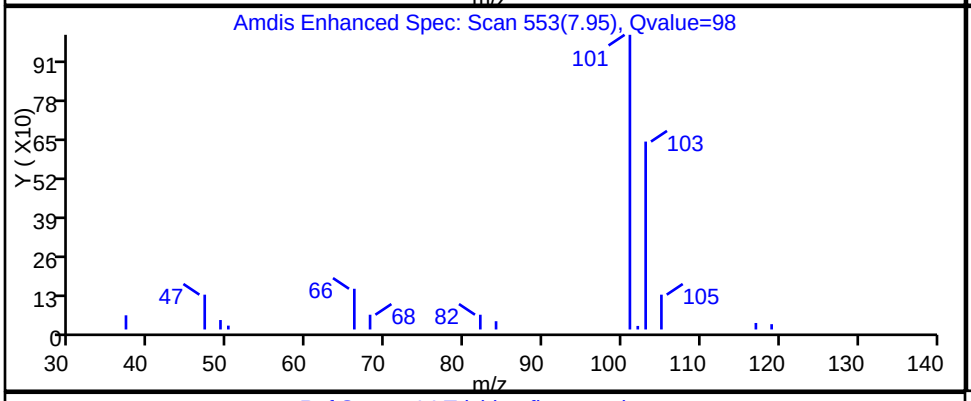
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

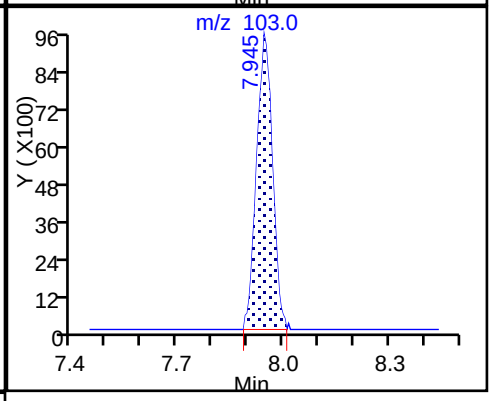
Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

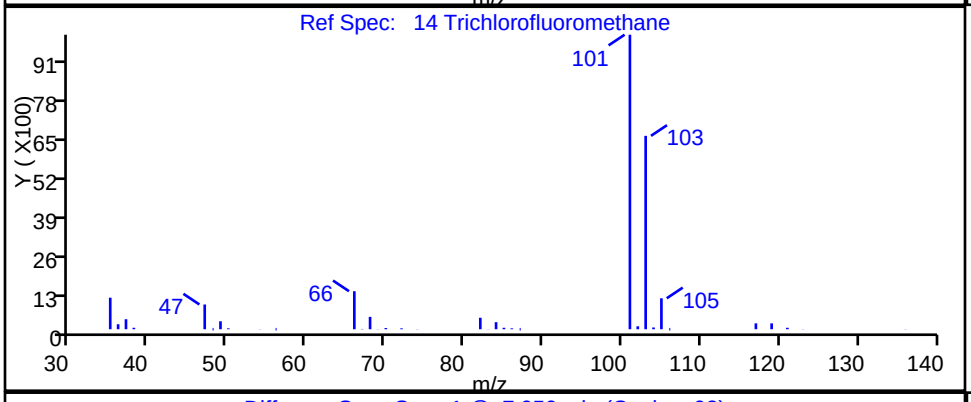
14 Trichlorofluoromethane, CAS: 75-69-4

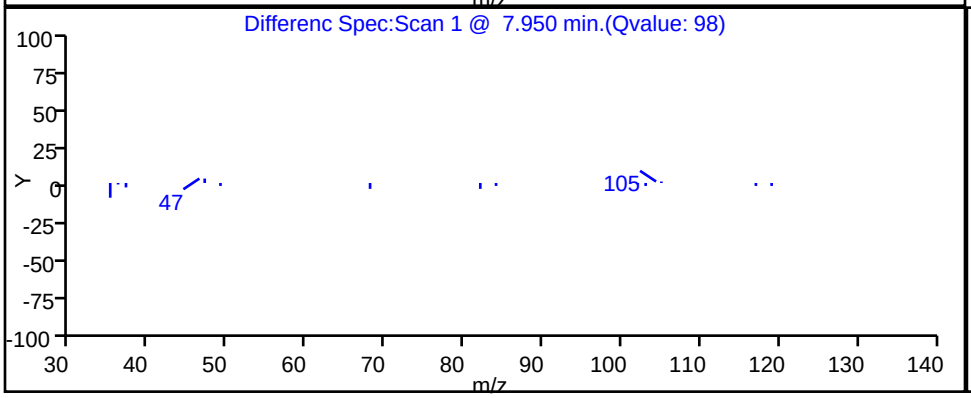


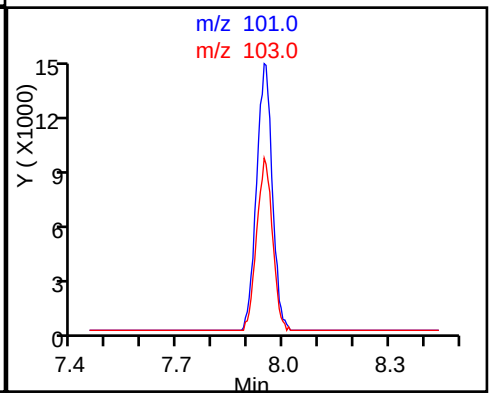












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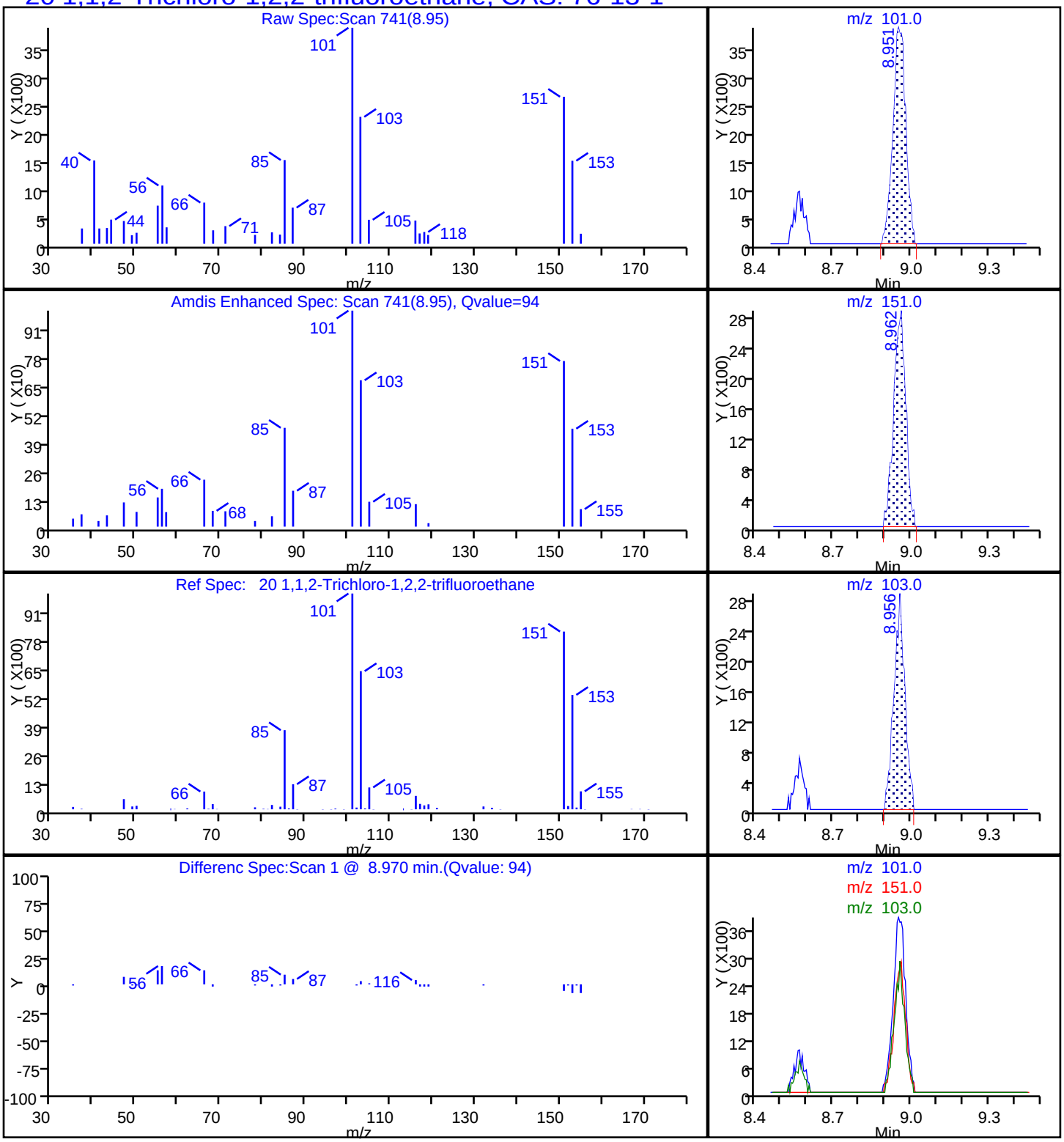
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



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TestAmerica Burlington

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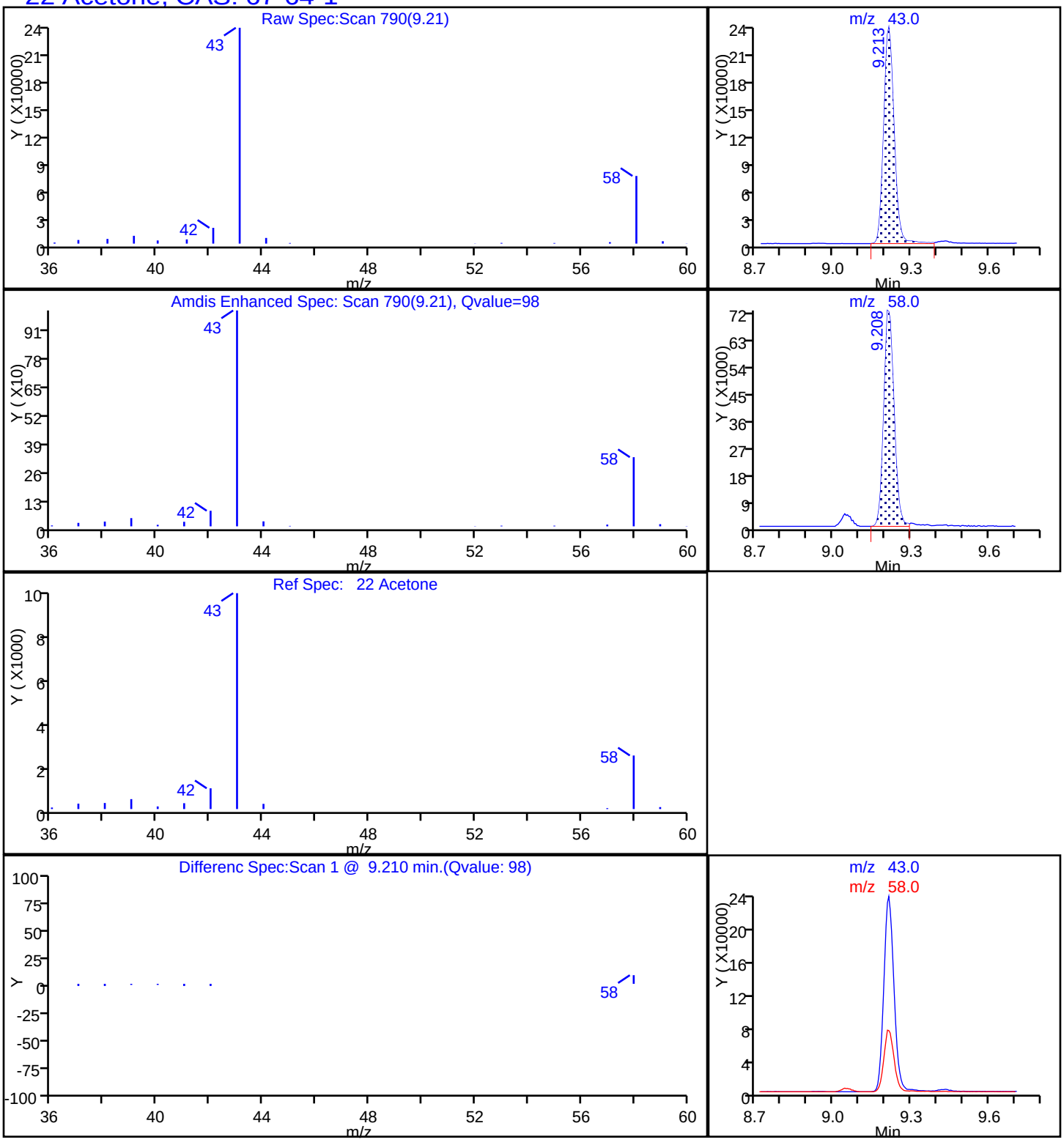
Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1



Report Date: 20-Jul-2017 14:34:11 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

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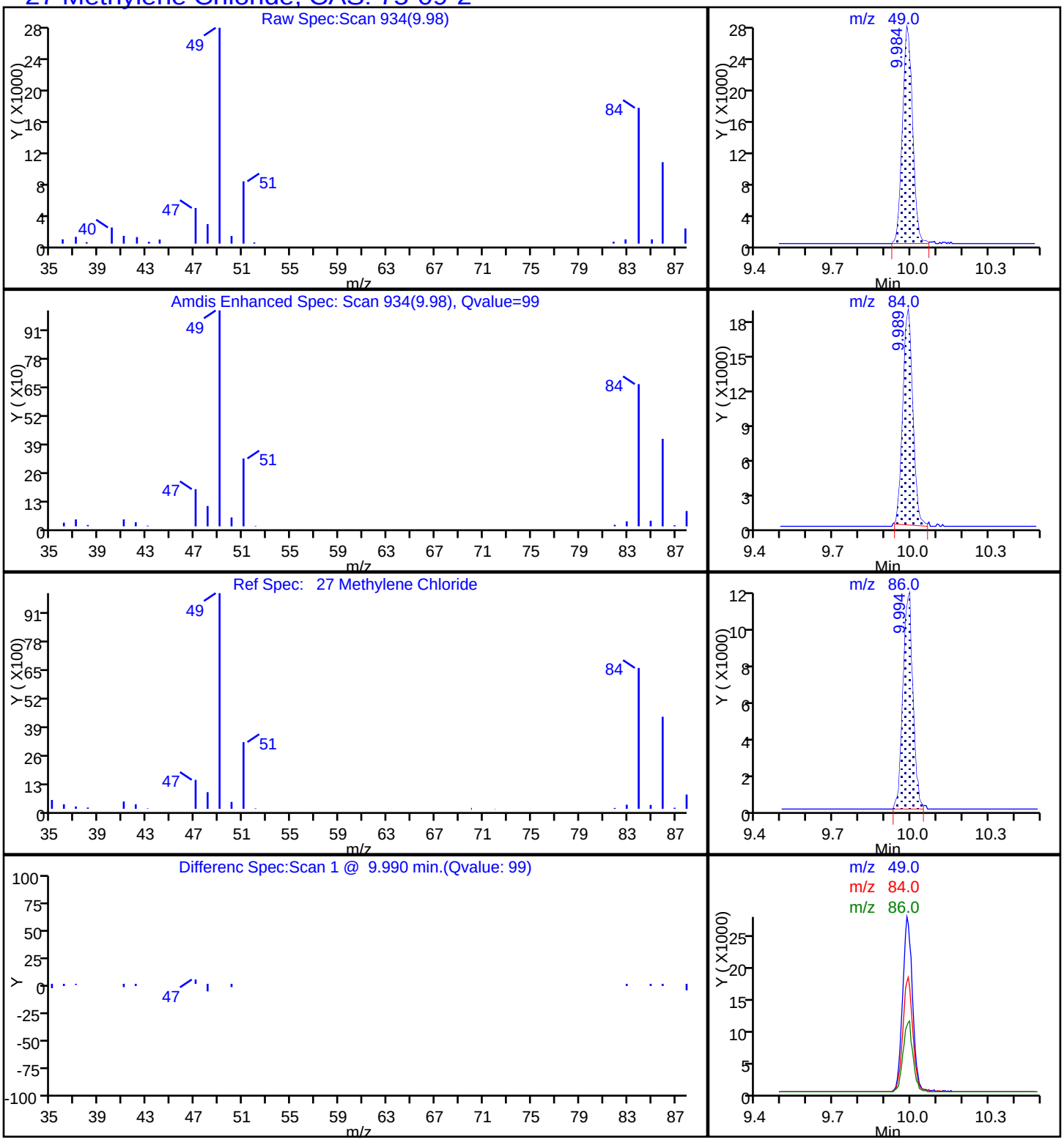
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



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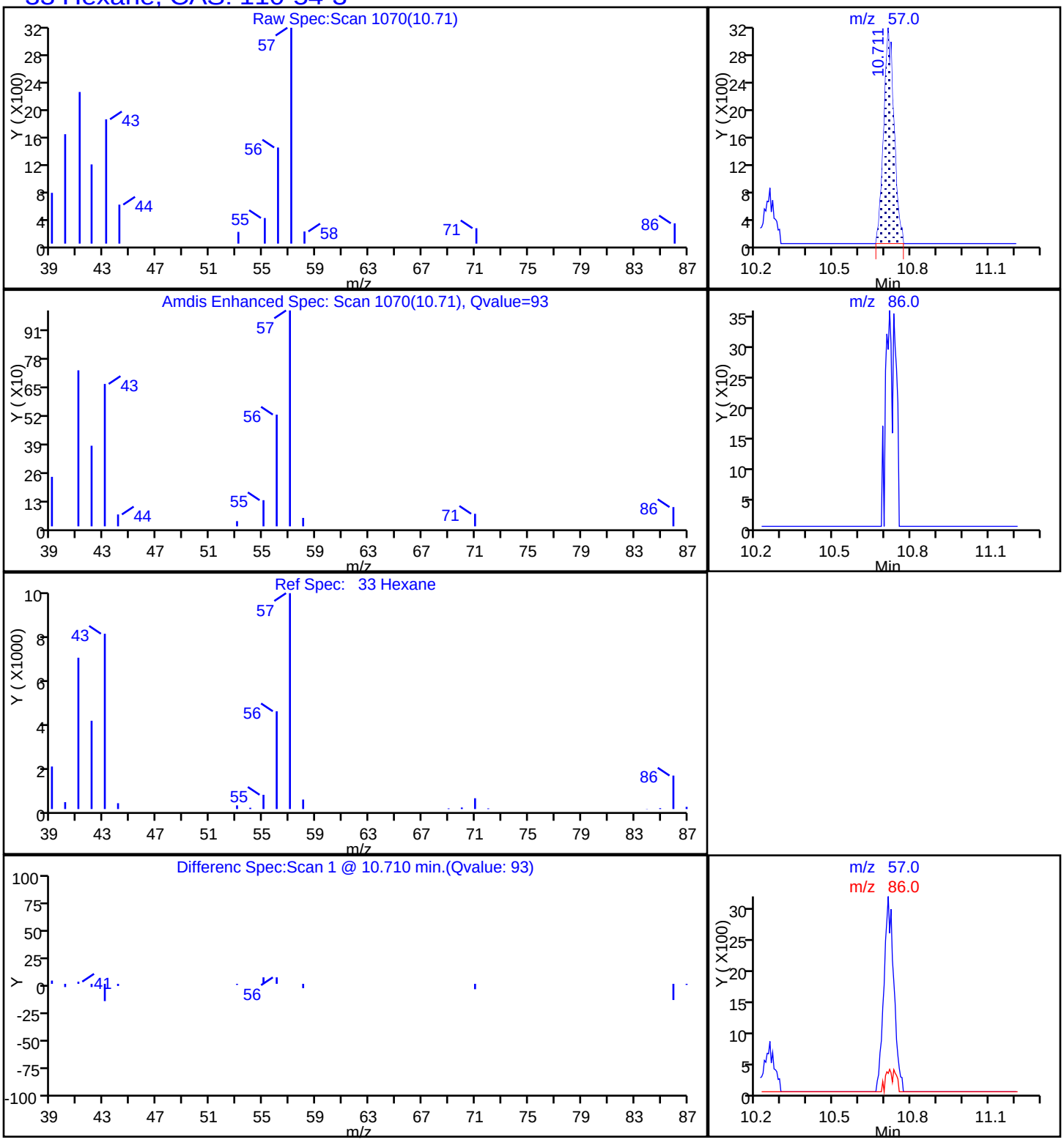
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

33 Hexane, CAS: 110-54-3



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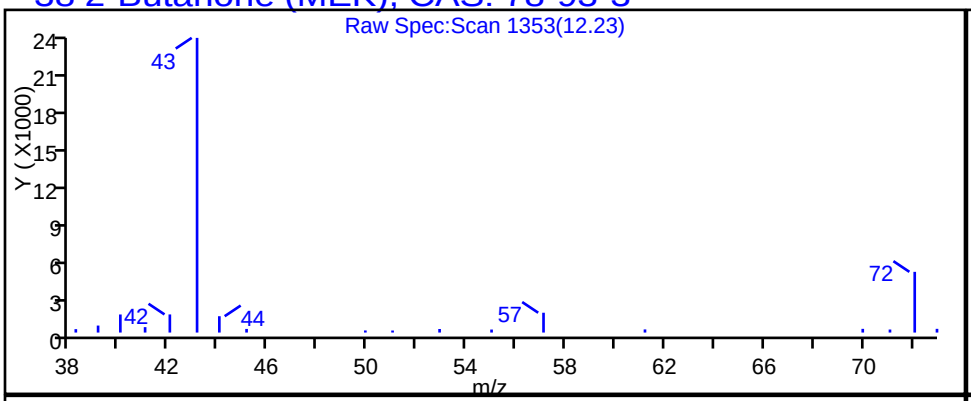
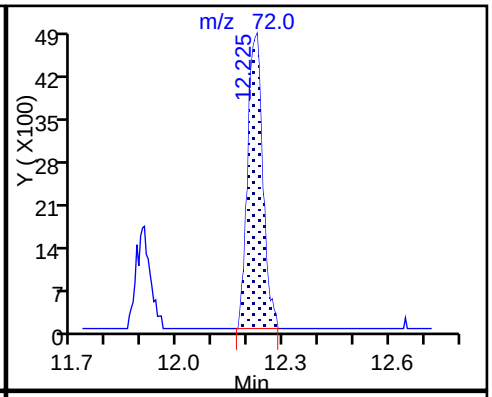
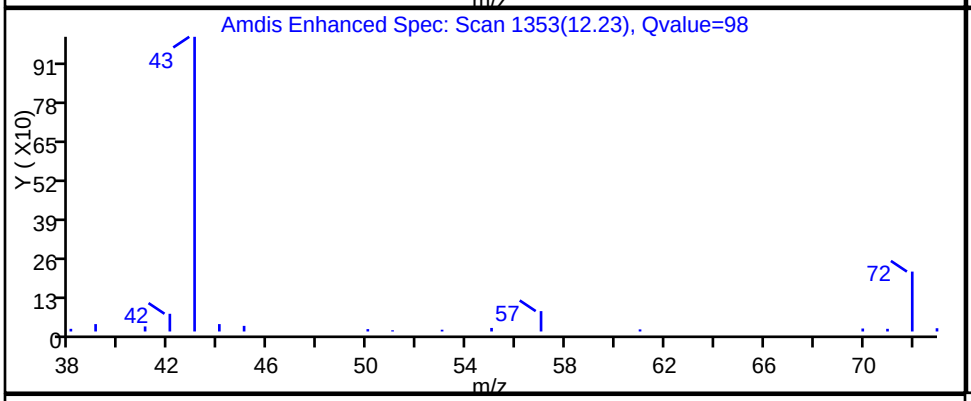
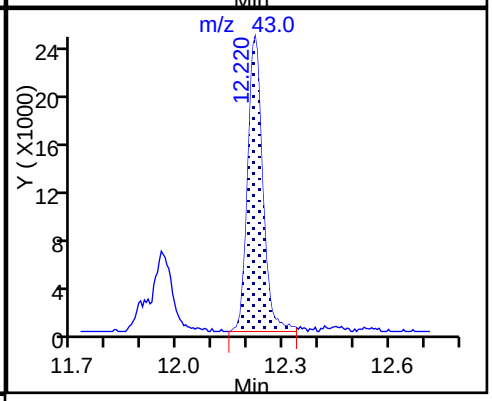
Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

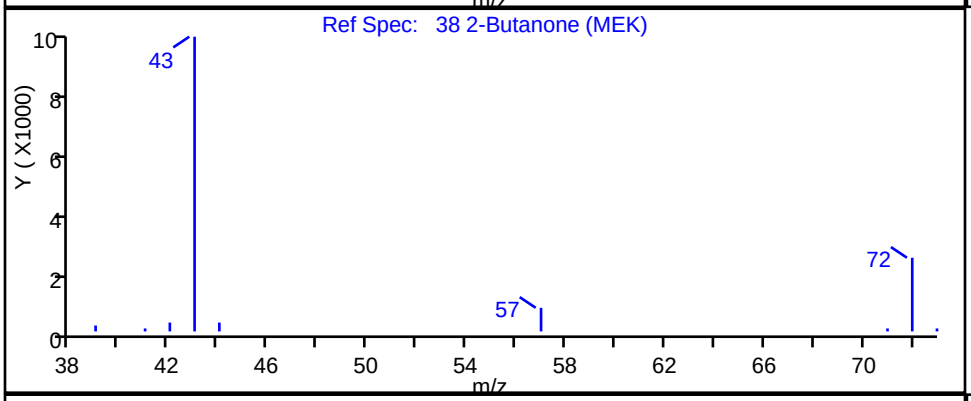
38 2-Butanone (MEK), CAS: 78-93-3

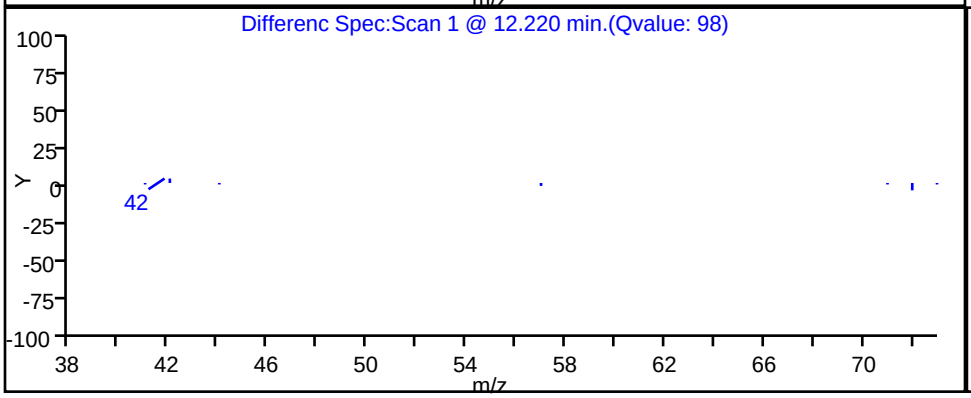


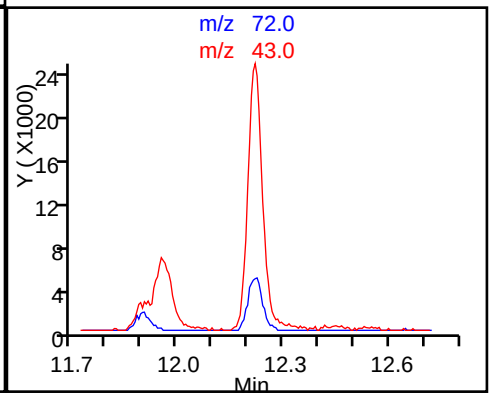












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TestAmerica Burlington

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Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
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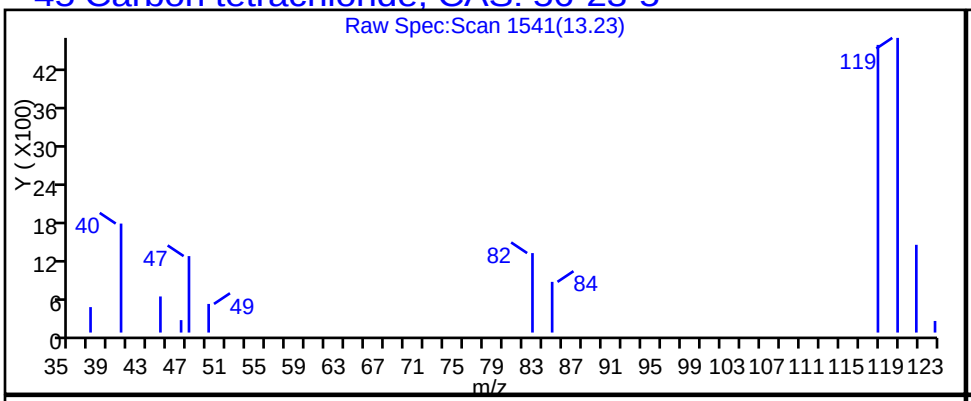
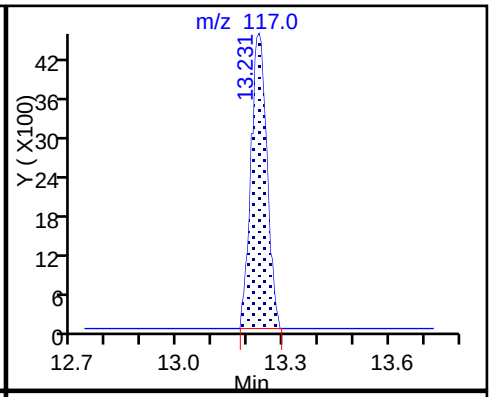
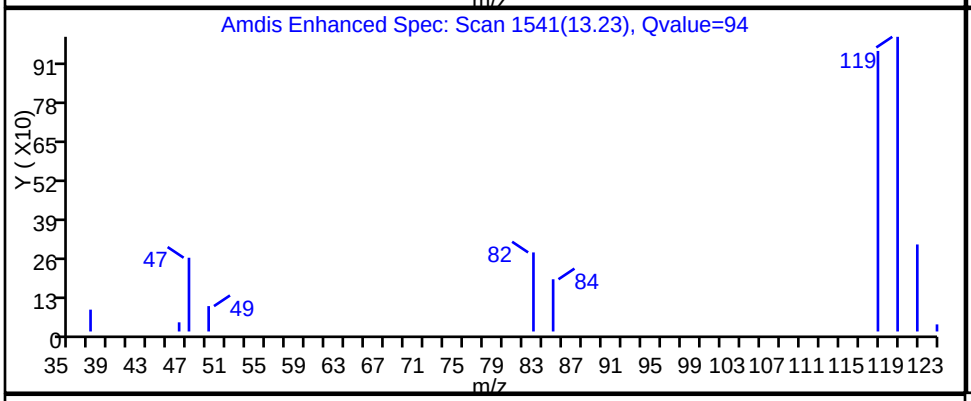
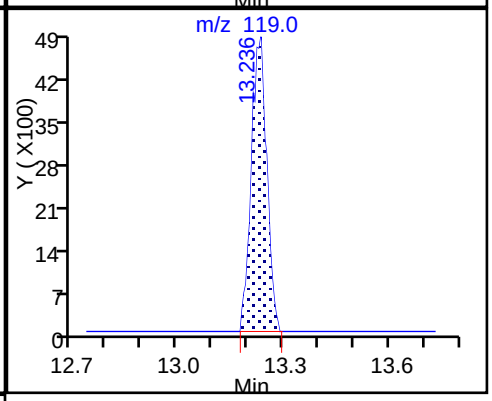
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

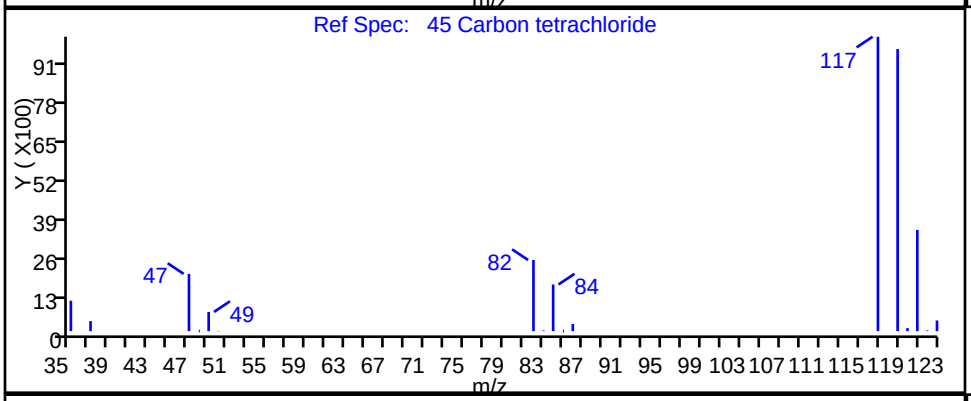
45 Carbon tetrachloride, CAS: 56-23-5

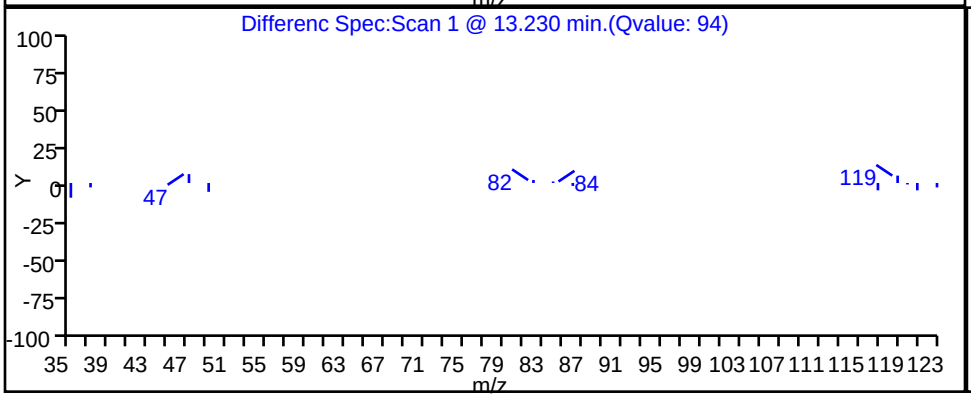


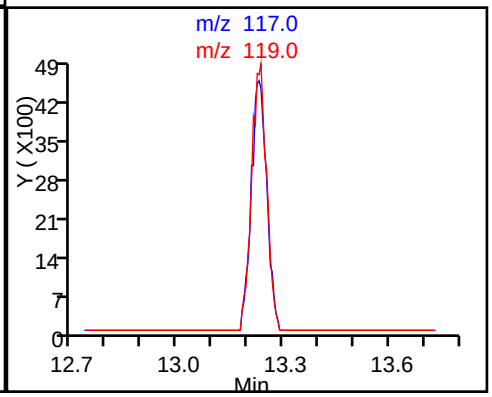












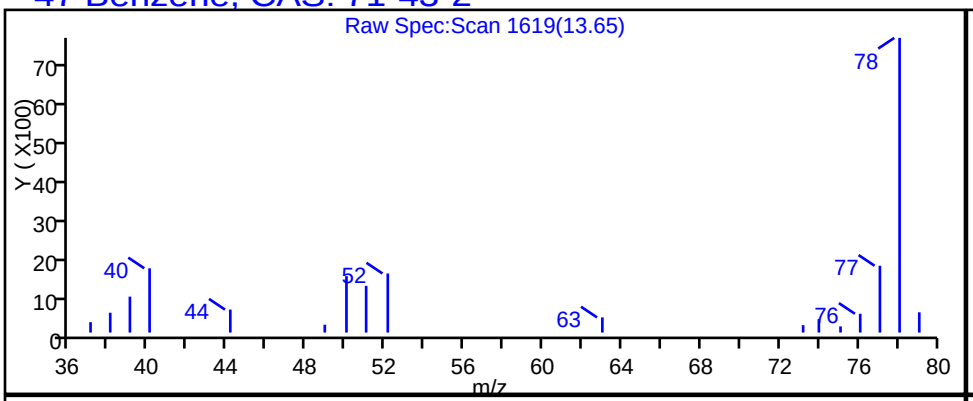
Report Date: 20-Jul-2017 14:34:11 Chrom Revision: 2.2 26-Jun-2017 09:07:56

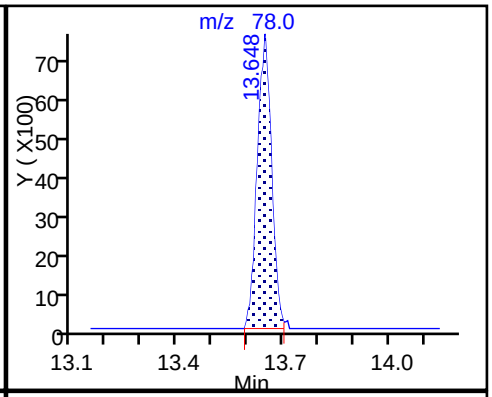
TestAmerica Burlington

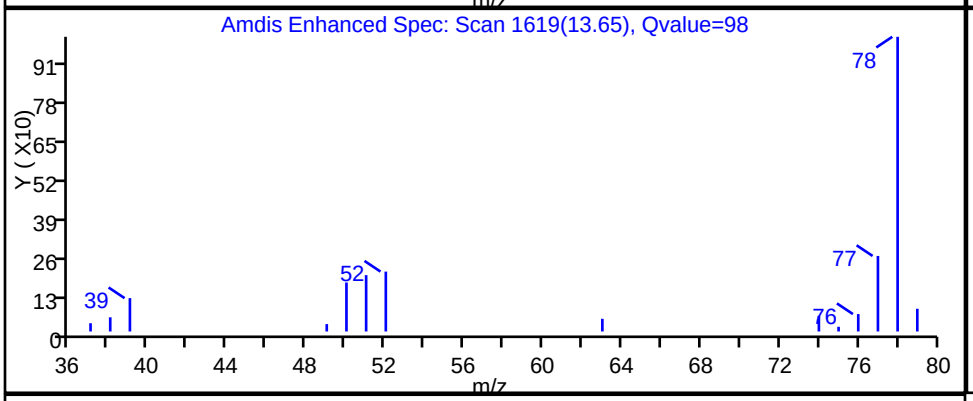
Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-11.d

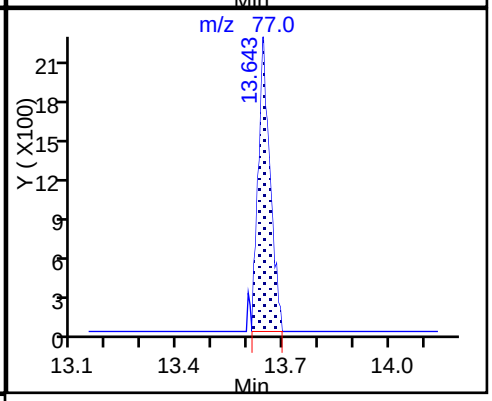
Injection Date:	11-Jul-2017 19:11:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-2	Lab Sample ID:	200-39198-2		
Client ID:	4348				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

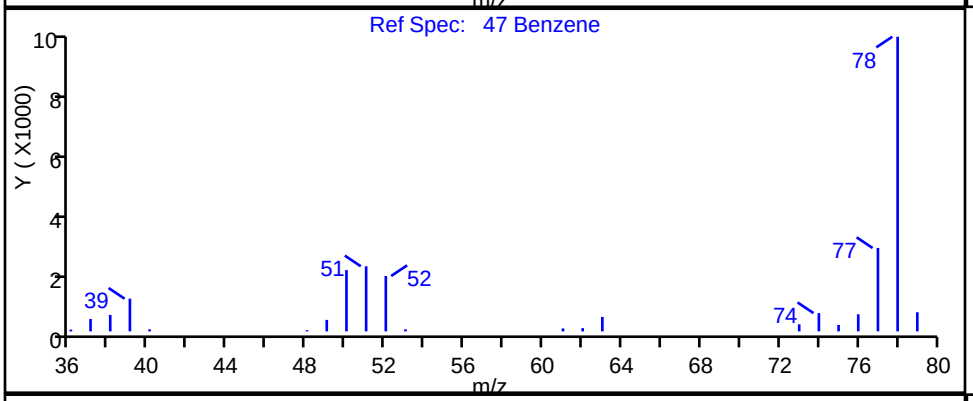
47 Benzene, CAS: 71-43-2

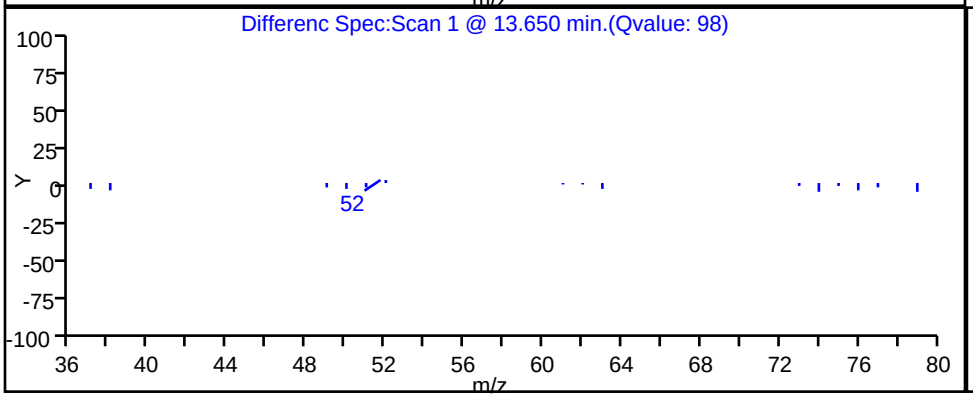


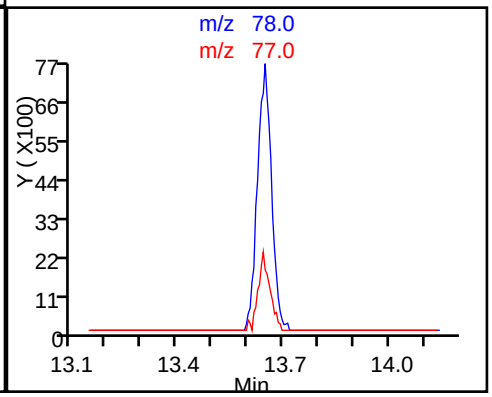












FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5042 Lab Sample ID: 200-39198-3

Matrix: Air Lab File ID: 25849-12.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 20:21

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5042 Lab Sample ID: 200-39198-3

Matrix: Air Lab File ID: 25849-12.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 20:21

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5042 Lab Sample ID: 200-39198-3

Matrix: Air Lab File ID: 25849-12.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 20:21

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-12.d
Lims ID: 200-39198-A-3
Client ID: 5042
Sample Type: Client
Inject. Date: 11-Jul-2017 20:21:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-012
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:34:34

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.260				ND	
	2 Dichlorodifluoromethane	85		5.367				ND	
	3 Chlorodifluoromethane	51		5.452				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
	5 Chloromethane	50		5.977				ND	
	6 Butane	43		6.244				ND	
	7 Vinyl chloride	62		6.298				ND	
	8 Butadiene	54		6.394				ND	
	10 Bromomethane	94		7.196				ND	
	11 Chloroethane	64		7.448				ND	
	13 Vinyl bromide	106		7.860				ND	
	14 Trichlorofluoromethane	101		7.951				ND	
	17 Ethanol	45		8.454				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
	21 1,1-Dichloroethene	96		9.026				ND	
	22 Acetone	43	9.245	9.219	0.026	97	11977	0.3490	
	23 Carbon disulfide	76	9.432	9.422	0.010	61	3767	0.0607	
	24 Isopropyl alcohol	45	9.438	9.422	0.016	95	8321	0.2126	
	25 3-Chloro-1-propene	41		9.721				ND	
	27 Methylene Chloride	49	9.994	9.989	0.005	92	1674	0.0604	
	28 2-Methyl-2-propanol	59		10.112				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	29 Methyl tert-butyl ether	73		10.326				ND	
	31 trans-1,2-Dichloroethene	61		10.385				ND	
	33 Hexane	57		10.716				ND	
	34 1,1-Dichloroethane	63		11.193				ND	
	35 Vinyl acetate	43		11.214				ND	
	37 cis-1,2-Dichloroethene	96		12.204				ND	
	38 2-Butanone (MEK)	72		12.220				ND	
	39 Ethyl acetate	88		12.225				ND	
	41 Tetrahydrofuran	42		12.626				ND	
*	40 Chlorobromomethane	128	12.637	12.632	0.005	97	134003	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.344	14.344	0.000	96	686565	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.832	19.832	0.000	90	593584	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

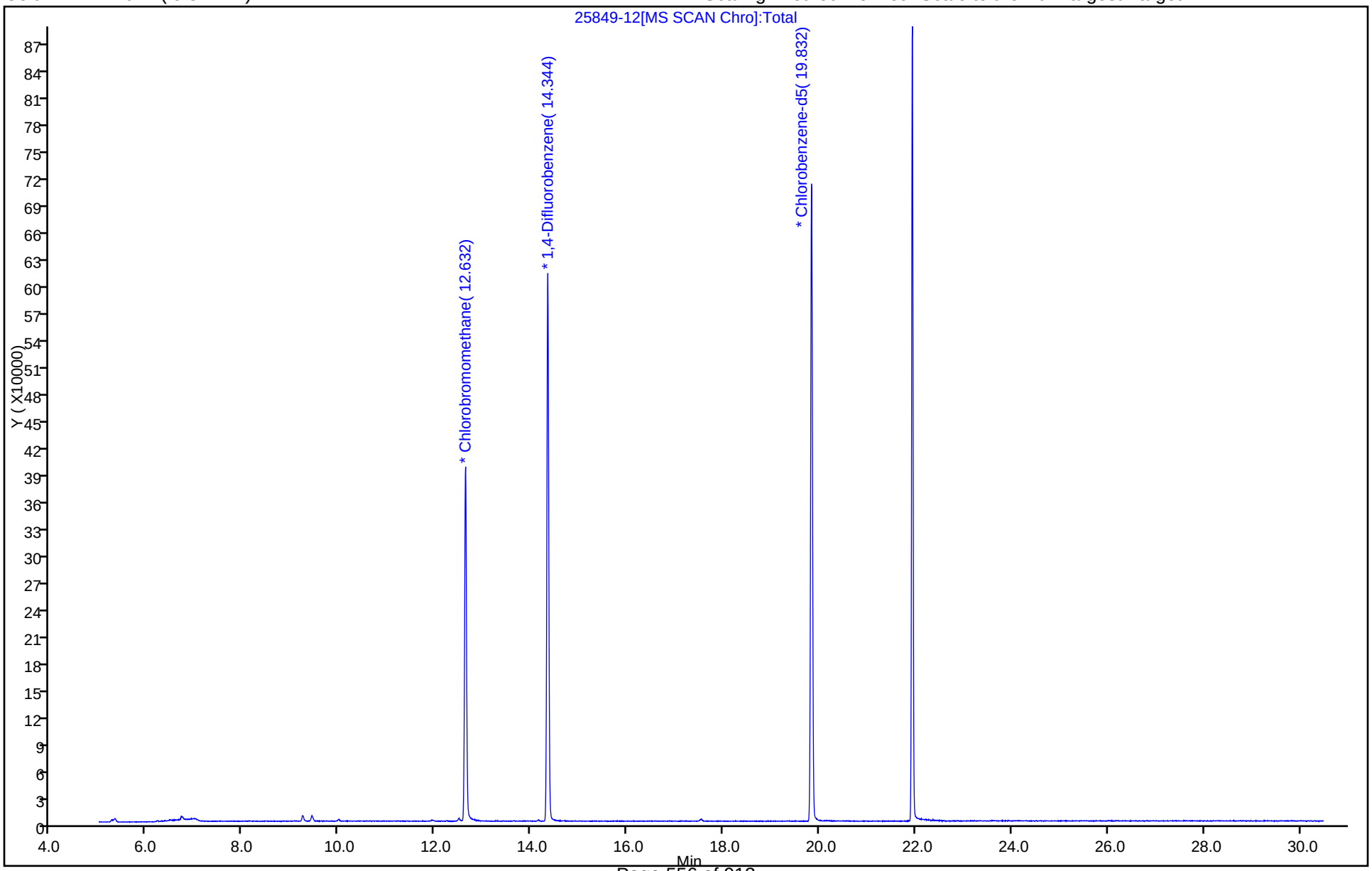
Report Date: 20-Jul-2017 14:34:34 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-12.d

Injection Date:	11-Jul-2017 20:21:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-3	Lab Sample ID:	200-39198-3	Worklist Smp#:	12
Client ID:	5042				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4067 | Lab Sample ID: 200-39198-4

Matrix: Air | Lab File ID: 25849-13.d

Analysis Method: TO-15 | Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/11/2017 21:32

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118406 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4067 Lab Sample ID: 200-39198-4

Matrix: Air Lab File ID: 25849-13.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 21:32

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4067 Lab Sample ID: 200-39198-4

Matrix: Air Lab File ID: 25849-13.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 21:32

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-13.d
Lims ID: 200-39198-A-4
Client ID: 4067
Sample Type: Client
Inject. Date: 11-Jul-2017 21:32:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-013
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:34:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		5.260				ND	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.452				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50		5.977				ND	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.298				ND	
8 Butadiene	54		6.394				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.448				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.951				ND	
17 Ethanol	45		8.454				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43	9.229	9.219	0.010	98	12967	0.3483	
23 Carbon disulfide	76		9.422				ND	
24 Isopropyl alcohol	45	9.432	9.422	0.010	97	9178	0.2162	
25 3-Chloro-1-propene	41		9.721				ND	
27 Methylene Chloride	49	9.983	9.989	-0.006	92	2139	0.0711	
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.326				ND	
31 trans-1,2-Dichloroethene	61		10.385				ND	
33 Hexane	57		10.716				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.214				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.225				ND	
41 Tetrahydrofuran	42		12.626				ND	
* 40 Chlorobromomethane	128	12.632	12.632	0.000	96	145372	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	759026	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.832	19.832	0.000	89	663633	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

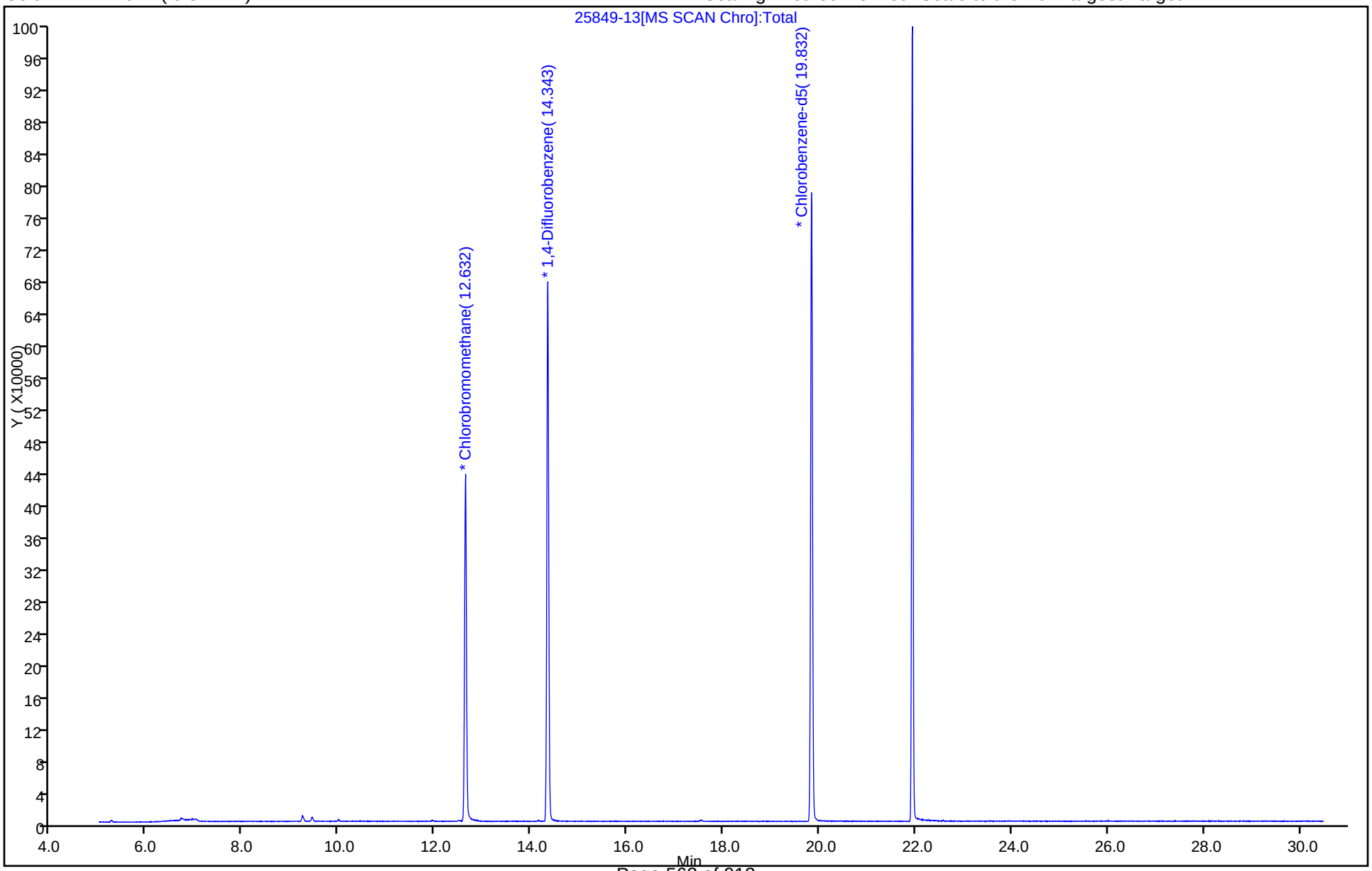
Report Date: 20-Jul-2017 14:34:51 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-13.d

Injection Date:	11-Jul-2017 21:32:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-4	Lab Sample ID:	200-39198-4	Worklist Smp#:	13
Client ID:	4067				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4308 Lab Sample ID: 200-39198-5

Matrix: Air Lab File ID: 25849-14.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 22:42

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4308 Lab Sample ID: 200-39198-5

Matrix: Air Lab File ID: 25849-14.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 22:42

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4308 Lab Sample ID: 200-39198-5

Matrix: Air Lab File ID: 25849-14.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 22:42

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-14.d
Lims ID: 200-39198-A-5
Client ID: 4308
Sample Type: Client
Inject. Date: 11-Jul-2017 22:42:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-014
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:35:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		5.260				ND	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.452				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50		5.977				ND	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.298				ND	
8 Butadiene	54		6.394				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.448				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.951				ND	
17 Ethanol	45		8.454				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43	9.234	9.219	0.015	98	11395	0.3467	
23 Carbon disulfide	76		9.422				ND	
24 Isopropyl alcohol	45	9.432	9.422	0.010	98	7962	0.2124	
25 3-Chloro-1-propene	41		9.721				ND	
27 Methylene Chloride	49	9.994	9.989	0.005	92	1605	0.0604	
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.326				ND	
31 trans-1,2-Dichloroethene	61		10.385				ND	
33 Hexane	57		10.716				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.214				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.225				ND	
41 Tetrahydrofuran	42		12.626				ND	
* 40 Chlorobromomethane	128	12.626	12.632	-0.006	96	128338	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	645874	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.832	19.832	0.000	89	567861	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

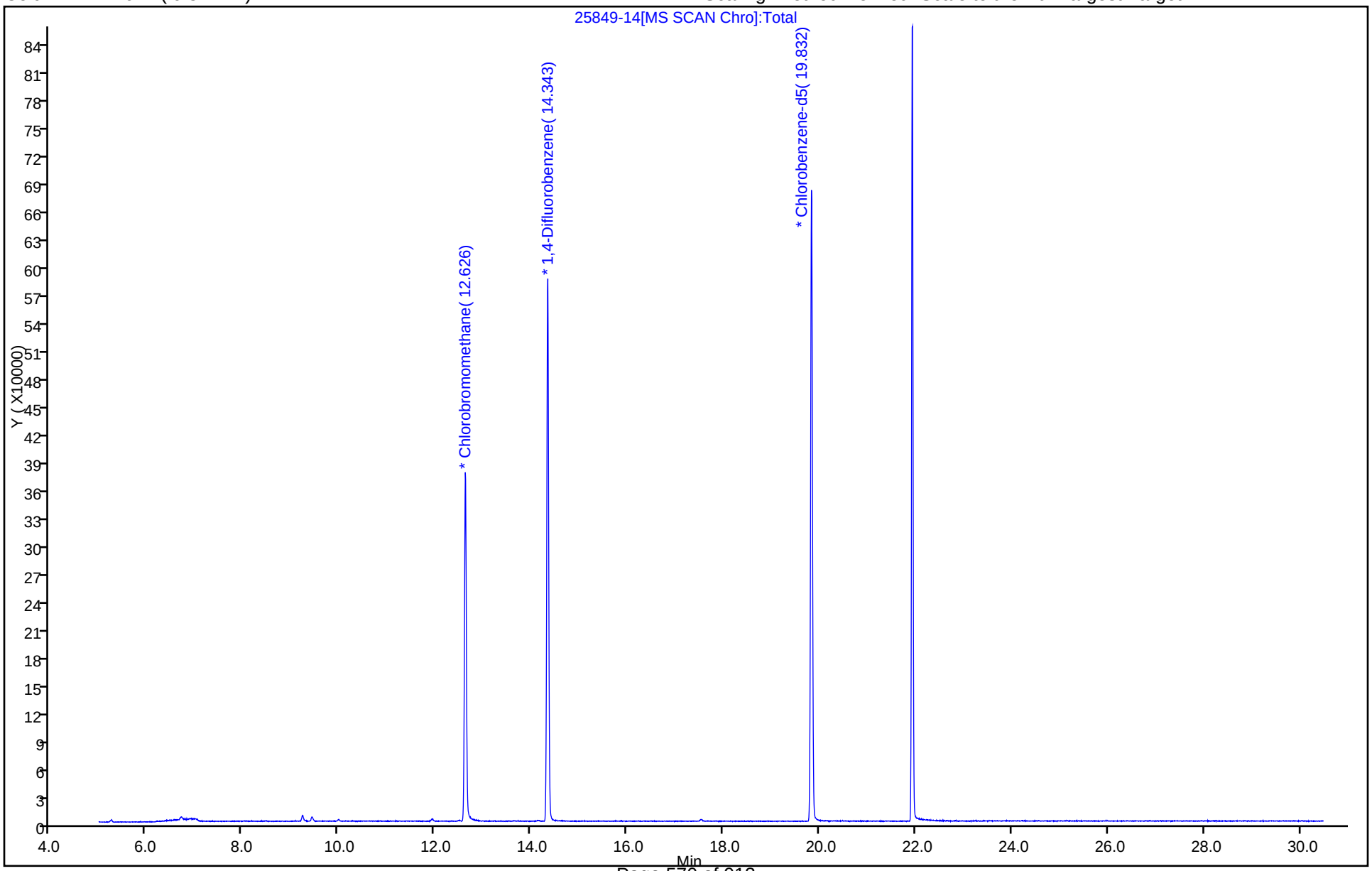
Report Date: 20-Jul-2017 14:35:10 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-14.d

Injection Date:	11-Jul-2017 22:42:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-5	Lab Sample ID:	200-39198-5	Worklist Smp#:	14
Client ID:	4308				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4141 Lab Sample ID: 200-39198-6

Matrix: Air Lab File ID: 25849-15.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 23:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4141 | Lab Sample ID: 200-39198-6

Matrix: Air | Lab File ID: 25849-15.d

Analysis Method: TO-15 | Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/11/2017 23:51

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118406 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4141 Lab Sample ID: 200-39198-6

Matrix: Air Lab File ID: 25849-15.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 23:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-15.d
Lims ID: 200-39198-A-6
Client ID: 4141
Sample Type: Client
Inject. Date: 11-Jul-2017 23:51:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-015
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:35:24

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41	5.265	5.260	0.005	65	1365	0.1163	
	2 Dichlorodifluoromethane	85		5.367				ND	
	3 Chlorodifluoromethane	51	5.463	5.452	0.011	1	1089	0.0409	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
	5 Chloromethane	50		5.977				ND	
	6 Butane	43		6.244				ND	
	7 Vinyl chloride	62		6.298				ND	
	8 Butadiene	54		6.394				ND	
	10 Bromomethane	94		7.196				ND	
	11 Chloroethane	64		7.448				ND	
	13 Vinyl bromide	106		7.860				ND	
	14 Trichlorofluoromethane	101		7.951				ND	
	17 Ethanol	45		8.454				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
	21 1,1-Dichloroethene	96		9.026				ND	
	22 Acetone	43	9.240	9.219	0.021	98	12086	0.3672	
	23 Carbon disulfide	76		9.422				ND	
	24 Isopropyl alcohol	45	9.438	9.422	0.016	98	7807	0.2080	
	25 3-Chloro-1-propene	41		9.721				ND	
	27 Methylene Chloride	49	9.983	9.989	-0.006	93	1954	0.0735	
	28 2-Methyl-2-propanol	59		10.112				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	29 Methyl tert-butyl ether	73		10.326				ND	
	31 trans-1,2-Dichloroethene	61		10.385				ND	
	33 Hexane	57		10.716				ND	
	34 1,1-Dichloroethane	63		11.193				ND	
	35 Vinyl acetate	43		11.214				ND	
	37 cis-1,2-Dichloroethene	96		12.204				ND	
	38 2-Butanone (MEK)	72		12.220				ND	
	39 Ethyl acetate	88		12.225				ND	
	41 Tetrahydrofuran	42		12.626				ND	
*	40 Chlorobromomethane	128	12.626	12.632	-0.006	96	128510	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	642834	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.832	19.832	0.000	89	559577	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

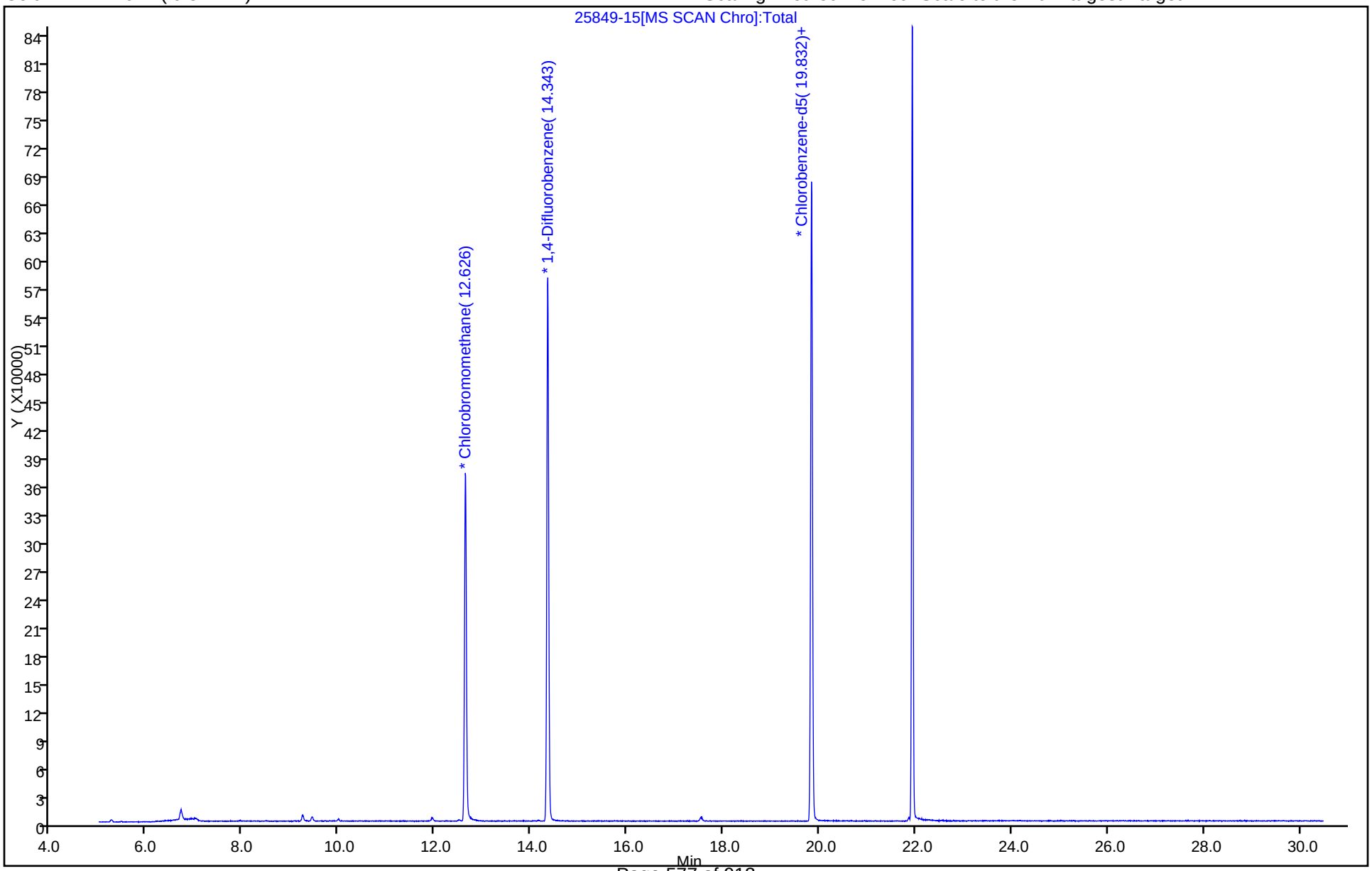
Report Date: 20-Jul-2017 14:48:22 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-15.d

Injection Date:	11-Jul-2017 23:51:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-6	Lab Sample ID:	200-39198-6	Worklist Smp#:	15
Client ID:	4141				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	14
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 3708 Lab Sample ID: 200-39198-7

Matrix: Air Lab File ID: 25849-16.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/12/2017 01:02

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: 3708 | Lab Sample ID: 200-39198-7

Matrix: Air | Lab File ID: 25849-16.d

Analysis Method: TO-15 | Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/12/2017 01:02

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118406 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 3708 Lab Sample ID: 200-39198-7

Matrix: Air Lab File ID: 25849-16.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/12/2017 01:02

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-16.d
Lims ID: 200-39198-A-7
Client ID: 3708
Sample Type: Client
Inject. Date: 12-Jul-2017 01:02:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-016
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:47:32

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.260				ND	
	2 Dichlorodifluoromethane	85		5.367				ND	
	3 Chlorodifluoromethane	51		5.452				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
	5 Chloromethane	50		5.977				ND	
	6 Butane	43		6.244				ND	
	7 Vinyl chloride	62		6.298				ND	
	8 Butadiene	54		6.394				ND	
	10 Bromomethane	94		7.196				ND	
	11 Chloroethane	64		7.448				ND	
	13 Vinyl bromide	106		7.860				ND	
	14 Trichlorofluoromethane	101		7.951				ND	
	17 Ethanol	45		8.454				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
	21 1,1-Dichloroethene	96		9.026				ND	
	22 Acetone	43		9.219				ND	
	23 Carbon disulfide	76		9.422				ND	
	24 Isopropyl alcohol	45	9.438	9.422	0.016	98	7774	0.2154	
	25 3-Chloro-1-propene	41		9.721				ND	
	27 Methylene Chloride	49		9.989				ND	
	28 2-Methyl-2-propanol	59		10.112				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	29 Methyl tert-butyl ether	73		10.326				ND	
	31 trans-1,2-Dichloroethene	61		10.385				ND	
	33 Hexane	57		10.716				ND	
	34 1,1-Dichloroethane	63		11.193				ND	
	35 Vinyl acetate	43		11.214				ND	
	37 cis-1,2-Dichloroethene	96		12.204				ND	
	38 2-Butanone (MEK)	72		12.220				ND	
	39 Ethyl acetate	88		12.225				ND	
	41 Tetrahydrofuran	42		12.626				ND	
*	40 Chlorobromomethane	128	12.632	12.632	0.000	96	123579	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	631187	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.838	19.832	0.006	89	550719	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

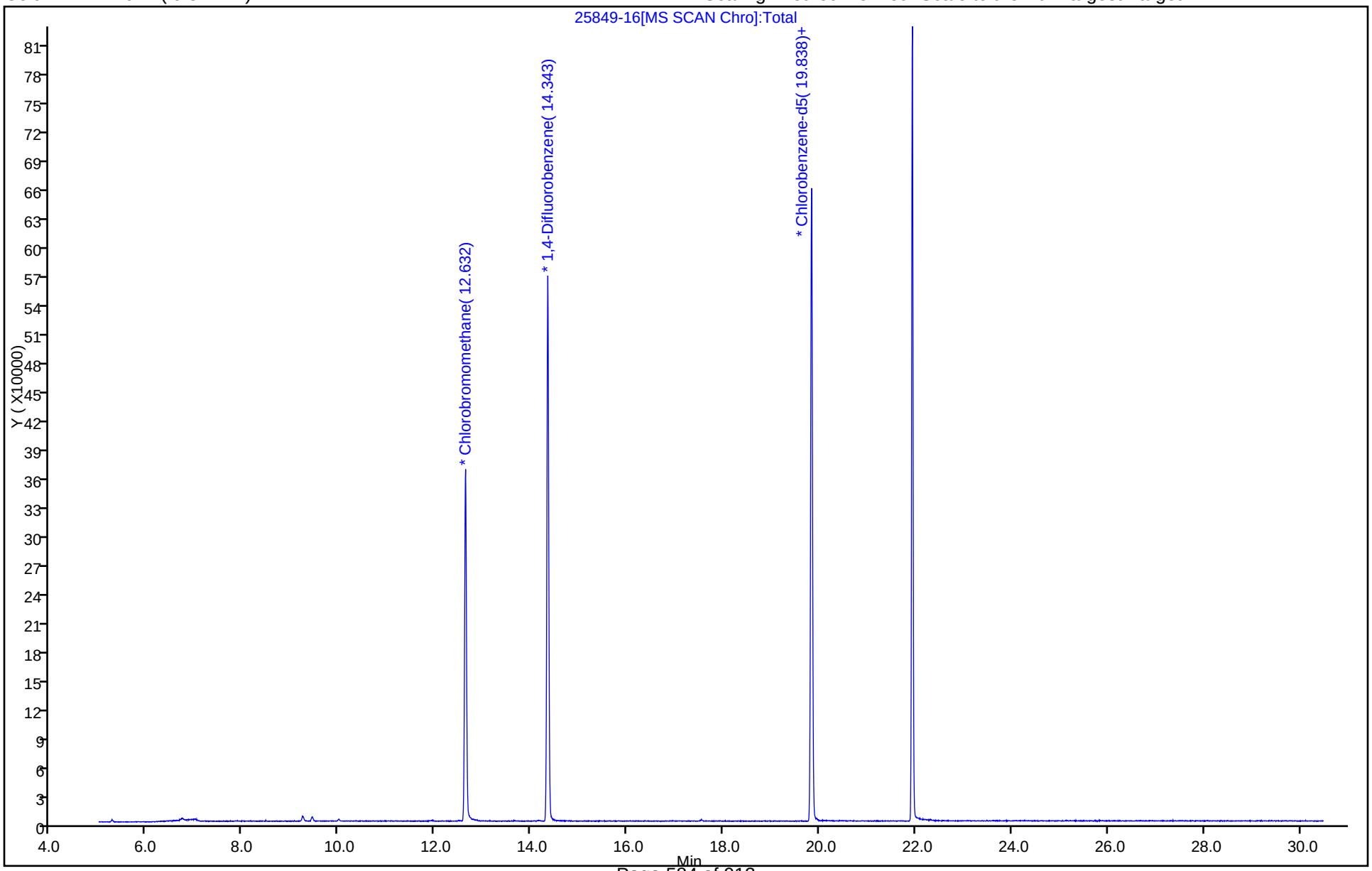
Report Date: 20-Jul-2017 14:47:34 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-16.d

Injection Date:	12-Jul-2017 01:02:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-7	Lab Sample ID:	200-39198-7	Worklist Smp#:	16
Client ID:	3708				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	15
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 2754 Lab Sample ID: 200-39198-8

Matrix: Air Lab File ID: 25849-17.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/12/2017 02:12

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 2754 Lab Sample ID: 200-39198-8

Matrix: Air Lab File ID: 25849-17.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/12/2017 02:12

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 2754 Lab Sample ID: 200-39198-8

Matrix: Air Lab File ID: 25849-17.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/12/2017 02:12

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118406 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-17.d
Lims ID: 200-39198-A-8
Client ID: 2754
Sample Type: Client
Inject. Date: 12-Jul-2017 02:12:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025849-017
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 14:32:31 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: desjardinsb Date: 20-Jul-2017 14:49:01

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		5.260				ND	
	2 Dichlorodifluoromethane	85		5.367				ND	
	3 Chlorodifluoromethane	51		5.452				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
	5 Chloromethane	50		5.977				ND	
	6 Butane	43		6.244				ND	
	7 Vinyl chloride	62		6.298				ND	
	8 Butadiene	54		6.394				ND	
	10 Bromomethane	94		7.196				ND	
	11 Chloroethane	64		7.448				ND	
	13 Vinyl bromide	106		7.860				ND	
	14 Trichlorofluoromethane	101		7.951				ND	
	17 Ethanol	45		8.454				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.956				ND	
	21 1,1-Dichloroethene	96		9.026				ND	
	22 Acetone	43		9.219				ND	
	23 Carbon disulfide	76		9.422				ND	
	24 Isopropyl alcohol	45	9.438	9.422	0.016	95	7336	0.2035	
	25 3-Chloro-1-propene	41		9.721				ND	
	27 Methylene Chloride	49		9.989				ND	
	28 2-Methyl-2-propanol	59		10.112				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	29 Methyl tert-butyl ether	73		10.326				ND	
	31 trans-1,2-Dichloroethene	61		10.385				ND	
	33 Hexane	57		10.716				ND	
	34 1,1-Dichloroethane	63		11.193				ND	
	35 Vinyl acetate	43		11.214				ND	
	37 cis-1,2-Dichloroethene	96		12.204				ND	
	38 2-Butanone (MEK)	72		12.220				ND	
	39 Ethyl acetate	88		12.225				ND	
	41 Tetrahydrofuran	42		12.626				ND	
*	40 Chlorobromomethane	128	12.631	12.632	-0.001	96	123443	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.231				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.648				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	630869	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.269				ND	
	55 Methyl methacrylate	69		15.344				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.499				ND	
	58 Dichlorobromomethane	83		15.735				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.837	19.832	0.005	89	551646	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.421				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.080				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

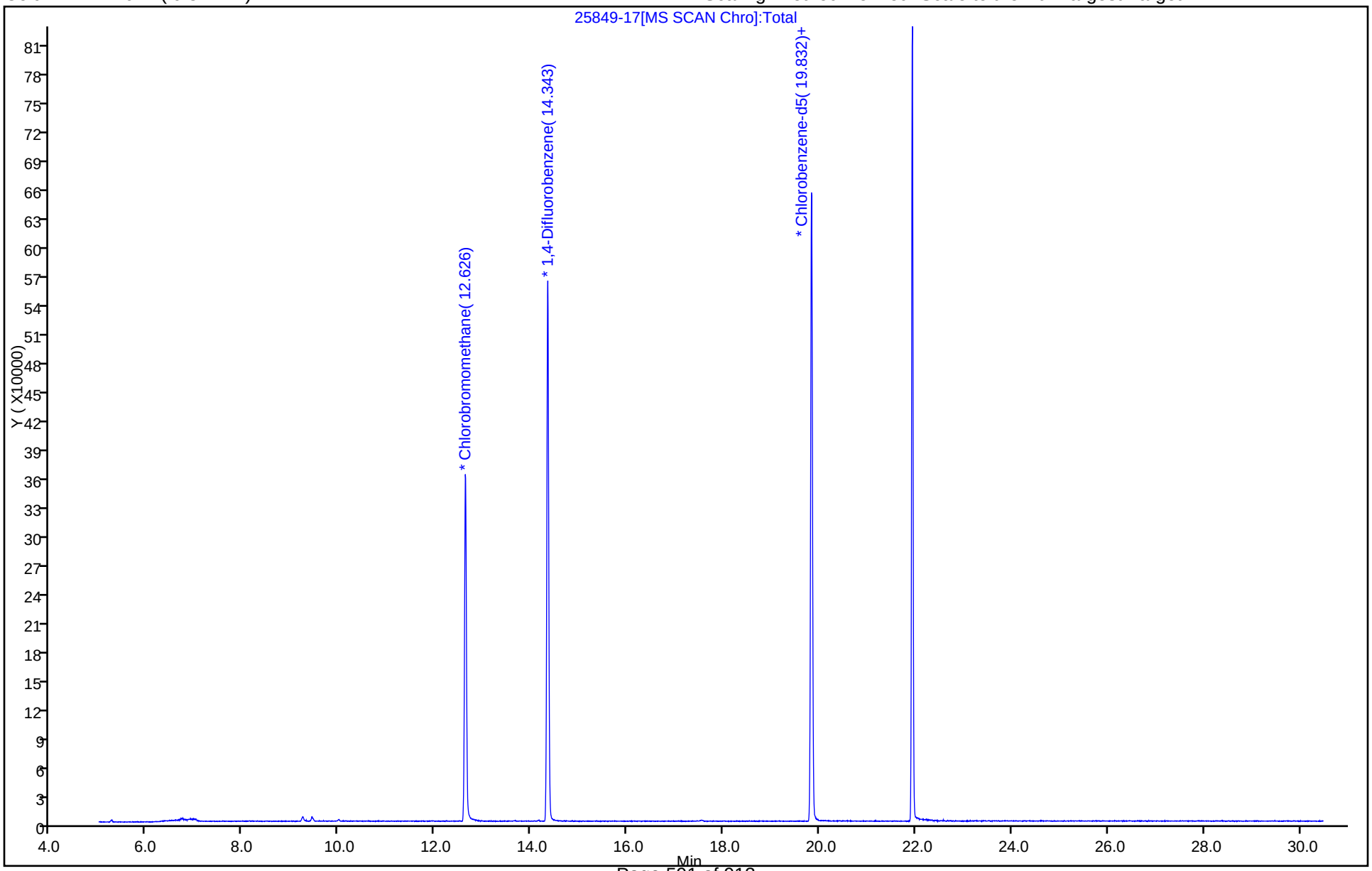
Report Date: 20-Jul-2017 14:49:01 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170711-25849.b\25849-17.d

Injection Date:	12-Jul-2017 02:12:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-8	Lab Sample ID:	200-39198-8	Worklist Smp#:	17
Client ID:	2754				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	16
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 2535 Lab Sample ID: 200-39198-9

Matrix: Air Lab File ID: 200-26195-008.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 16:28

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 2535 Lab Sample ID: 200-39198-9

Matrix: Air Lab File ID: 200-26195-008.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 16:28

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 2535 Lab Sample ID: 200-39198-9

Matrix: Air Lab File ID: 200-26195-008.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 16:28

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-008.D
Lims ID: 200-39198-A-9
Client ID: 2535
Sample Type: Client
Inject. Date: 03-Aug-2017 16:28:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-008
Misc. Info.: 39198-09
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:17:30 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:17:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139				ND	
2 Dichlorodifluoromethane	85		3.197				ND	
3 Chlorodifluoromethane	51		3.235				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5 Chloromethane	50	3.518	3.529	-0.011	94	1234	0.0399	
6 Butane	43		3.690				ND	
7 Vinyl chloride	62		3.727				ND	
8 Butadiene	54		3.786				ND	
10 Bromomethane	94		4.348				ND	
11 Chloroethane	64		4.535				ND	
13 Vinyl bromide	106		4.850				ND	
14 Trichlorofluoromethane	101		4.925				ND	
17 Ethanol	45		5.418				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21 1,1-Dichloroethene	96		5.878				ND	
22 Acetone	43	6.124	6.124	0.011	82	5791	0.1490	7
23 Carbon disulfide	76		6.241				ND	
24 Isopropyl alcohol	45		6.348				ND	
25 3-Chloro-1-propene	41		6.562				ND	
27 Methylene Chloride	49	6.798	6.825	-0.027	92	3457	0.0981	
28 2-Methyl-2-propanol	59		7.044				ND	
29 Methyl tert-butyl ether	73		7.204				ND	
31 trans-1,2-Dichloroethene	61		7.215				ND	
33 Hexane	57		7.541				ND	
34 1,1-Dichloroethane	63		8.028				ND	
35 Vinyl acetate	43		8.092				ND	
37 cis-1,2-Dichloroethene	96		9.055				ND	
38 2-Butanone (MEK)	72		9.136				ND	
39 Ethyl acetate	88		9.152				ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	87	325635	10.0	
41 Tetrahydrofuran	42		9.542				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.590	9.612	-0.022	95	17307	0.1642	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.847				ND	
	44 1,1,1-Trichloroethane	97		9.885				ND	
	45 Carbon tetrachloride	117		10.120				ND	
	46 Isooctane	57		10.527				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.388	11.404	-0.016	95	1818627	10.0	
	53 Trichloroethene	95		11.859				ND	
	54 1,2-Dichloropropane	63		12.426				ND	
	55 Methyl methacrylate	69		12.597				ND	
	57 Dibromomethane	174		12.672				ND	
	56 1,4-Dioxane	88		12.677				ND	
	58 Dichlorobromomethane	83		12.955				ND	
	60 cis-1,3-Dichloropropene	75		13.875				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
	65 Toluene	92		14.453				ND	
	66 trans-1,3-Dichloropropene	75		15.058				ND	
	67 1,1,2-Trichloroethane	83		15.432				ND	
	68 Tetrachloroethene	166		15.512				ND	
	69 2-Hexanone	43		15.914				ND	
	71 Chlorodibromomethane	129		16.187				ND	
	72 Ethylene Dibromide	107		16.459				ND	
*	74 Chlorobenzene-d5	117	17.353	17.358	-0.005	88	1616017	10.0	
	75 Chlorobenzene	112		17.417				ND	
	76 Ethylbenzene	91		17.572				ND	
	78 m-Xylene & p-Xylene	106		17.829				ND	
	79 o-Xylene	106		18.685				ND	
	80 Styrene	104		18.744				ND	
	81 Bromoform	173		19.188				ND	
	82 Isopropylbenzene	105		19.412				ND	
S	73 Xylenes, Total	106		19.600				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
	85 N-Propylbenzene	91		20.167				ND	
	89 2-Chlorotoluene	91		20.370				ND	
	88 4-Ethyltoluene	105		20.370				ND	
	90 1,3,5-Trimethylbenzene	105		20.482				ND	
	92 tert-Butylbenzene	119		20.985				ND	
	93 1,2,4-Trimethylbenzene	105		21.087				ND	
	94 sec-Butylbenzene	105		21.322				ND	
	95 4-Isopropyltoluene	119		21.531				ND	
	96 1,3-Dichlorobenzene	146	21.552	21.552	0.000	92	1999	0.0177	
	97 1,4-Dichlorobenzene	146	21.686	21.691	-0.005	73	2534	0.0229	
	98 Benzyl chloride	91		21.900				ND	
	100 n-Butylbenzene	91		22.109				ND	
	101 1,2-Dichlorobenzene	146	22.226	22.226	0.000	93	2100	0.0198	
	103 1,2,4-Trichlorobenzene	180	24.698	24.687	0.011	65	2858	0.0458	
	104 Hexachlorobutadiene	225		24.869				ND	
	105 Naphthalene	128	25.174	25.169	0.005	97	6818	0.0508	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

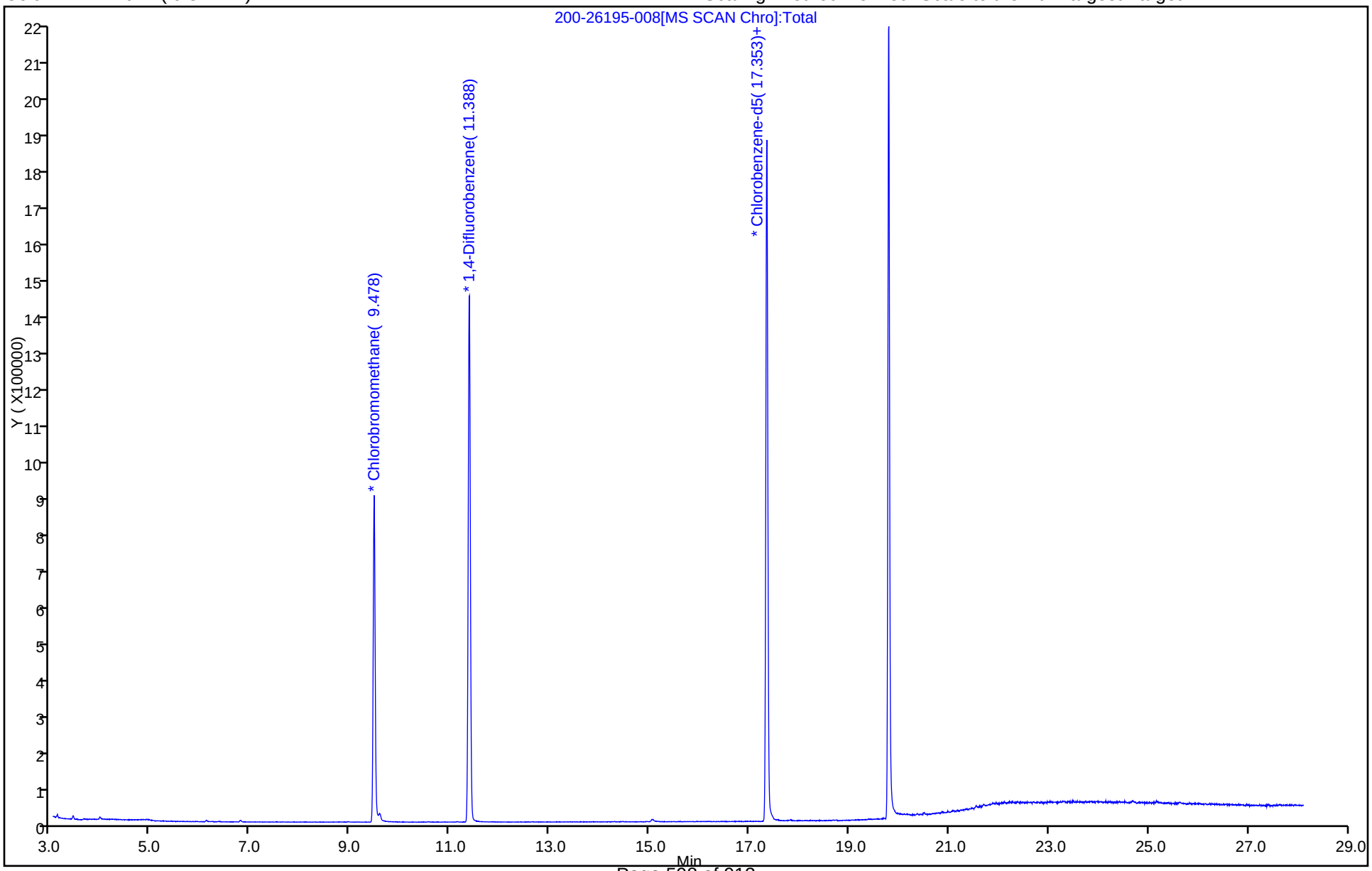
Report Date: 04-Aug-2017 14:17:31 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-008.D

Injection Date:	03-Aug-2017 16:28:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39198-A-9	Lab Sample ID:	200-39198-9	Worklist Smp#:	8
Client ID:	2535				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 3790 Lab Sample ID: 200-39198-10

Matrix: Air Lab File ID: 200-26195-009.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 17:19

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: 3790 | Lab Sample ID: 200-39198-10

Matrix: Air | Lab File ID: 200-26195-009.D

Analysis Method: TO-15 | Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 08/03/2017 17:19

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119318 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 3790 Lab Sample ID: 200-39198-10

Matrix: Air Lab File ID: 200-26195-009.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 17:19

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-009.D
Lims ID: 200-39198-A-10
Client ID: 3790
Sample Type: Client
Inject. Date: 03-Aug-2017 17:19:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-009
Misc. Info.: 39198-10
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:22:53 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:22:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139				ND	
2 Dichlorodifluoromethane	85		3.197				ND	
3 Chlorodifluoromethane	51		3.235				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5 Chloromethane	50		3.529				ND	
6 Butane	43		3.690				ND	
7 Vinyl chloride	62		3.727				ND	
8 Butadiene	54		3.786				ND	
10 Bromomethane	94		4.348				ND	
11 Chloroethane	64		4.535				ND	
13 Vinyl bromide	106		4.850				ND	
14 Trichlorofluoromethane	101		4.925				ND	
17 Ethanol	45		5.418				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21 1,1-Dichloroethene	96		5.878				ND	
22 Acetone	43		6.113				ND	
23 Carbon disulfide	76		6.241				ND	
24 Isopropyl alcohol	45		6.348				ND	
25 3-Chloro-1-propene	41		6.562				ND	
27 Methylene Chloride	49	6.798	6.825	-0.027	95	3094	0.0862	
28 2-Methyl-2-propanol	59		7.044				ND	
29 Methyl tert-butyl ether	73		7.204				ND	
31 trans-1,2-Dichloroethene	61		7.215				ND	
33 Hexane	57		7.541				ND	
34 1,1-Dichloroethane	63		8.028				ND	
35 Vinyl acetate	43		8.092				ND	
37 cis-1,2-Dichloroethene	96		9.055				ND	
38 2-Butanone (MEK)	72		9.136				ND	
39 Ethyl acetate	88		9.152				ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	86	331723	10.0	
41 Tetrahydrofuran	42		9.542				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
42 Chloroform	83	9.590	9.612	-0.022	96	17468	0.1626	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
43 Cyclohexane	84		9.847				ND	
44 1,1,1-Trichloroethane	97		9.885				ND	
45 Carbon tetrachloride	117		10.120				ND	
46 Isooctane	57		10.527				ND	
47 Benzene	78		10.585				ND	
48 1,2-Dichloroethane	62		10.773				ND	
49 n-Heptane	43		10.901				ND	
* 50 1,4-Difluorobenzene	114	11.388	11.404	-0.016	95	1823043	10.0	
53 Trichloroethene	95	11.848	11.848	-0.011	91	4415	0.0567	M
54 1,2-Dichloropropane	63		12.426				ND	
55 Methyl methacrylate	69		12.597				ND	
57 Dibromomethane	174		12.672				ND	
56 1,4-Dioxane	88		12.677				ND	
58 Dichlorobromomethane	83		12.955				ND	
60 cis-1,3-Dichloropropene	75		13.875				ND	
61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
65 Toluene	92		14.453				ND	
66 trans-1,3-Dichloropropene	75		15.058				ND	
67 1,1,2-Trichloroethane	83		15.432				ND	
68 Tetrachloroethene	166	15.502	15.512	-0.010	85	2360	0.0285	
69 2-Hexanone	43		15.914				ND	
71 Chlorodibromomethane	129		16.187				ND	
72 Ethylene Dibromide	107		16.459				ND	
* 74 Chlorobenzene-d5	117	17.353	17.358	-0.005	88	1610099	10.0	
75 Chlorobenzene	112		17.417				ND	
76 Ethylbenzene	91		17.572				ND	
78 m-Xylene & p-Xylene	106		17.829				ND	
79 o-Xylene	106		18.685				ND	
80 Styrene	104		18.744				ND	
81 Bromoform	173		19.188				ND	
82 Isopropylbenzene	105		19.412				ND	
S 73 Xylenes, Total	106		19.600				ND	
84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
85 N-Propylbenzene	91		20.167				ND	
89 2-Chlorotoluene	91		20.370				ND	
88 4-Ethyltoluene	105		20.370				ND	
90 1,3,5-Trimethylbenzene	105		20.482				ND	
92 tert-Butylbenzene	119		20.985				ND	
93 1,2,4-Trimethylbenzene	105		21.087				ND	
94 sec-Butylbenzene	105		21.322				ND	
95 4-Isopropyltoluene	119		21.531				ND	
96 1,3-Dichlorobenzene	146		21.552				ND	
97 1,4-Dichlorobenzene	146		21.691				ND	
98 Benzyl chloride	91		21.900				ND	
100 n-Butylbenzene	91		22.109				ND	
101 1,2-Dichlorobenzene	146		22.226				ND	
103 1,2,4-Trichlorobenzene	180		24.687				ND	
104 Hexachlorobutadiene	225		24.869				ND	
105 Naphthalene	128		25.169				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

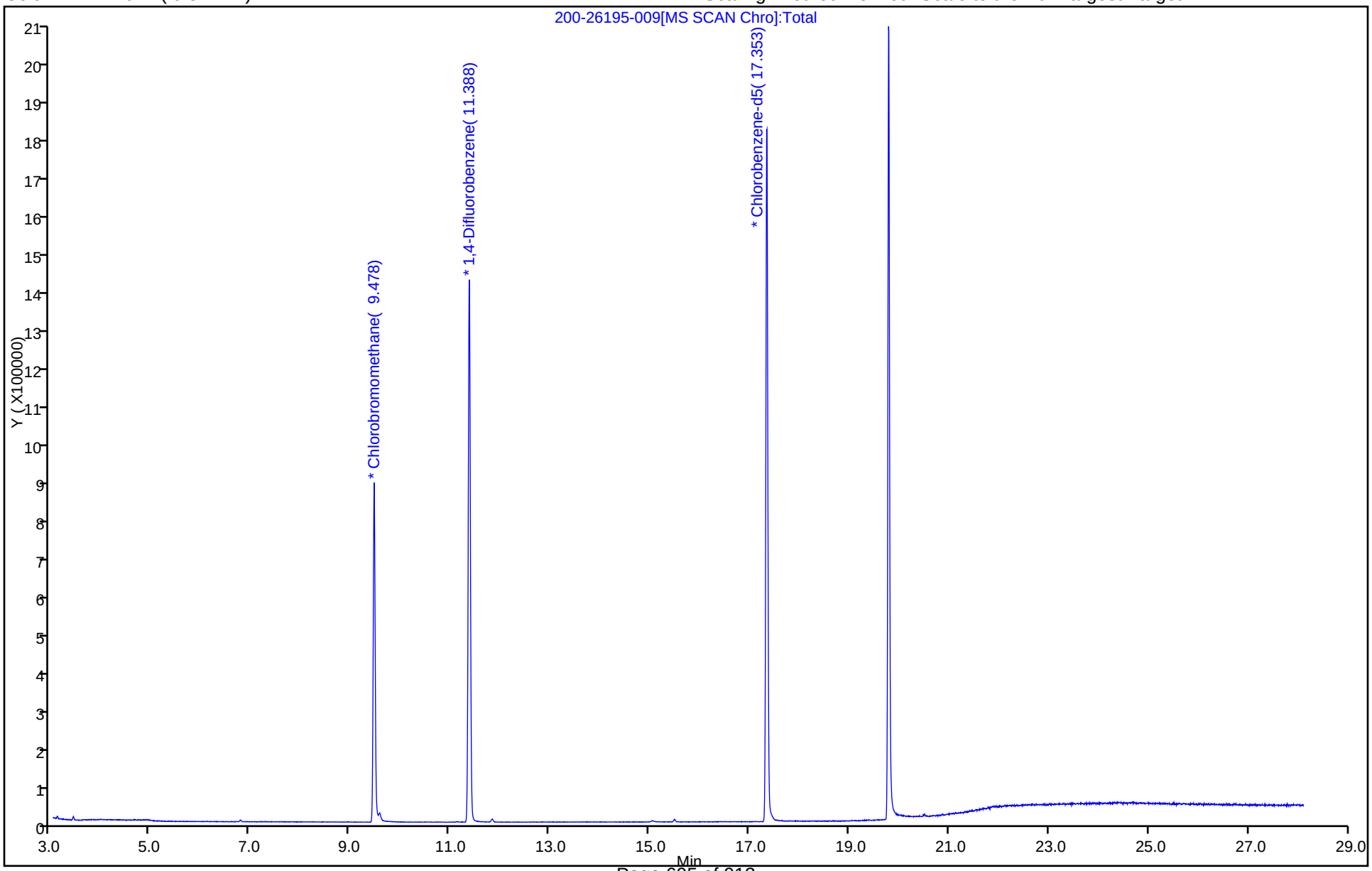
Report Date: 04-Aug-2017 14:22:54 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-009.D

Injection Date:	03-Aug-2017 17:19:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39198-A-10	Lab Sample ID:	200-39198-10	Worklist Smp#:	9
Client ID:	3790				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

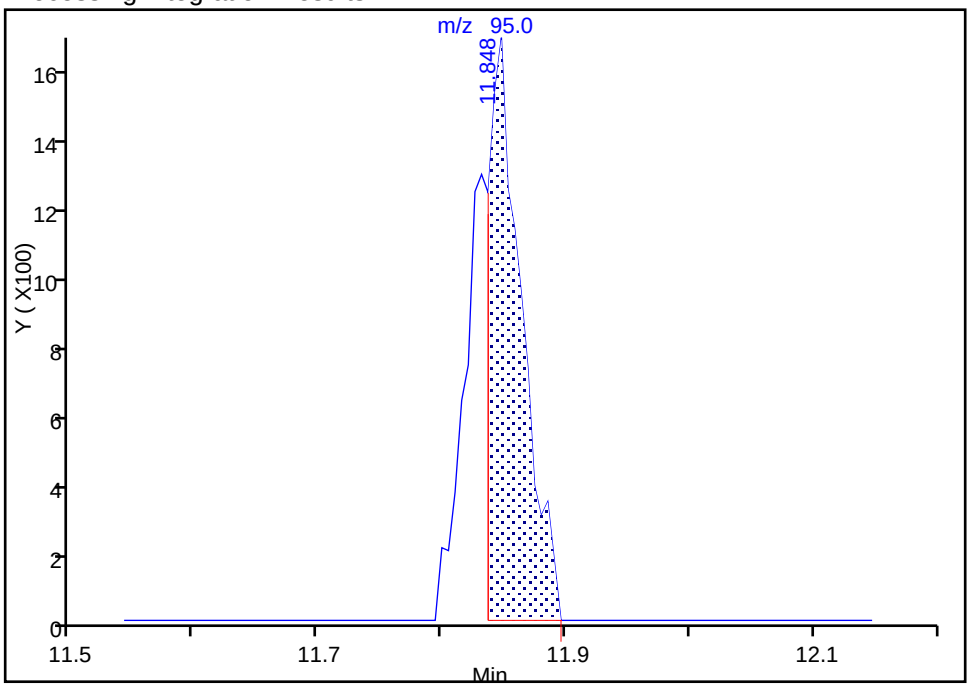
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-009.D				
Injection Date:	03-Aug-2017 17:19:30	Instrument ID:	CHG.i		
Lims ID:	200-39198-A-10	Lab Sample ID:	200-39198-10		
Client ID:	3790				
Operator ID:	pad	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

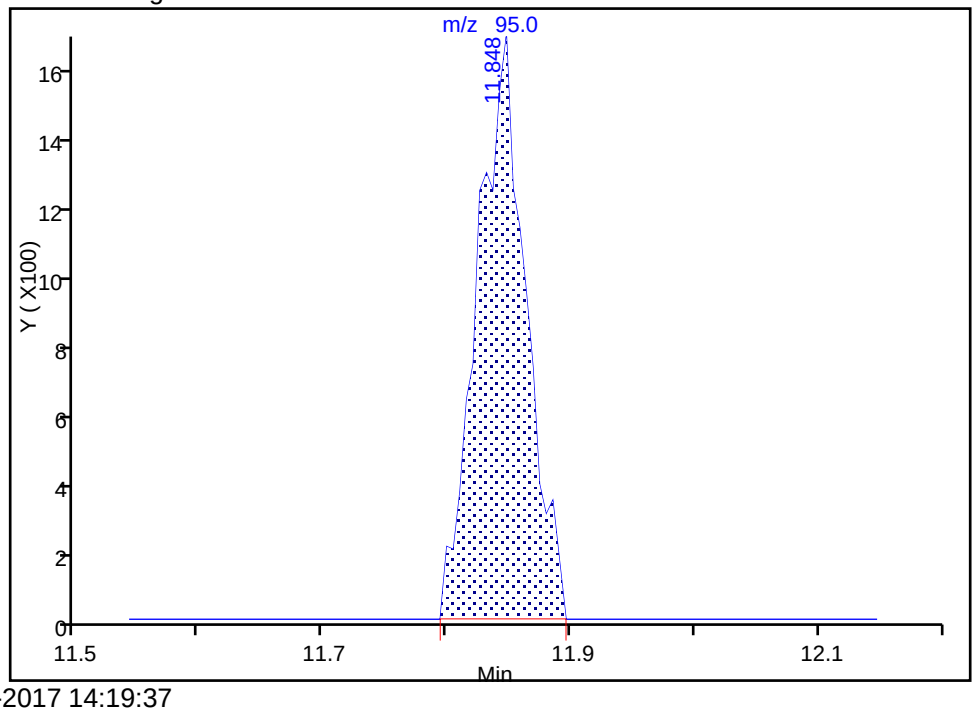
Processing Integration Results

RT: 11.85
Area: 2981
Amount: 0.038276
Amount Units: ppb v/v



Manual Integration Results

RT: 11.85
Area: 4415
Amount: 0.056689
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:19:37

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4437 Lab Sample ID: 200-39198-11

Matrix: Air Lab File ID: 200-26195-010.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 18:11

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4437 Lab Sample ID: 200-39198-11

Matrix: Air Lab File ID: 200-26195-010.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 18:11

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 4437 Lab Sample ID: 200-39198-11

Matrix: Air Lab File ID: 200-26195-010.D

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 18:11

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-010.D
Lims ID: 200-39198-A-11
Client ID: 4437
Sample Type: Client
Inject. Date: 03-Aug-2017 18:11:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-010
Misc. Info.: 39198-11
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:25:07 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:25:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139				ND	
2 Dichlorodifluoromethane	85		3.197				ND	
3 Chlorodifluoromethane	51		3.235				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5 Chloromethane	50		3.529				ND	
6 Butane	43		3.690				ND	
7 Vinyl chloride	62		3.727				ND	
8 Butadiene	54		3.786				ND	
10 Bromomethane	94		4.348				ND	
11 Chloroethane	64		4.535				ND	
13 Vinyl bromide	106		4.850				ND	
14 Trichlorofluoromethane	101		4.925				ND	
17 Ethanol	45		5.418				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21 1,1-Dichloroethene	96		5.878				ND	
22 Acetone	43	6.108	6.113	-0.005	100	21270	0.5336	
23 Carbon disulfide	76		6.241				ND	
24 Isopropyl alcohol	45		6.348				ND	
25 3-Chloro-1-propene	41		6.562				ND	
27 Methylene Chloride	49	6.792	6.825	-0.033	93	3180	0.0880	
28 2-Methyl-2-propanol	59		7.044				ND	
29 Methyl tert-butyl ether	73		7.204				ND	
31 trans-1,2-Dichloroethene	61		7.215				ND	
33 Hexane	57		7.541				ND	
34 1,1-Dichloroethane	63		8.028				ND	
35 Vinyl acetate	43		8.092				ND	
37 cis-1,2-Dichloroethene	96		9.055				ND	
38 2-Butanone (MEK)	72		9.136				ND	
39 Ethyl acetate	88		9.152				ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	86	333909	10.0	
41 Tetrahydrofuran	42		9.542				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.596	9.612	-0.016	95	17529	0.1621	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.847				ND	
	44 1,1,1-Trichloroethane	97		9.885				ND	
	45 Carbon tetrachloride	117		10.120				ND	
	46 Isooctane	57		10.527				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.388	11.404	-0.016	95	1802544	10.0	
	53 Trichloroethene	95		11.859				ND	
	54 1,2-Dichloropropane	63		12.426				ND	
	55 Methyl methacrylate	69		12.597				ND	
	57 Dibromomethane	174		12.672				ND	
	56 1,4-Dioxane	88		12.677				ND	
	58 Dichlorobromomethane	83		12.955				ND	
	60 cis-1,3-Dichloropropene	75		13.875				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
	65 Toluene	92		14.453				ND	
	66 trans-1,3-Dichloropropene	75		15.058				ND	
	67 1,1,2-Trichloroethane	83		15.432				ND	
	68 Tetrachloroethene	166		15.512				ND	
	69 2-Hexanone	43		15.914				ND	
	71 Chlorodibromomethane	129		16.187				ND	
	72 Ethylene Dibromide	107		16.459				ND	
*	74 Chlorobenzene-d5	117	17.353	17.358	-0.005	88	1572863	10.0	
	75 Chlorobenzene	112		17.417				ND	
	76 Ethylbenzene	91		17.572				ND	
	78 m-Xylene & p-Xylene	106		17.829				ND	
	79 o-Xylene	106		18.685				ND	
	80 Styrene	104		18.744				ND	
	81 Bromoform	173		19.188				ND	
	82 Isopropylbenzene	105		19.412				ND	
S	73 Xylenes, Total	106		19.600				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
	85 N-Propylbenzene	91		20.167				ND	
	89 2-Chlorotoluene	91		20.370				ND	
	88 4-Ethyltoluene	105		20.370				ND	
	90 1,3,5-Trimethylbenzene	105		20.482				ND	
	92 tert-Butylbenzene	119		20.985				ND	
	93 1,2,4-Trimethylbenzene	105		21.087				ND	
	94 sec-Butylbenzene	105		21.322				ND	
	95 4-Isopropyltoluene	119		21.531				ND	
	96 1,3-Dichlorobenzene	146		21.552				ND	
	97 1,4-Dichlorobenzene	146		21.691				ND	
	98 Benzyl chloride	91		21.900				ND	
	100 n-Butylbenzene	91		22.109				ND	
	101 1,2-Dichlorobenzene	146		22.226				ND	
	103 1,2,4-Trichlorobenzene	180		24.687				ND	
	104 Hexachlorobutadiene	225		24.869				ND	
	105 Naphthalene	128		25.169				ND	

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

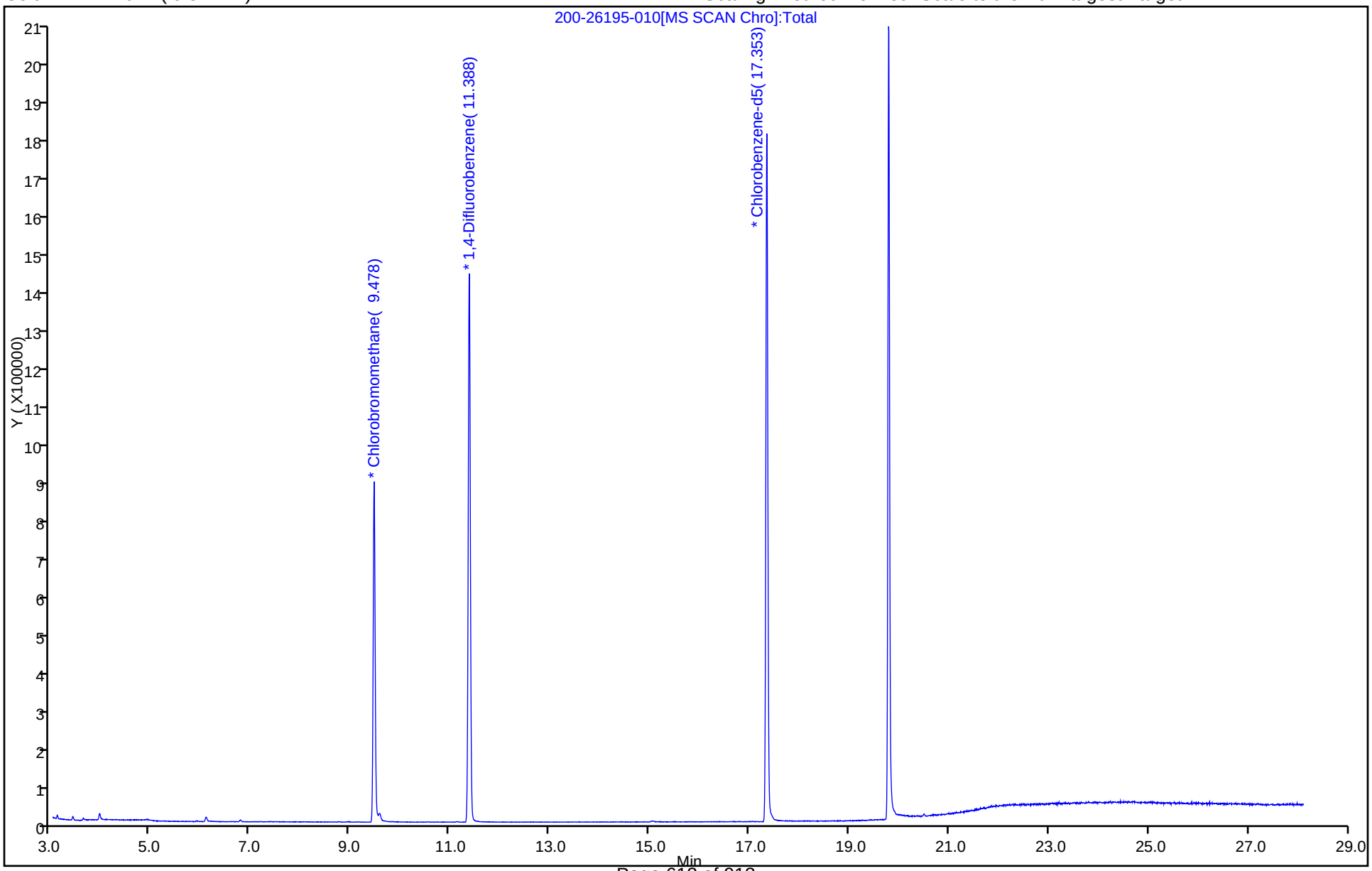
Report Date: 04-Aug-2017 14:25:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-010.D

Injection Date:	03-Aug-2017 18:11:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39198-A-11	Lab Sample ID:	200-39198-11	Worklist Smp#:	10
Client ID:	4437				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5038 | Lab Sample ID: 200-39198-12

Matrix: Air | Lab File ID: 25955-18.d

Analysis Method: TO-15 | Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/19/2017 08:29

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118667 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U *	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5038 Lab Sample ID: 200-39198-12

Matrix: Air Lab File ID: 25955-18.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 08:29

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Client Sample ID: 5038 Lab Sample ID: 200-39198-12

Matrix: Air Lab File ID: 25955-18.d

Analysis Method: TO-15 Date Collected: 07/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 08:29

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-18.d
Lims ID: 200-39198-A-12
Client ID: 5038
Sample Type: Client
Inject. Date: 19-Jul-2017 08:29:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025955-18
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 20-Jul-2017 09:16:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	5.281	5.249	0.032	81	2342	0.2277	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.447				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50		5.971				ND	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.303				ND	
8 Butadiene	54		6.399				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.453				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.956				ND	
17 Ethanol	45		8.459				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43	9.235	9.219	0.015	77	8197	0.2842	7
23 Carbon disulfide	76		9.422				ND	
24 Isopropyl alcohol	45	9.438	9.427	0.011	95	6697	0.2036	
25 3-Chloro-1-propene	41		9.727				ND	
27 Methylene Chloride	49	9.994	9.989	0.005	27	1806	0.0775	M
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.331				ND	
31 trans-1,2-Dichloroethene	61		10.390				ND	
33 Hexane	57		10.717				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.219				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.231				ND	
41 Tetrahydrofuran	42		12.632				ND	
* 40 Chlorobromomethane	128	12.632	12.637	-0.005	95	112626	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.723				ND	
	43 Cyclohexane	84		12.990				ND	
	44 1,1,1-Trichloroethane	97		13.006				ND	
	45 Carbon tetrachloride	117		13.236				ND	
	46 Isooctane	57		13.584				ND	
	47 Benzene	78		13.654				ND	
	48 1,2-Dichloroethane	62		13.798				ND	
	49 n-Heptane	43		13.900				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	567606	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.274				ND	
	55 Methyl methacrylate	69		15.349				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.505				ND	
	58 Dichlorobromomethane	83		15.729				ND	
	60 cis-1,3-Dichloropropene	75		16.558				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92		17.109				ND	
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.987				ND	
	68 Tetrachloroethene	166	18.099	18.110	-0.011	84	542	0.0159	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.714				ND	
	72 Ethylene Dibromide	107		18.993				ND	
*	74 Chlorobenzene-d5	117	19.838	19.832	0.006	91	496652	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.020				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.250				ND	
	79 o-Xylene	106		20.999				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.427				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.422				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.989				ND	
	93 1,2,4-Trimethylbenzene	105		23.074				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.904				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.273				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.210				ND	
	105 Naphthalene	128		27.568				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

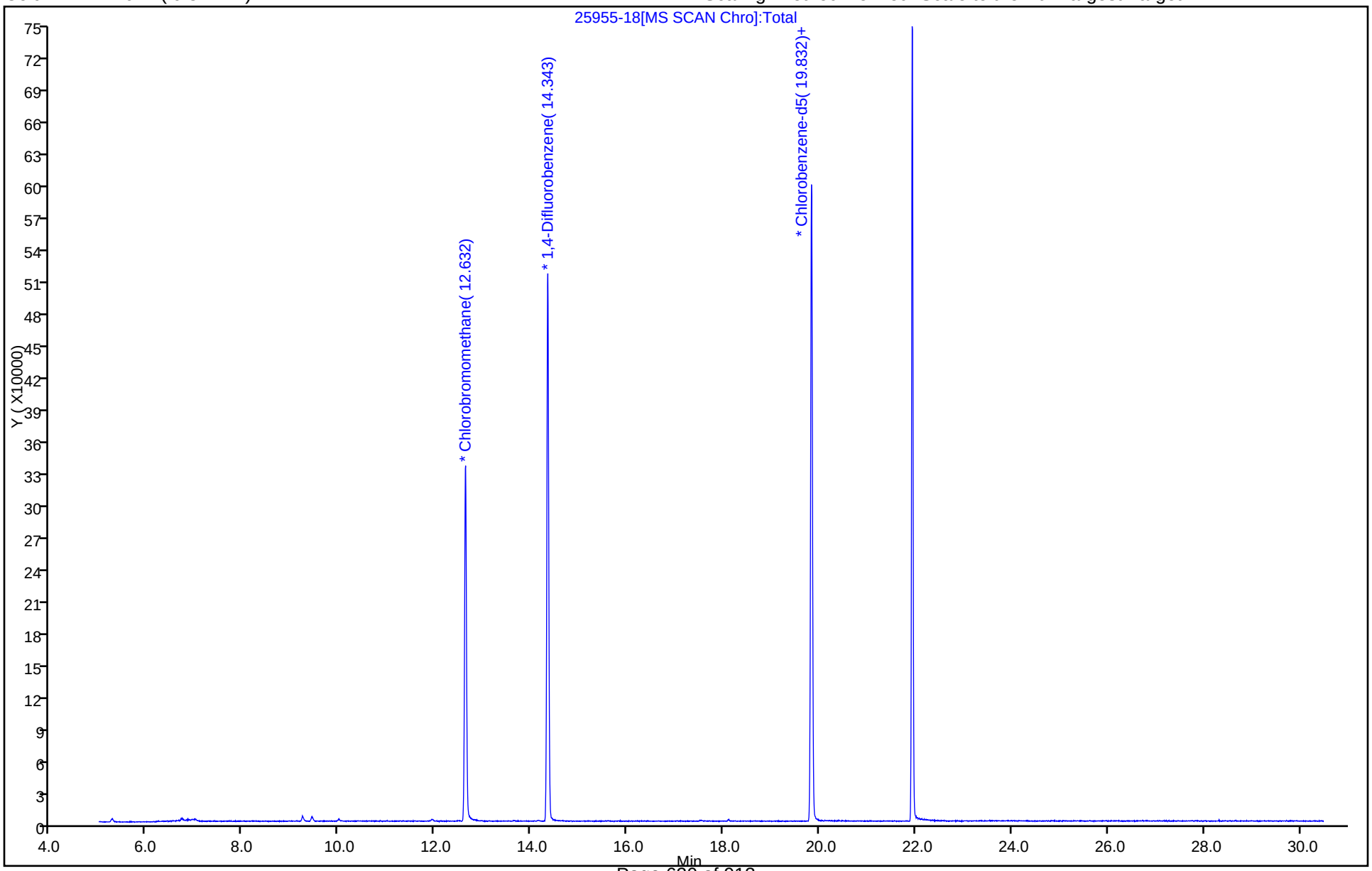
Report Date: 20-Jul-2017 13:30:30 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-18.d

Injection Date:	19-Jul-2017 08:29:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39198-A-12	Lab Sample ID:	200-39198-12	Worklist Smp#:	18
Client ID:	5038				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	17
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

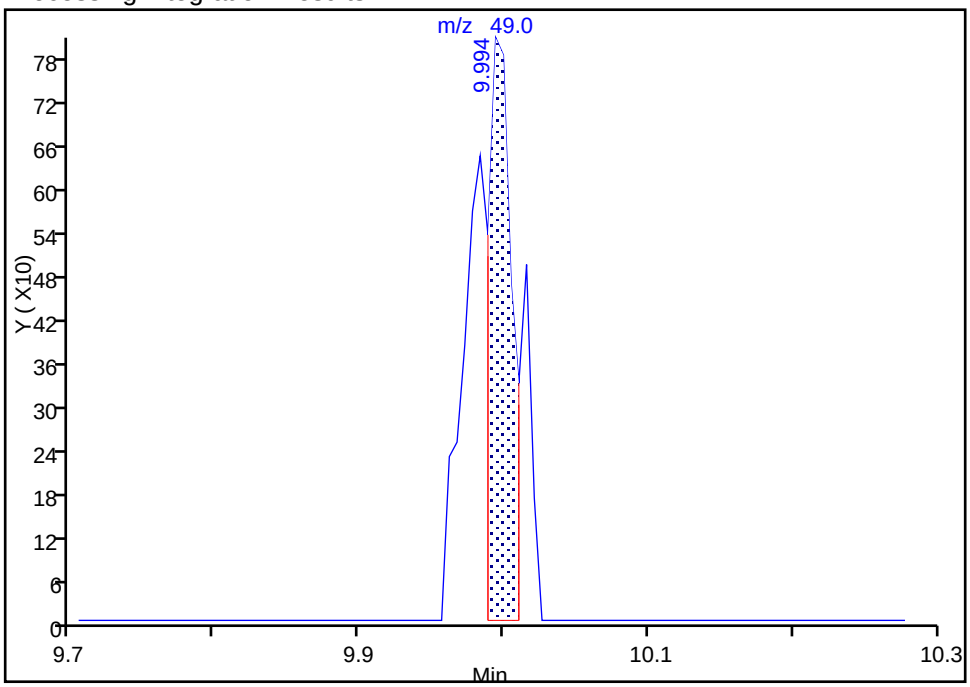
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-18.d				
Injection Date:	19-Jul-2017 08:29:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-12	Lab Sample ID:	200-39198-12		
Client ID:	5038				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

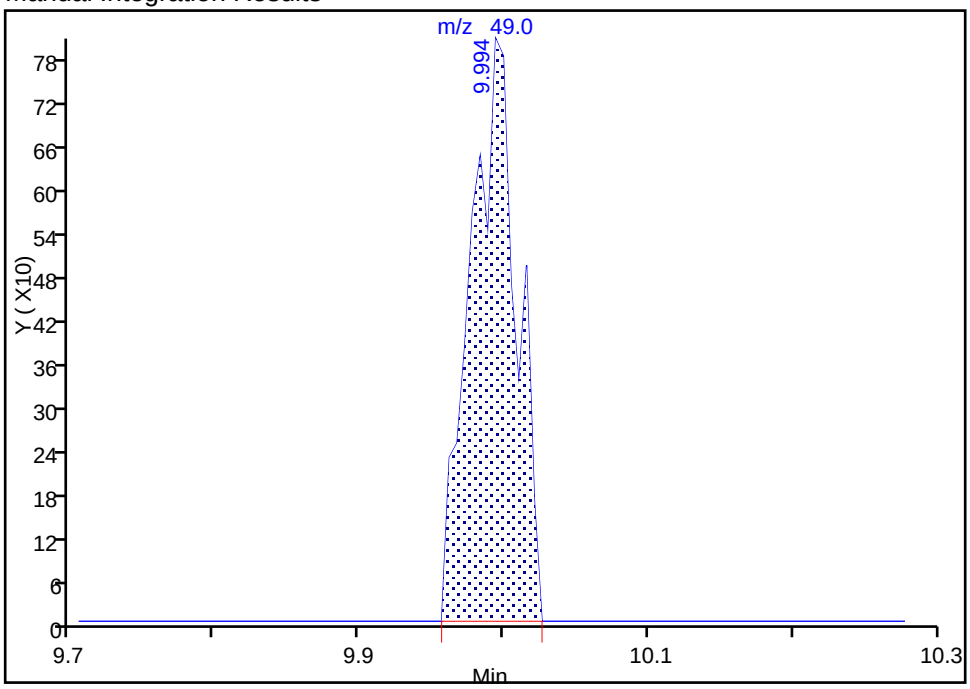
Processing Integration Results

RT: 9.99
Area: 934
Amount: 0.040084
Amount Units: ppb v/v



Manual Integration Results

RT: 9.99
Area: 1806
Amount: 0.077507
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:14:15

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

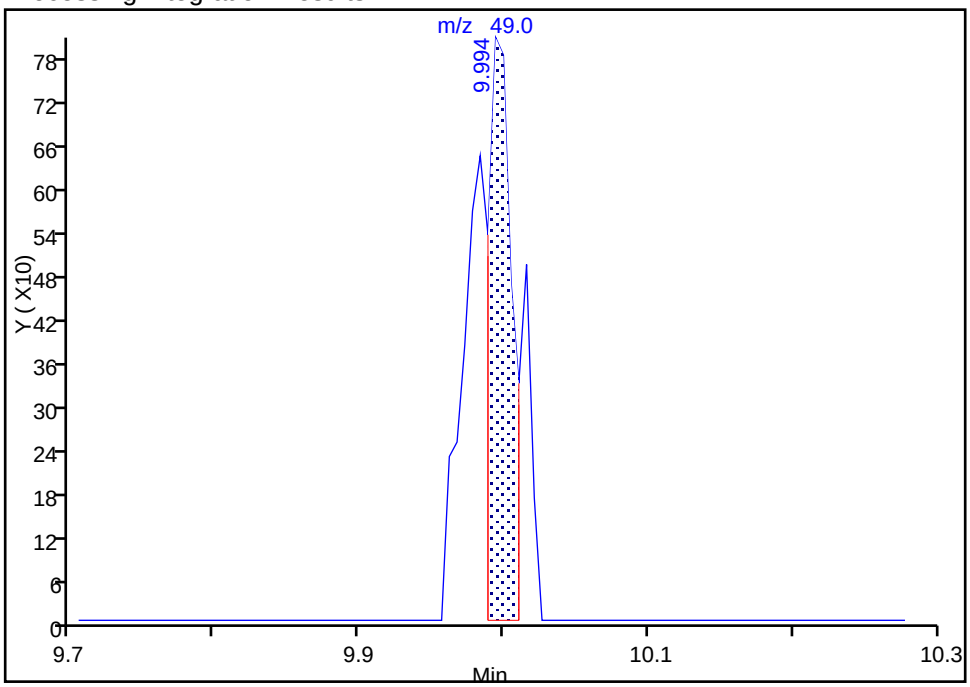
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-18.d				
Injection Date:	19-Jul-2017 08:29:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-12	Lab Sample ID:	200-39198-12		
Client ID:	5038				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

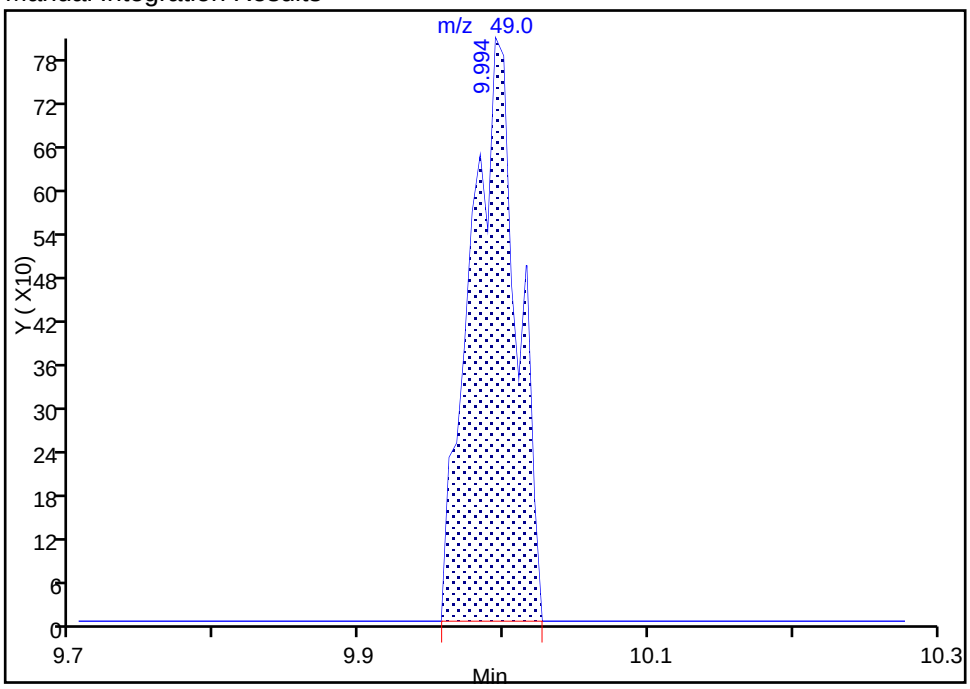
Processing Integration Results

RT: 9.99
Area: 934
Amount: 0.040084
Amount Units: ppb v/v



Manual Integration Results

RT: 9.99
Area: 1806
Amount: 0.077507
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:14:26

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

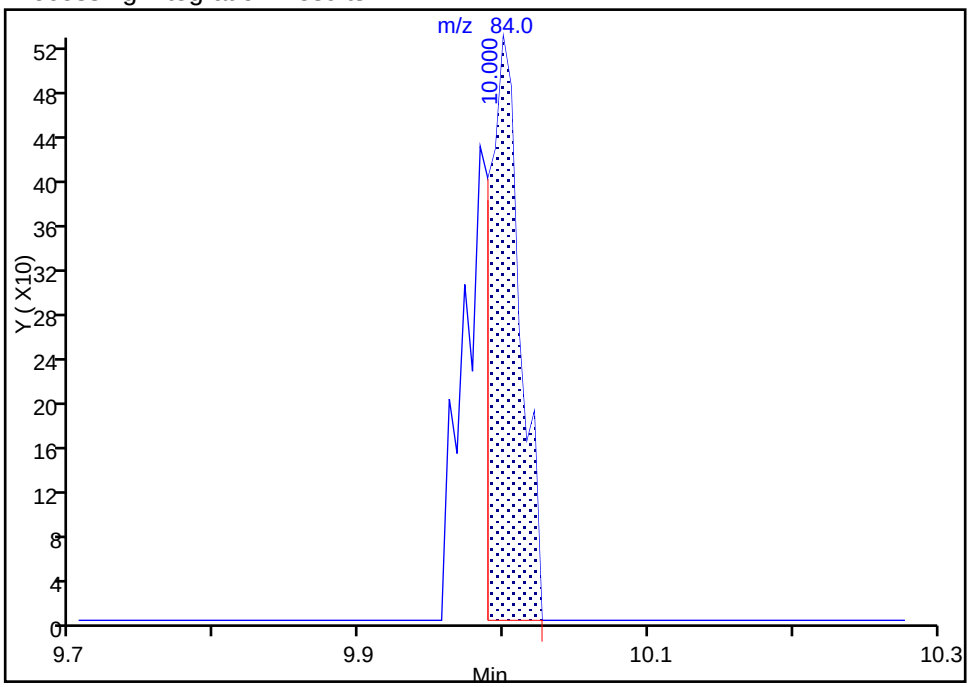
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-18.d				
Injection Date:	19-Jul-2017 08:29:30	Instrument ID:	CHW.i		
Lims ID:	200-39198-A-12	Lab Sample ID:	200-39198-12		
Client ID:	5038				
Operator ID:	ert	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 2

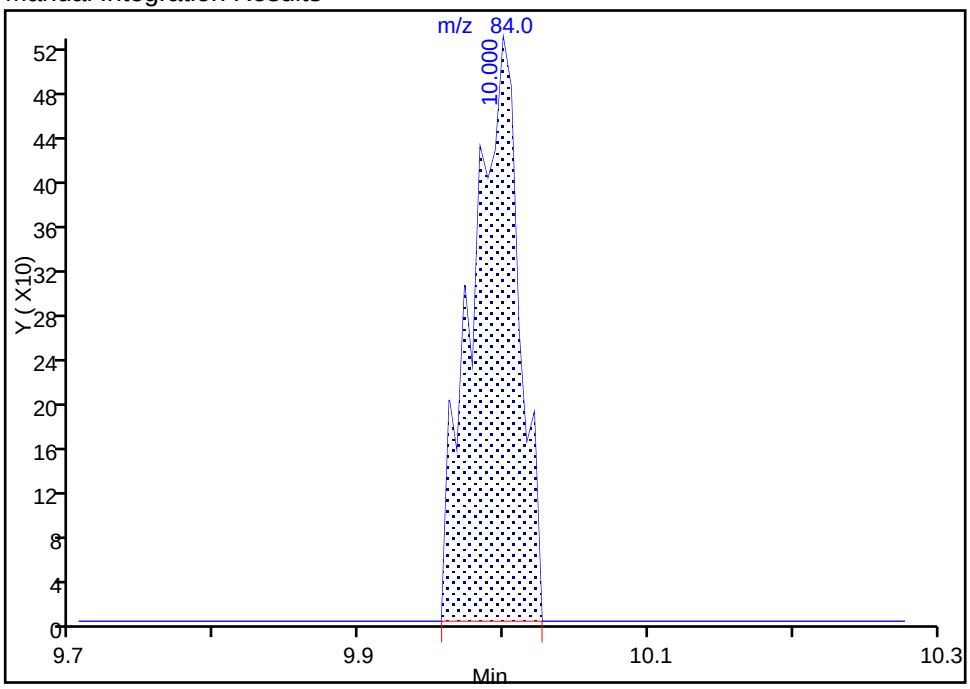
Processing Integration Results

RT: 10.00
Area: 781
Amount: 0.040084
Amount Units: ppb v/v



Manual Integration Results

RT: 10.00
Area: 1199
Amount: 0.077507
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:14:46

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4376 | Lab Sample ID: 200-39232-1

Matrix: Air | Lab File ID: 25955-19.d

Analysis Method: TO-15 | Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/19/2017 09:39

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118667 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U *	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4376 Lab Sample ID: 200-39232-1

Matrix: Air Lab File ID: 25955-19.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 09:39

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4376 Lab Sample ID: 200-39232-1

Matrix: Air Lab File ID: 25955-19.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 09:39

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-19.d
Lims ID: 200-39232-A-1
Client ID: 4376
Sample Type: Client
Inject. Date: 19-Jul-2017 09:39:30 ALS Bottle#: 6 Worklist Smp#: 19
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025955-19
Misc. Info.: 39232-1
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 20-Jul-2017 09:18:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		5.249				ND	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.447				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50	5.993	5.971	0.022	86	1519	0.1103	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.303				ND	
8 Butadiene	54		6.399				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.453				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.956				ND	
17 Ethanol	45		8.459				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43		9.219				ND	
23 Carbon disulfide	76		9.422				ND	
24 Isopropyl alcohol	45	9.449	9.427	0.022	93	6306	0.1908	
25 3-Chloro-1-propene	41		9.727				ND	
27 Methylene Chloride	49	9.984	9.989	-0.005	91	1655	0.0707	
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.331				ND	
31 trans-1,2-Dichloroethene	61		10.390				ND	
33 Hexane	57		10.717				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.219				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.231				ND	
41 Tetrahydrofuran	42		12.632				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 40 Chlorobromomethane	128	12.626	12.637	-0.011	95	113155	10.0	
42 Chloroform	83		12.723				ND	
43 Cyclohexane	84		12.990				ND	
44 1,1,1-Trichloroethane	97		13.006				ND	
45 Carbon tetrachloride	117		13.236				ND	
46 Isooctane	57		13.584				ND	
47 Benzene	78		13.654				ND	
48 1,2-Dichloroethane	62		13.798				ND	
49 n-Heptane	43		13.900				ND	
* 50 1,4-Difluorobenzene	114	14.344	14.344	0.000	96	565872	10.0	
53 Trichloroethene	95		14.777				ND	
54 1,2-Dichloropropane	63		15.274				ND	
55 Methyl methacrylate	69		15.349				ND	
56 1,4-Dioxane	88		15.435				ND	
57 Dibromomethane	174		15.505				ND	
58 Dichlorobromomethane	83		15.729				ND	
60 cis-1,3-Dichloropropene	75		16.558				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
65 Toluene	92		17.109				ND	
66 trans-1,3-Dichloropropene	75		17.628				ND	
67 1,1,2-Trichloroethane	83		17.987				ND	
68 Tetrachloroethene	166		18.110				ND	
69 2-Hexanone	43		18.372				ND	
71 Chlorodibromomethane	129		18.714				ND	
72 Ethylene Dibromide	107		18.993				ND	
* 74 Chlorobenzene-d5	117	19.838	19.832	0.006	90	496990	10.0	
75 Chlorobenzene	112		19.891				ND	
76 Ethylbenzene	91		20.020				ND	
S 73 Xylenes, Total	106		20.100				ND	
78 m-Xylene & p-Xylene	106		20.250				ND	
79 o-Xylene	106		20.999				ND	
80 Styrene	104		21.041				ND	
81 Bromoform	173		21.427				ND	
82 Isopropylbenzene	105		21.587				ND	
84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
85 N-Propylbenzene	91		22.245				ND	
88 4-Ethyltoluene	105		22.422				ND	
89 2-Chlorotoluene	91		22.443				ND	
90 1,3,5-Trimethylbenzene	105		22.518				ND	
92 tert-Butylbenzene	119		22.989				ND	
93 1,2,4-Trimethylbenzene	105		23.074				ND	
94 sec-Butylbenzene	105		23.304				ND	
95 4-Isopropyltoluene	119		23.502				ND	
96 1,3-Dichlorobenzene	146		23.556				ND	
97 1,4-Dichlorobenzene	146		23.695				ND	
98 Benzyl chloride	91		23.904				ND	
100 n-Butylbenzene	91		24.112				ND	
101 1,2-Dichlorobenzene	146		24.273				ND	
103 1,2,4-Trichlorobenzene	180		27.017				ND	
104 Hexachlorobutadiene	225		27.210				ND	
105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

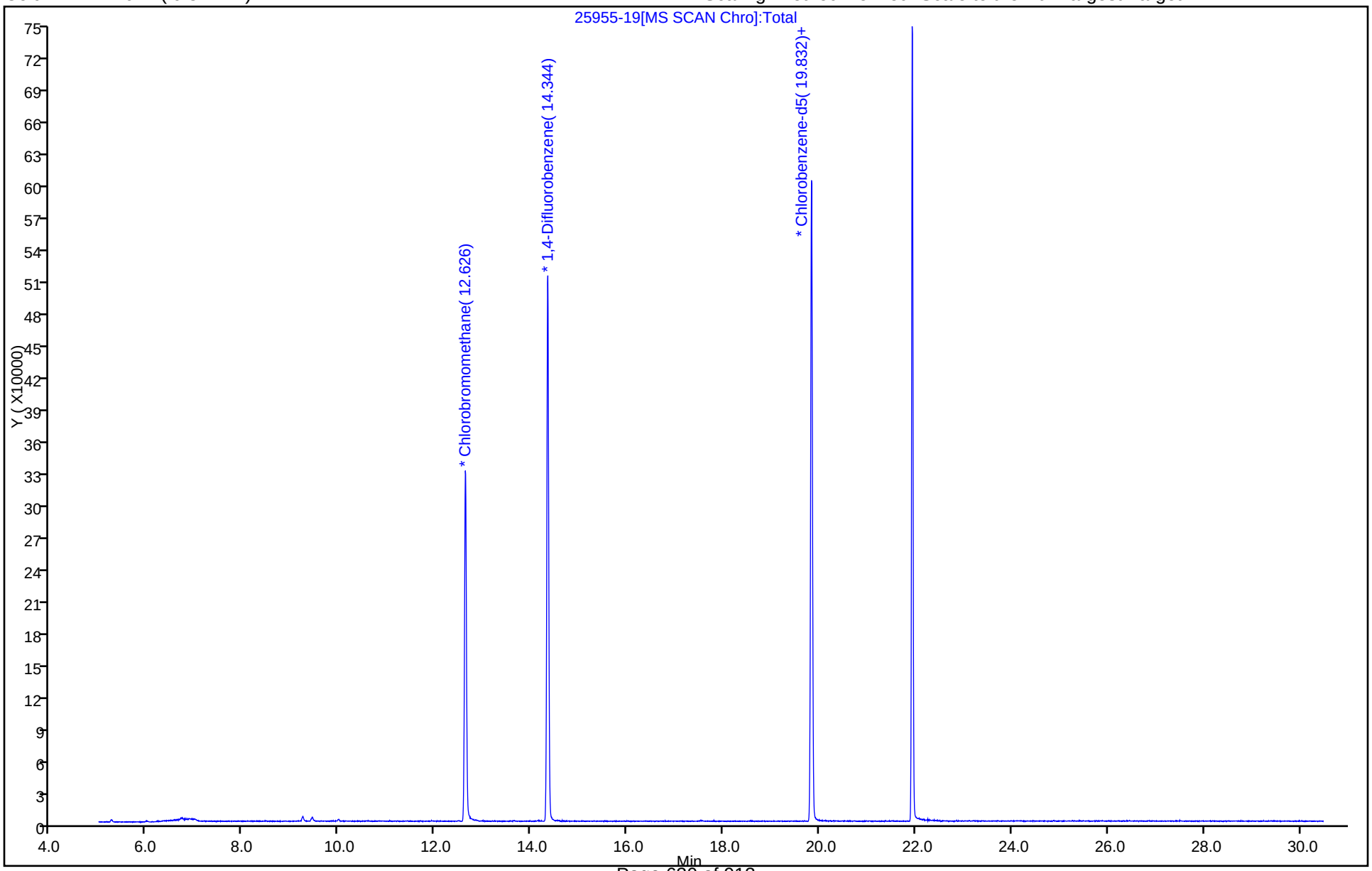
Report Date: 20-Jul-2017 13:30:32 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-19.d

Injection Date:	19-Jul-2017 09:39:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39232-A-1	Lab Sample ID:	200-39232-1	Worklist Smp#:	19
Client ID:	4376				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	6
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 5114 Lab Sample ID: 200-39232-2

Matrix: Air Lab File ID: 25955-20.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 10:49

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U *	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: 5114 | Lab Sample ID: 200-39232-2

Matrix: Air | Lab File ID: 25955-20.d

Analysis Method: TO-15 | Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/19/2017 10:49

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118667 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 5114 Lab Sample ID: 200-39232-2

Matrix: Air Lab File ID: 25955-20.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 10:49

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-20.d
Lims ID: 200-39232-A-2
Client ID: 5114
Sample Type: Client
Inject. Date: 19-Jul-2017 10:49:30 ALS Bottle#: 7 Worklist Smp#: 20
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025955-20
Misc. Info.: 39232-2
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 20-Jul-2017 09:20:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		5.249				ND	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.447				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50		5.971				ND	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.303				ND	
8 Butadiene	54		6.399				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.453				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.956				ND	
17 Ethanol	45		8.459				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43	9.245	9.219	0.026	98	10093	0.3471	
23 Carbon disulfide	76	9.433	9.422	0.011	52	2440	0.0464	
24 Isopropyl alcohol	45	9.427	9.427	0.000	96	6789	0.2047	
25 3-Chloro-1-propene	41		9.727				ND	
27 Methylene Chloride	49	9.989	9.989	0.000	72	1601	0.0682	
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.331				ND	
31 trans-1,2-Dichloroethene	61		10.390				ND	
33 Hexane	57		10.717				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.219				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.231				ND	
41 Tetrahydrofuran	42		12.632				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 40 Chlorobromomethane	128	12.632	12.637	-0.005	96	113543	10.0	
42 Chloroform	83		12.723				ND	
43 Cyclohexane	84		12.990				ND	
44 1,1,1-Trichloroethane	97		13.006				ND	
45 Carbon tetrachloride	117		13.236				ND	
46 Isooctane	57		13.584				ND	
47 Benzene	78		13.654				ND	
48 1,2-Dichloroethane	62		13.798				ND	
49 n-Heptane	43		13.900				ND	
* 50 1,4-Difluorobenzene	114	14.344	14.344	0.000	96	568752	10.0	
53 Trichloroethene	95		14.777				ND	
54 1,2-Dichloropropane	63		15.274				ND	
55 Methyl methacrylate	69		15.349				ND	
56 1,4-Dioxane	88		15.435				ND	
57 Dibromomethane	174		15.505				ND	
58 Dichlorobromomethane	83		15.729				ND	
60 cis-1,3-Dichloropropene	75		16.558				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
65 Toluene	92		17.109				ND	
66 trans-1,3-Dichloropropene	75		17.628				ND	
67 1,1,2-Trichloroethane	83		17.987				ND	
68 Tetrachloroethene	166		18.110				ND	
69 2-Hexanone	43		18.372				ND	
71 Chlorodibromomethane	129		18.714				ND	
72 Ethylene Dibromide	107		18.993				ND	
* 74 Chlorobenzene-d5	117	19.832	19.832	0.000	90	498369	10.0	
75 Chlorobenzene	112		19.891				ND	
76 Ethylbenzene	91		20.020				ND	
S 73 Xylenes, Total	106		20.100				ND	
78 m-Xylene & p-Xylene	106		20.250				ND	
79 o-Xylene	106		20.999				ND	
80 Styrene	104		21.041				ND	
81 Bromoform	173		21.427				ND	
82 Isopropylbenzene	105		21.587				ND	
84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
85 N-Propylbenzene	91		22.245				ND	
88 4-Ethyltoluene	105		22.422				ND	
89 2-Chlorotoluene	91		22.443				ND	
90 1,3,5-Trimethylbenzene	105		22.518				ND	
92 tert-Butylbenzene	119		22.989				ND	
93 1,2,4-Trimethylbenzene	105		23.074				ND	
94 sec-Butylbenzene	105		23.304				ND	
95 4-Isopropyltoluene	119		23.502				ND	
96 1,3-Dichlorobenzene	146		23.556				ND	
97 1,4-Dichlorobenzene	146		23.695				ND	
98 Benzyl chloride	91		23.904				ND	
100 n-Butylbenzene	91		24.112				ND	
101 1,2-Dichlorobenzene	146		24.273				ND	
103 1,2,4-Trichlorobenzene	180		27.017				ND	
104 Hexachlorobutadiene	225		27.210				ND	
105 Naphthalene	128		27.568				ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

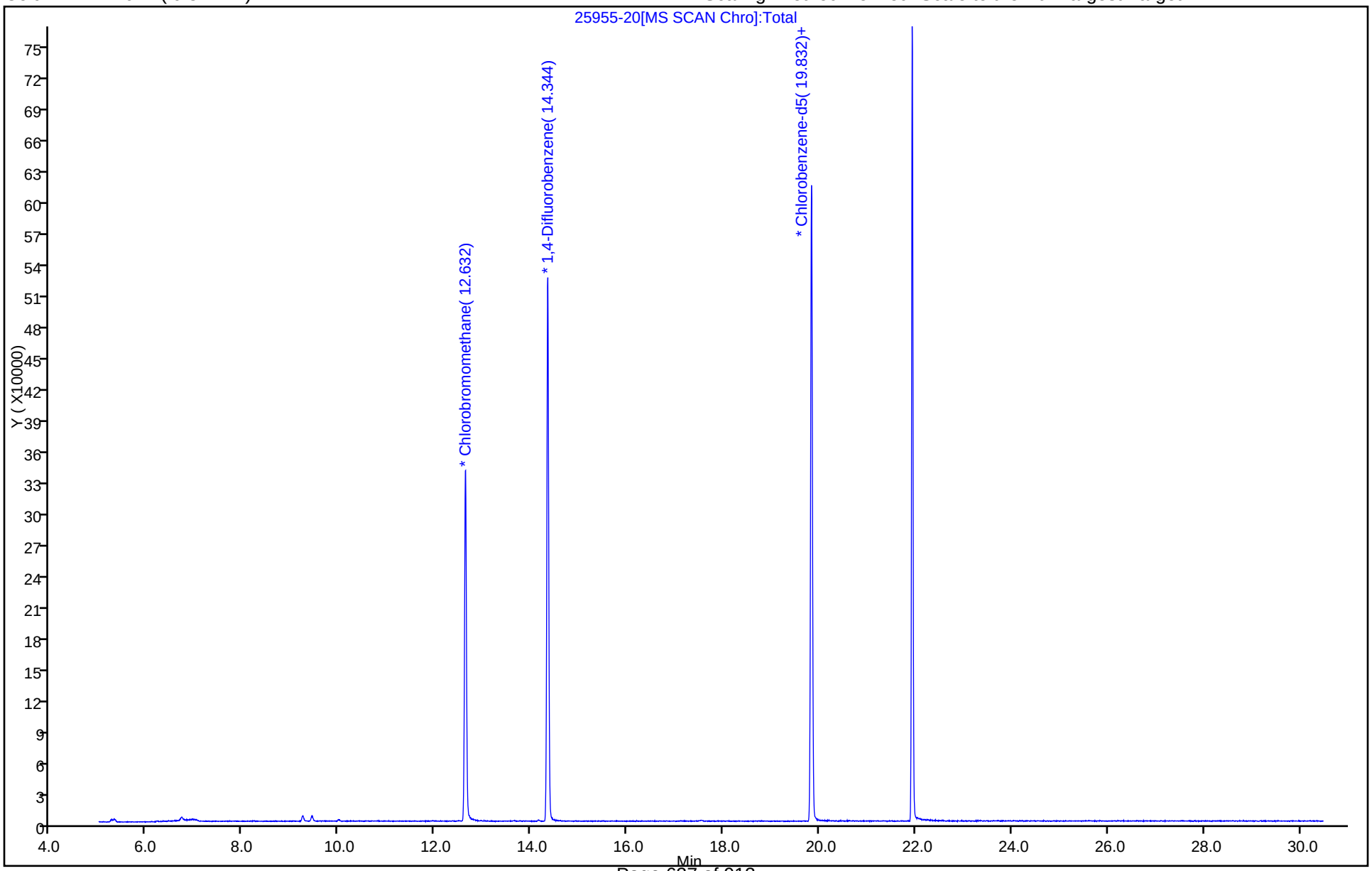
Report Date: 20-Jul-2017 13:30:34 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-20.d

Injection Date:	19-Jul-2017 10:49:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39232-A-2	Lab Sample ID:	200-39232-2	Worklist Smp#:	20
Client ID:	5114				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	7
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4439 Lab Sample ID: 200-39232-3

Matrix: Air Lab File ID: 25955-21.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 11:59

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U *	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4439 Lab Sample ID: 200-39232-3

Matrix: Air Lab File ID: 25955-21.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 11:59

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4439 Lab Sample ID: 200-39232-3

Matrix: Air Lab File ID: 25955-21.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 11:59

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-21.d
Lims ID: 200-39232-A-3
Client ID: 4439
Sample Type: Client
Inject. Date: 19-Jul-2017 11:59:30 ALS Bottle#: 8 Worklist Smp#: 21
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025955-21
Misc. Info.: 39232-3
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 20-Jul-2017 09:22:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		5.249				ND	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.447				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50		5.971				ND	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.303				ND	
8 Butadiene	54		6.399				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.453				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.956				ND	
17 Ethanol	45		8.459				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43	9.240	9.219	0.021	70	8264	0.2898	7
23 Carbon disulfide	76		9.422				ND	
24 Isopropyl alcohol	45	9.443	9.427	0.016	93	6031	0.1855	
25 3-Chloro-1-propene	41		9.727				ND	
27 Methylene Chloride	49	9.994	9.989	0.005	92	1394	0.0605	
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.331				ND	
31 trans-1,2-Dichloroethene	61		10.390				ND	
33 Hexane	57		10.717				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.219				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.231				ND	
41 Tetrahydrofuran	42		12.632				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 40 Chlorobromomethane	128	12.626	12.637	-0.011	96	111342	10.0	
42 Chloroform	83		12.723				ND	
43 Cyclohexane	84		12.990				ND	
44 1,1,1-Trichloroethane	97		13.006				ND	
45 Carbon tetrachloride	117		13.236				ND	
46 Isooctane	57		13.584				ND	
47 Benzene	78		13.654				ND	
48 1,2-Dichloroethane	62		13.798				ND	
49 n-Heptane	43		13.900				ND	
* 50 1,4-Difluorobenzene	114	14.343	14.344	-0.001	96	561491	10.0	
53 Trichloroethene	95		14.777				ND	
54 1,2-Dichloropropane	63		15.274				ND	
55 Methyl methacrylate	69		15.349				ND	
56 1,4-Dioxane	88		15.435				ND	
57 Dibromomethane	174		15.505				ND	
58 Dichlorobromomethane	83		15.729				ND	
60 cis-1,3-Dichloropropene	75		16.558				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
65 Toluene	92		17.109				ND	
66 trans-1,3-Dichloropropene	75		17.628				ND	
67 1,1,2-Trichloroethane	83		17.987				ND	
68 Tetrachloroethene	166		18.110				ND	
69 2-Hexanone	43		18.372				ND	
71 Chlorodibromomethane	129		18.714				ND	
72 Ethylene Dibromide	107		18.993				ND	
* 74 Chlorobenzene-d5	117	19.838	19.832	0.006	90	486620	10.0	
75 Chlorobenzene	112		19.891				ND	
76 Ethylbenzene	91		20.020				ND	
S 73 Xylenes, Total	106		20.100				ND	
78 m-Xylene & p-Xylene	106		20.250				ND	
79 o-Xylene	106		20.999				ND	
80 Styrene	104		21.041				ND	
81 Bromoform	173		21.427				ND	
82 Isopropylbenzene	105		21.587				ND	
84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
85 N-Propylbenzene	91		22.245				ND	
88 4-Ethyltoluene	105		22.422				ND	
89 2-Chlorotoluene	91		22.443				ND	
90 1,3,5-Trimethylbenzene	105		22.518				ND	
92 tert-Butylbenzene	119		22.989				ND	
93 1,2,4-Trimethylbenzene	105		23.074				ND	
94 sec-Butylbenzene	105		23.304				ND	
95 4-Isopropyltoluene	119		23.502				ND	
96 1,3-Dichlorobenzene	146		23.556				ND	
97 1,4-Dichlorobenzene	146		23.695				ND	
98 Benzyl chloride	91		23.904				ND	
100 n-Butylbenzene	91		24.112				ND	
101 1,2-Dichlorobenzene	146		24.273				ND	
103 1,2,4-Trichlorobenzene	180		27.017				ND	
104 Hexachlorobutadiene	225		27.210				ND	
105 Naphthalene	128		27.568				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

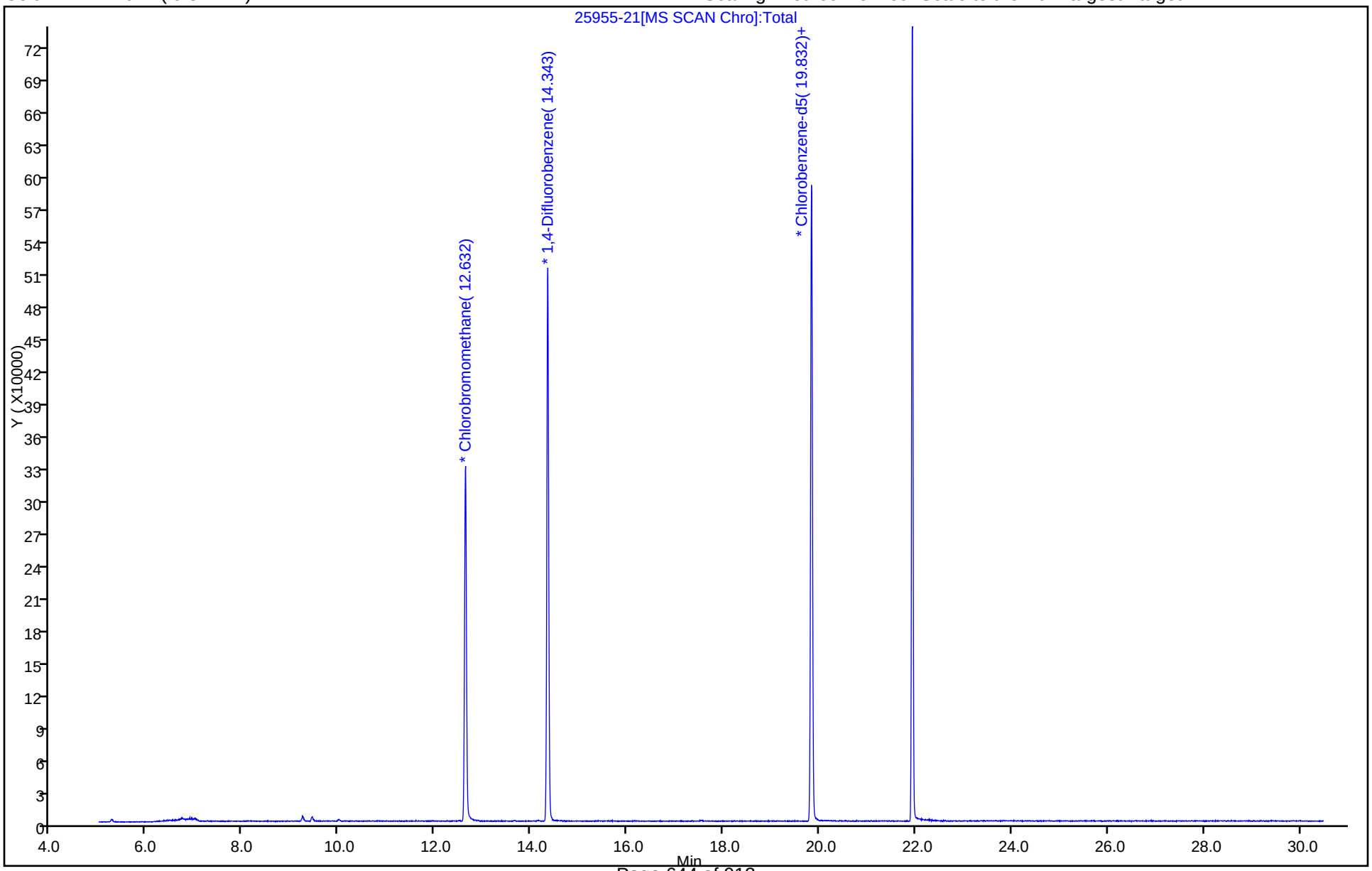
Report Date: 20-Jul-2017 13:30:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-21.d

Injection Date:	19-Jul-2017 11:59:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39232-A-3	Lab Sample ID:	200-39232-3	Worklist Smp#:	21
Client ID:	4439				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	8
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 2538 Lab Sample ID: 200-39232-4

Matrix: Air Lab File ID: 25955-22.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 13:09

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U *	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: 2538 | Lab Sample ID: 200-39232-4

Matrix: Air | Lab File ID: 25955-22.d

Analysis Method: TO-15 | Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/19/2017 13:09

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118667 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 2538 Lab Sample ID: 200-39232-4

Matrix: Air Lab File ID: 25955-22.d

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/19/2017 13:09

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118667 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d
Lims ID: 200-39232-A-4
Client ID: 2538
Sample Type: Client
Inject. Date: 19-Jul-2017 13:09:30 ALS Bottle#: 9 Worklist Smp#: 22
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025955-22
Misc. Info.: 39232-4
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 20-Jul-2017 13:29:54 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK023

First Level Reviewer: puangmaleek Date: 20-Jul-2017 09:26:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		5.249				ND	
2 Dichlorodifluoromethane	85		5.367				ND	
3 Chlorodifluoromethane	51		5.447				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.779				ND	
5 Chloromethane	50		5.971				ND	
6 Butane	43		6.244				ND	
7 Vinyl chloride	62		6.303				ND	
8 Butadiene	54		6.399				ND	
10 Bromomethane	94		7.196				ND	
11 Chloroethane	64		7.453				ND	
13 Vinyl bromide	106		7.860				ND	
14 Trichlorofluoromethane	101		7.956				ND	
17 Ethanol	45		8.459				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.962				ND	
21 1,1-Dichloroethene	96		9.026				ND	
22 Acetone	43		9.219				ND	
23 Carbon disulfide	76	9.433	9.422	0.010	78	2711	0.0533	M
24 Isopropyl alcohol	45	9.433	9.427	0.005	92	6307	0.1966	
25 3-Chloro-1-propene	41		9.727				ND	
27 Methylene Chloride	49	9.994	9.989	0.005	1	1509	0.0664	M
28 2-Methyl-2-propanol	59		10.112				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
29 Methyl tert-butyl ether	73		10.331				ND	
31 trans-1,2-Dichloroethene	61		10.390				ND	
33 Hexane	57		10.717				ND	
34 1,1-Dichloroethane	63		11.193				ND	
35 Vinyl acetate	43		11.219				ND	
37 cis-1,2-Dichloroethene	96		12.204				ND	
38 2-Butanone (MEK)	72		12.220				ND	
39 Ethyl acetate	88		12.231				ND	
41 Tetrahydrofuran	42		12.632				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 40 Chlorobromomethane	128	12.632	12.637	-0.005	96	109837	10.0	
42 Chloroform	83		12.723				ND	
43 Cyclohexane	84		12.990				ND	
44 1,1,1-Trichloroethane	97		13.006				ND	
45 Carbon tetrachloride	117		13.236				ND	
46 Isooctane	57		13.584				ND	
47 Benzene	78		13.654				ND	
48 1,2-Dichloroethane	62		13.798				ND	
49 n-Heptane	43		13.900				ND	
* 50 1,4-Difluorobenzene	114	14.344	14.344	0.000	96	552331	10.0	
53 Trichloroethene	95		14.777				ND	
54 1,2-Dichloropropane	63		15.274				ND	
55 Methyl methacrylate	69		15.349				ND	
56 1,4-Dioxane	88		15.435				ND	
57 Dibromomethane	174		15.505				ND	
58 Dichlorobromomethane	83		15.729				ND	
60 cis-1,3-Dichloropropene	75		16.558				ND	
61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
65 Toluene	92		17.109				ND	
66 trans-1,3-Dichloropropene	75		17.628				ND	
67 1,1,2-Trichloroethane	83		17.987				ND	
68 Tetrachloroethene	166		18.110				ND	
69 2-Hexanone	43		18.372				ND	
71 Chlorodibromomethane	129		18.714				ND	
72 Ethylene Dibromide	107		18.993				ND	
* 74 Chlorobenzene-d5	117	19.832	19.832	0.000	90	483853	10.0	
75 Chlorobenzene	112		19.891				ND	
76 Ethylbenzene	91		20.020				ND	
S 73 Xylenes, Total	106		20.100				ND	
78 m-Xylene & p-Xylene	106		20.250				ND	
79 o-Xylene	106		20.999				ND	
80 Styrene	104		21.041				ND	
81 Bromoform	173		21.427				ND	
82 Isopropylbenzene	105		21.587				ND	
84 1,1,2,2-Tetrachloroethane	83		22.176				ND	
85 N-Propylbenzene	91		22.245				ND	
88 4-Ethyltoluene	105		22.422				ND	
89 2-Chlorotoluene	91		22.443				ND	
90 1,3,5-Trimethylbenzene	105		22.518				ND	
92 tert-Butylbenzene	119		22.989				ND	
93 1,2,4-Trimethylbenzene	105		23.074				ND	
94 sec-Butylbenzene	105		23.304				ND	
95 4-Isopropyltoluene	119		23.502				ND	
96 1,3-Dichlorobenzene	146		23.556				ND	
97 1,4-Dichlorobenzene	146		23.695				ND	
98 Benzyl chloride	91		23.904				ND	
100 n-Butylbenzene	91		24.112				ND	
101 1,2-Dichlorobenzene	146		24.273				ND	
103 1,2,4-Trichlorobenzene	180		27.017				ND	
104 Hexachlorobutadiene	225		27.210				ND	
105 Naphthalene	128		27.568				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

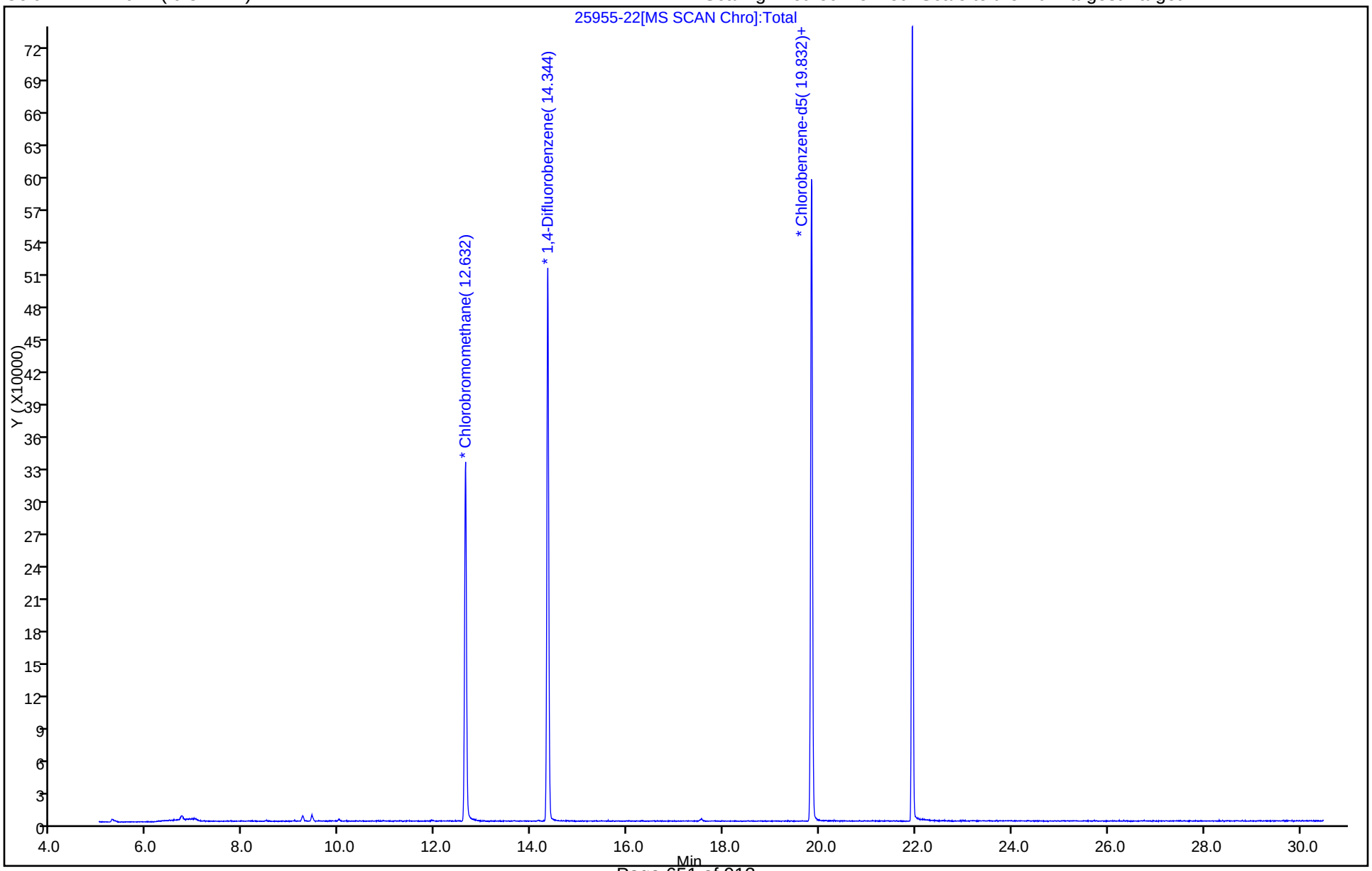
Report Date: 20-Jul-2017 13:30:38 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d

Injection Date:	19-Jul-2017 13:09:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39232-A-4	Lab Sample ID:	200-39232-4	Worklist Smp#:	22
Client ID:	2538				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	9
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

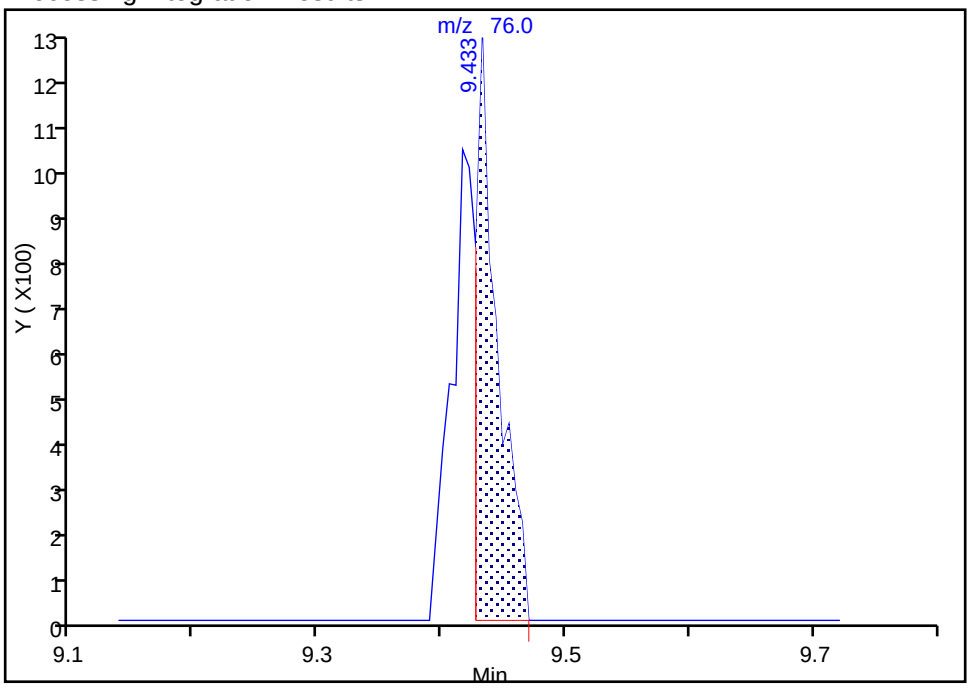
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d				
Injection Date:	19-Jul-2017 13:09:30	Instrument ID:	CHW.i		
Lims ID:	200-39232-A-4	Lab Sample ID:	200-39232-4		
Client ID:	2538				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

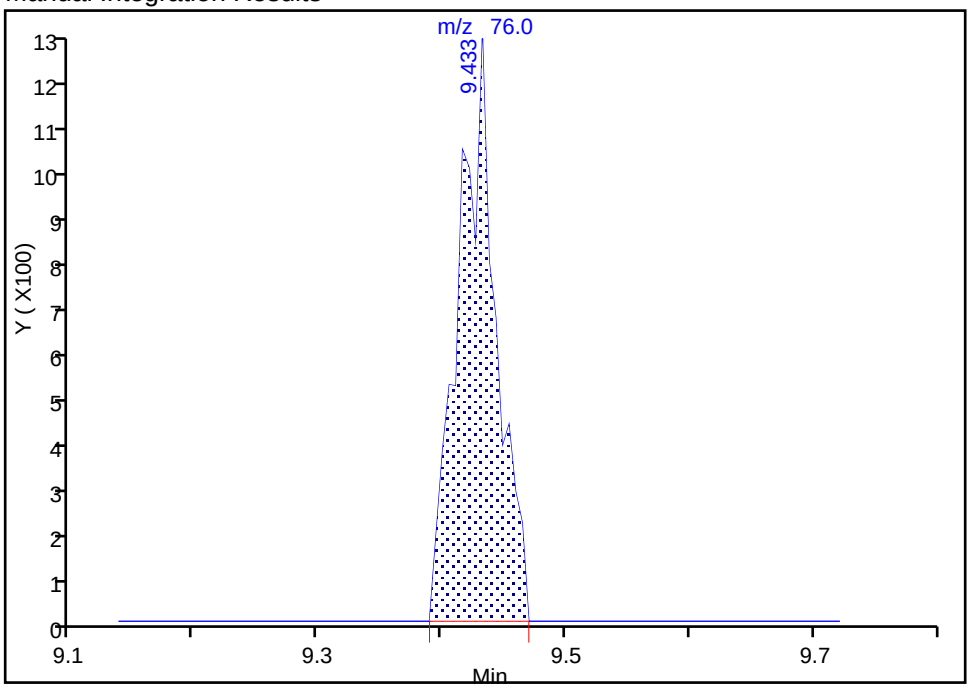
Processing Integration Results

RT: 9.43
Area: 1553
Amount: 0.030548
Amount Units: ppb v/v



Manual Integration Results

RT: 9.43
Area: 2711
Amount: 0.053326
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:24:22

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

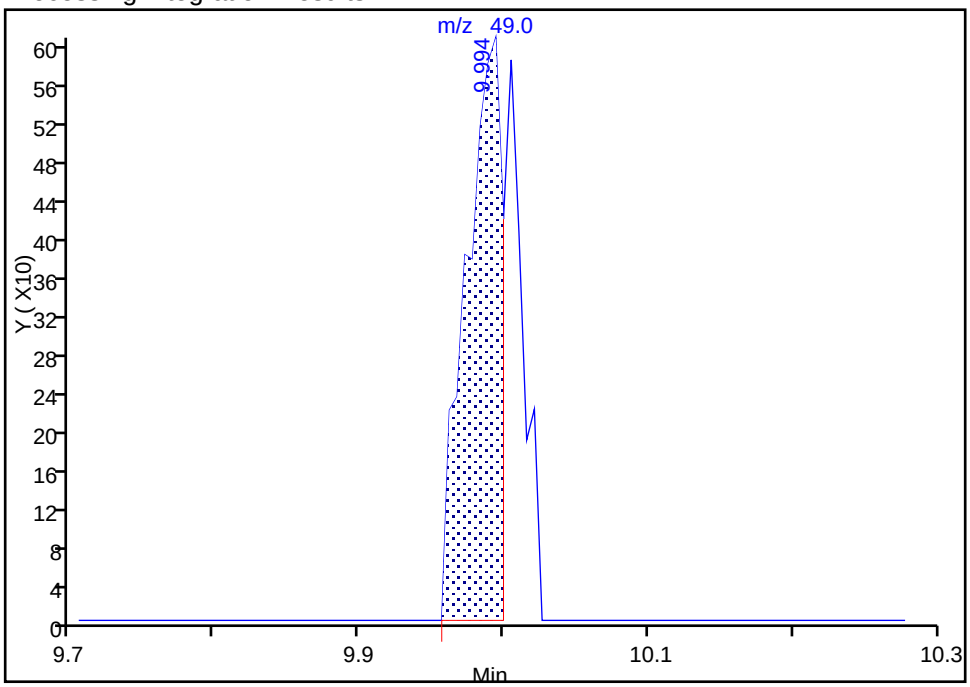
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d				
Injection Date:	19-Jul-2017 13:09:30	Instrument ID:	CHW.i		
Lims ID:	200-39232-A-4	Lab Sample ID:	200-39232-4		
Client ID:	2538				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

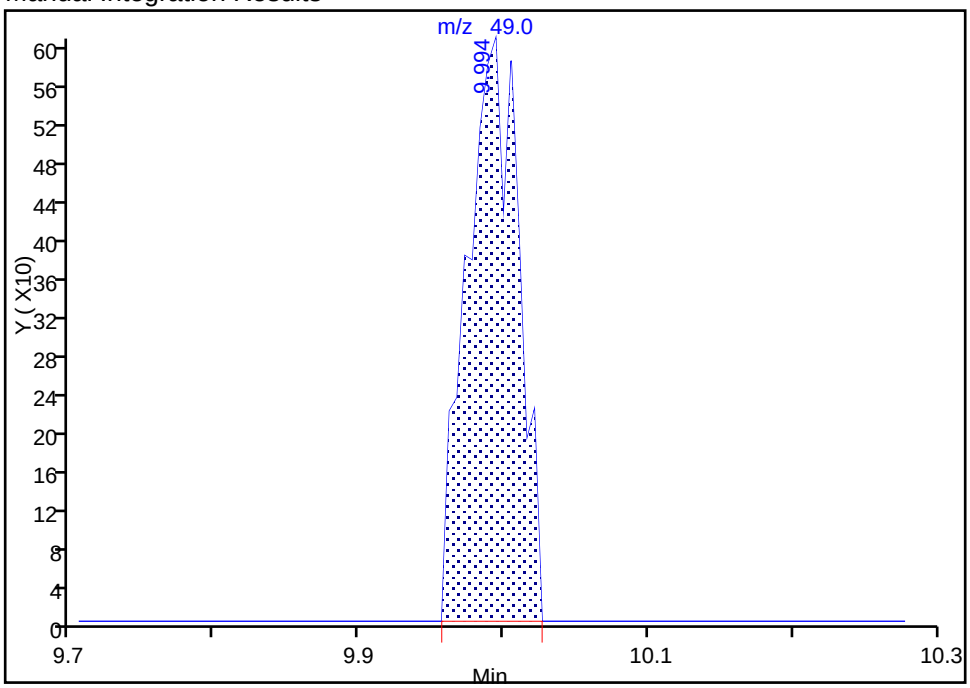
Processing Integration Results

RT: 9.99
Area: 1063
Amount: 0.046779
Amount Units: ppb v/v



Manual Integration Results

RT: 9.99
Area: 1509
Amount: 0.066405
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:24:35

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

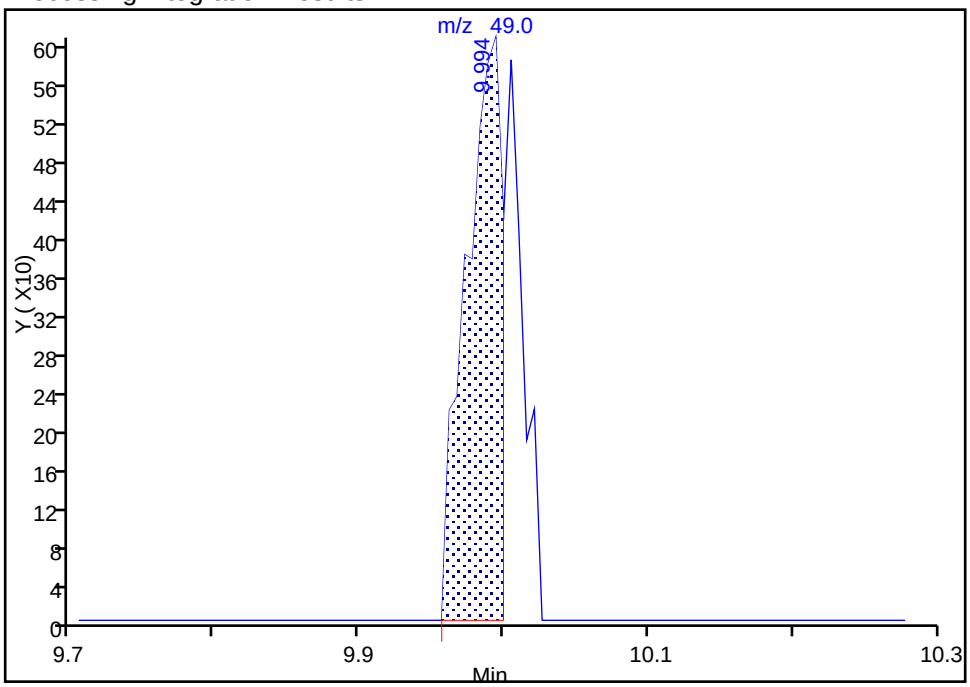
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d				
Injection Date:	19-Jul-2017 13:09:30	Instrument ID:	CHW.i		
Lims ID:	200-39232-A-4	Lab Sample ID:	200-39232-4		
Client ID:	2538				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 1

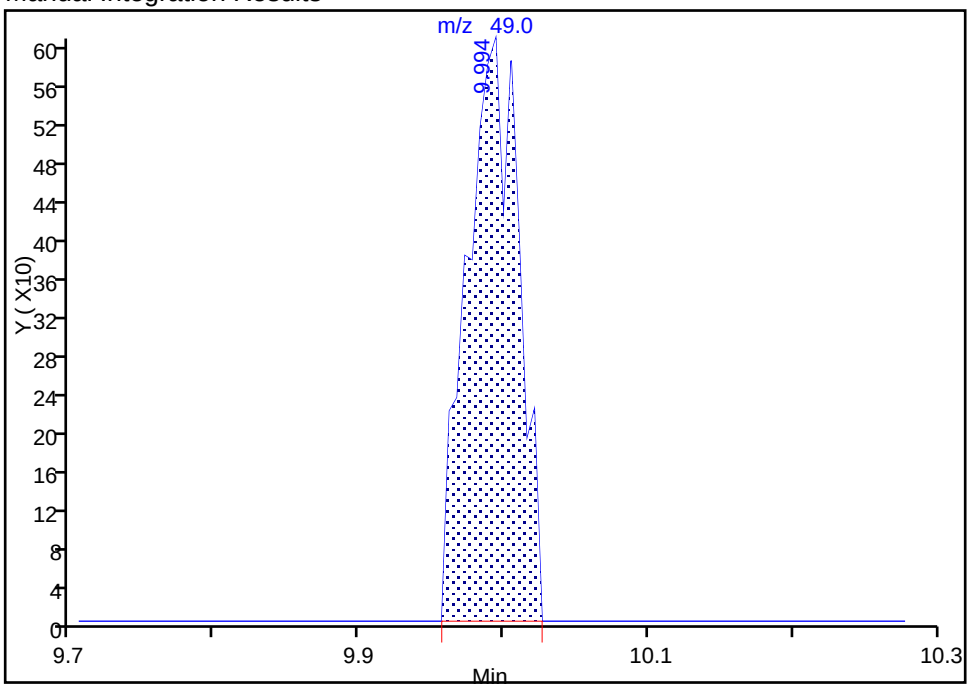
Processing Integration Results

RT: 9.99
Area: 1063
Amount: 0.046779
Amount Units: ppb v/v



Manual Integration Results

RT: 9.99
Area: 1509
Amount: 0.066405
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:24:42

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

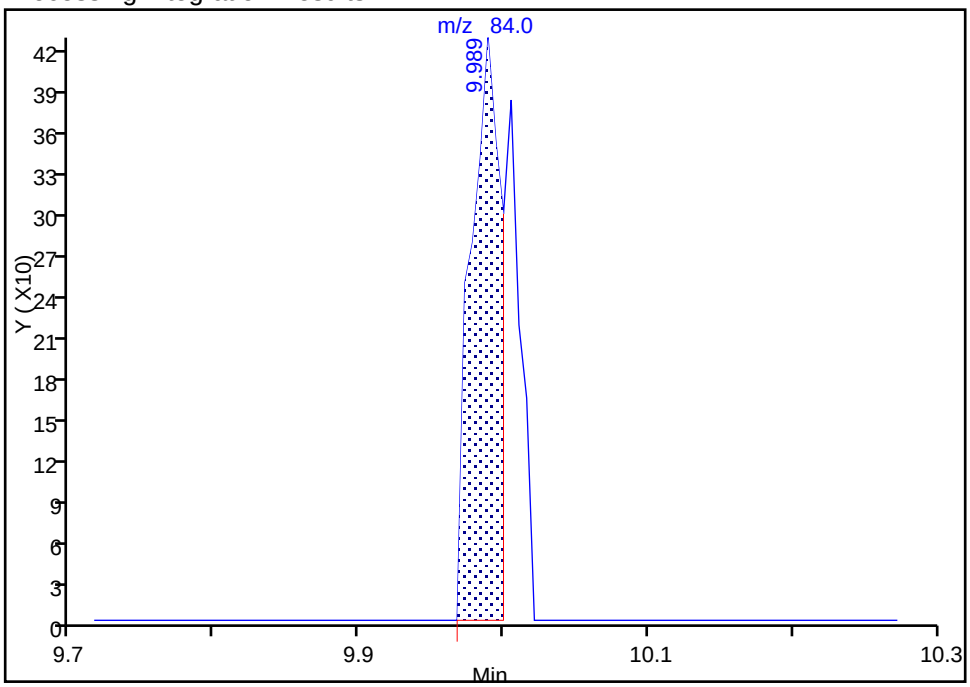
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d				
Injection Date:	19-Jul-2017 13:09:30	Instrument ID:	CHW.i		
Lims ID:	200-39232-A-4	Lab Sample ID:	200-39232-4		
Client ID:	2538				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 2

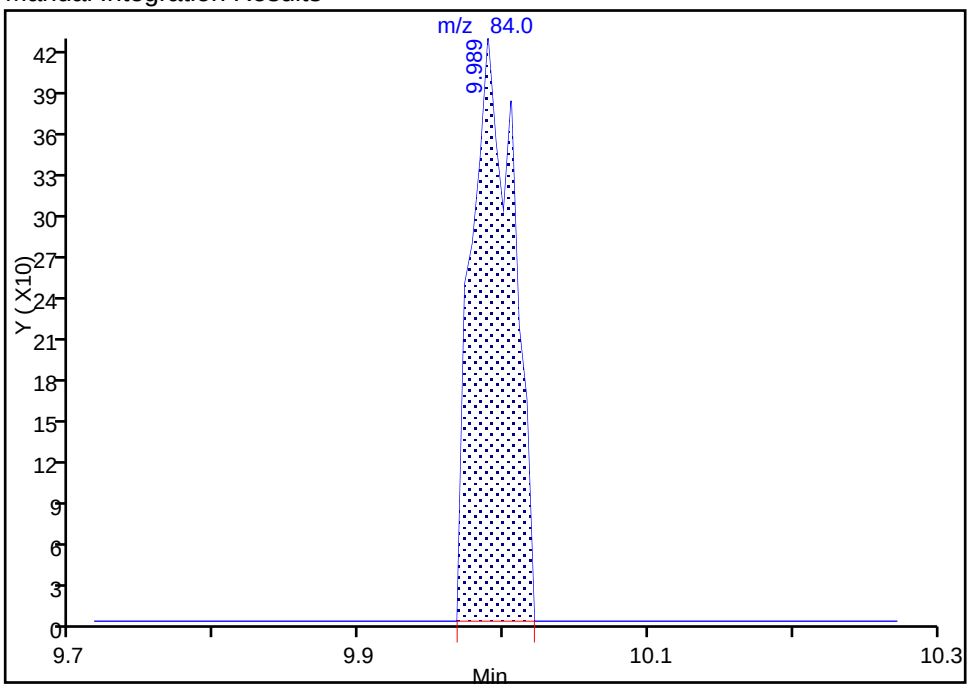
Processing Integration Results

RT: 9.99
Area: 627
Amount: 0.046779
Amount Units: ppb v/v



Manual Integration Results

RT: 9.99
Area: 873
Amount: 0.066405
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:24:55

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

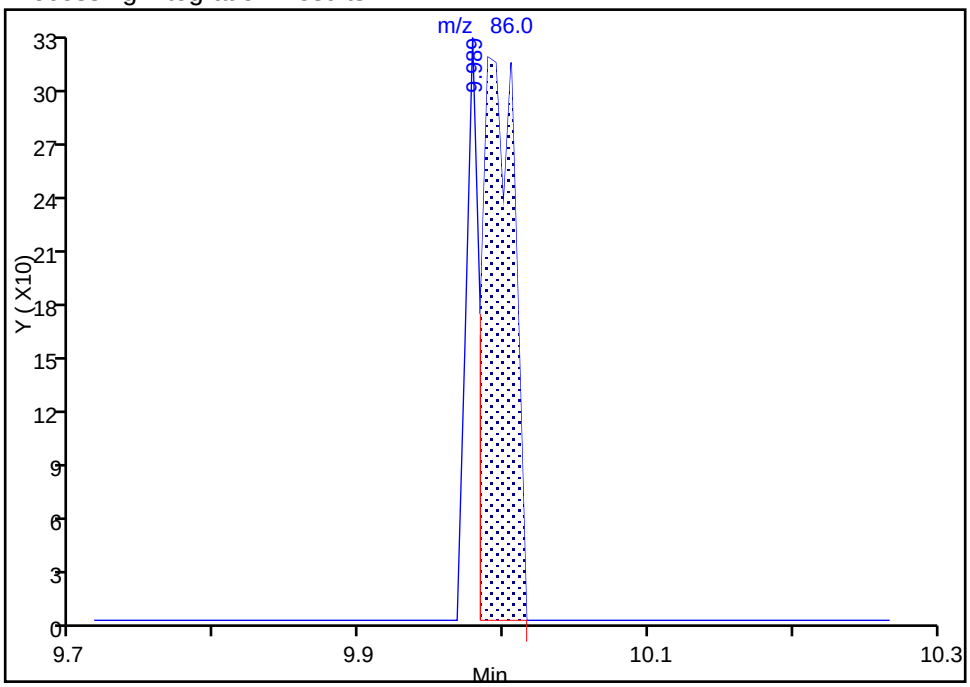
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170718-25955.b\25955-22.d				
Injection Date:	19-Jul-2017 13:09:30	Instrument ID:	CHW.i		
Lims ID:	200-39232-A-4	Lab Sample ID:	200-39232-4		
Client ID:	2538				
Operator ID:	ert	ALS Bottle#:	9	Worklist Smp#:	22
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2

Signal: 3

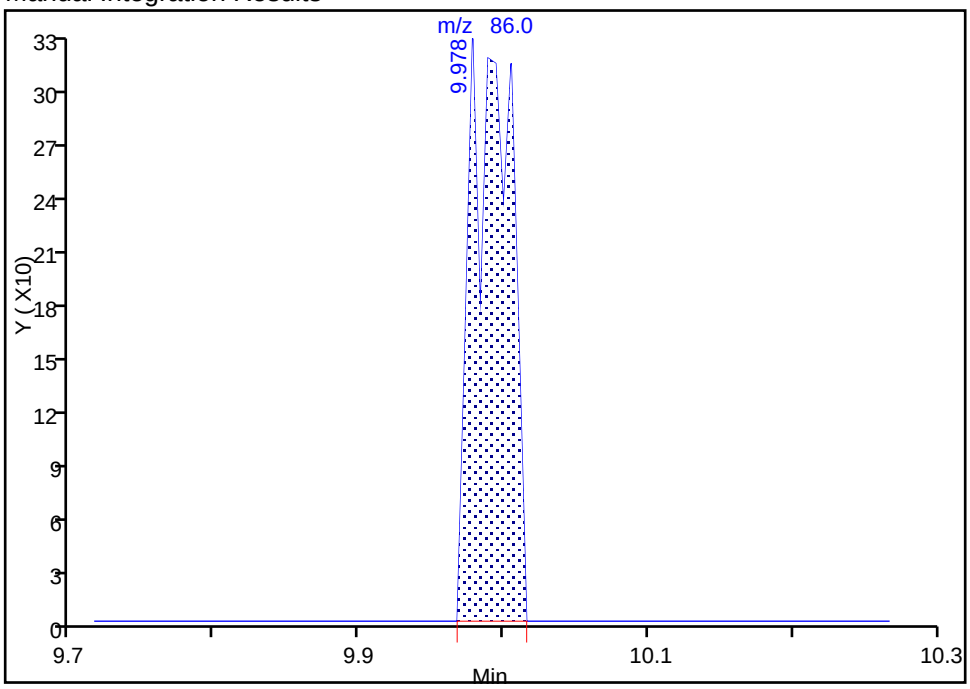
Processing Integration Results

RT: 9.99
Area: 483
Amount: 0.046779
Amount Units: ppb v/v



Manual Integration Results

RT: 9.98
Area: 637
Amount: 0.066405
Amount Units: ppb v/v



Reviewer: puangmaleek, 20-Jul-2017 09:25:02

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3346 Lab Sample ID: 200-39232-5

Matrix: Air Lab File ID: 200-26195-012.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 19:52

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3346 Lab Sample ID: 200-39232-5

Matrix: Air Lab File ID: 200-26195-012.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 19:52

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3346 Lab Sample ID: 200-39232-5

Matrix: Air Lab File ID: 200-26195-012.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 19:52

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-012.D
Lims ID: 200-39232-A-5
Client ID: 3346
Sample Type: Client
Inject. Date: 03-Aug-2017 19:52:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-012
Misc. Info.: 39232-05
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:30:34 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:30:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139				ND	
2 Dichlorodifluoromethane	85		3.197				ND	
3 Chlorodifluoromethane	51		3.235				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5 Chloromethane	50		3.529				ND	
6 Butane	43		3.690				ND	
7 Vinyl chloride	62		3.727				ND	
8 Butadiene	54		3.786				ND	
10 Bromomethane	94		4.348				ND	
11 Chloroethane	64		4.535				ND	
13 Vinyl bromide	106		4.850				ND	
14 Trichlorofluoromethane	101		4.925				ND	
17 Ethanol	45		5.418				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21 1,1-Dichloroethene	96		5.878				ND	
22 Acetone	43	6.118	6.118	0.005	82	3114	0.0808	7
23 Carbon disulfide	76		6.241				ND	
24 Isopropyl alcohol	45		6.348				ND	
25 3-Chloro-1-propene	41		6.562				ND	
27 Methylene Chloride	49	6.792	6.825	-0.033	91	3018	0.0863	
28 2-Methyl-2-propanol	59		7.044				ND	
29 Methyl tert-butyl ether	73		7.204				ND	
31 trans-1,2-Dichloroethene	61		7.215				ND	
33 Hexane	57		7.541				ND	
34 1,1-Dichloroethane	63		8.028				ND	
35 Vinyl acetate	43		8.092				ND	
37 cis-1,2-Dichloroethene	96		9.055				ND	
38 2-Butanone (MEK)	72		9.136				ND	
39 Ethyl acetate	88		9.152				ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	86	323010	10.0	
41 Tetrahydrofuran	42		9.542				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.590	9.612	-0.022	97	16348	0.1563	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.847				ND	
	44 1,1,1-Trichloroethane	97		9.885				ND	
	45 Carbon tetrachloride	117		10.120				ND	
	46 Isooctane	57		10.527				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.382	11.404	-0.022	95	1679272	10.0	
	53 Trichloroethene	95		11.859				ND	
	54 1,2-Dichloropropane	63		12.426				ND	
	55 Methyl methacrylate	69		12.597				ND	
	57 Dibromomethane	174		12.672				ND	
	56 1,4-Dioxane	88		12.677				ND	
	58 Dichlorobromomethane	83		12.955				ND	
	60 cis-1,3-Dichloropropene	75		13.875				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
	65 Toluene	92		14.453				ND	
	66 trans-1,3-Dichloropropene	75		15.058				ND	
	67 1,1,2-Trichloroethane	83		15.432				ND	
	68 Tetrachloroethene	166		15.512				ND	
	69 2-Hexanone	43		15.914				ND	
	71 Chlorodibromomethane	129		16.187				ND	
	72 Ethylene Dibromide	107		16.459				ND	
*	74 Chlorobenzene-d5	117	17.353	17.358	-0.006	88	1473233	10.0	
	75 Chlorobenzene	112		17.417				ND	
	76 Ethylbenzene	91		17.572				ND	
	78 m-Xylene & p-Xylene	106		17.829				ND	
	79 o-Xylene	106		18.685				ND	
	80 Styrene	104		18.744				ND	
	81 Bromoform	173		19.188				ND	
	82 Isopropylbenzene	105		19.412				ND	
S	73 Xylenes, Total	106		19.600				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
	85 N-Propylbenzene	91		20.167				ND	
	89 2-Chlorotoluene	91		20.370				ND	
	88 4-Ethyltoluene	105		20.370				ND	
	90 1,3,5-Trimethylbenzene	105		20.482				ND	
	92 tert-Butylbenzene	119		20.985				ND	
	93 1,2,4-Trimethylbenzene	105		21.087				ND	
	94 sec-Butylbenzene	105		21.322				ND	
	95 4-Isopropyltoluene	119		21.531				ND	
	96 1,3-Dichlorobenzene	146		21.552				ND	
	97 1,4-Dichlorobenzene	146		21.691				ND	
	98 Benzyl chloride	91		21.900				ND	
	100 n-Butylbenzene	91		22.109				ND	
	101 1,2-Dichlorobenzene	146		22.226				ND	
	103 1,2,4-Trichlorobenzene	180		24.687				ND	
	104 Hexachlorobutadiene	225		24.869				ND	
	105 Naphthalene	128		25.169				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

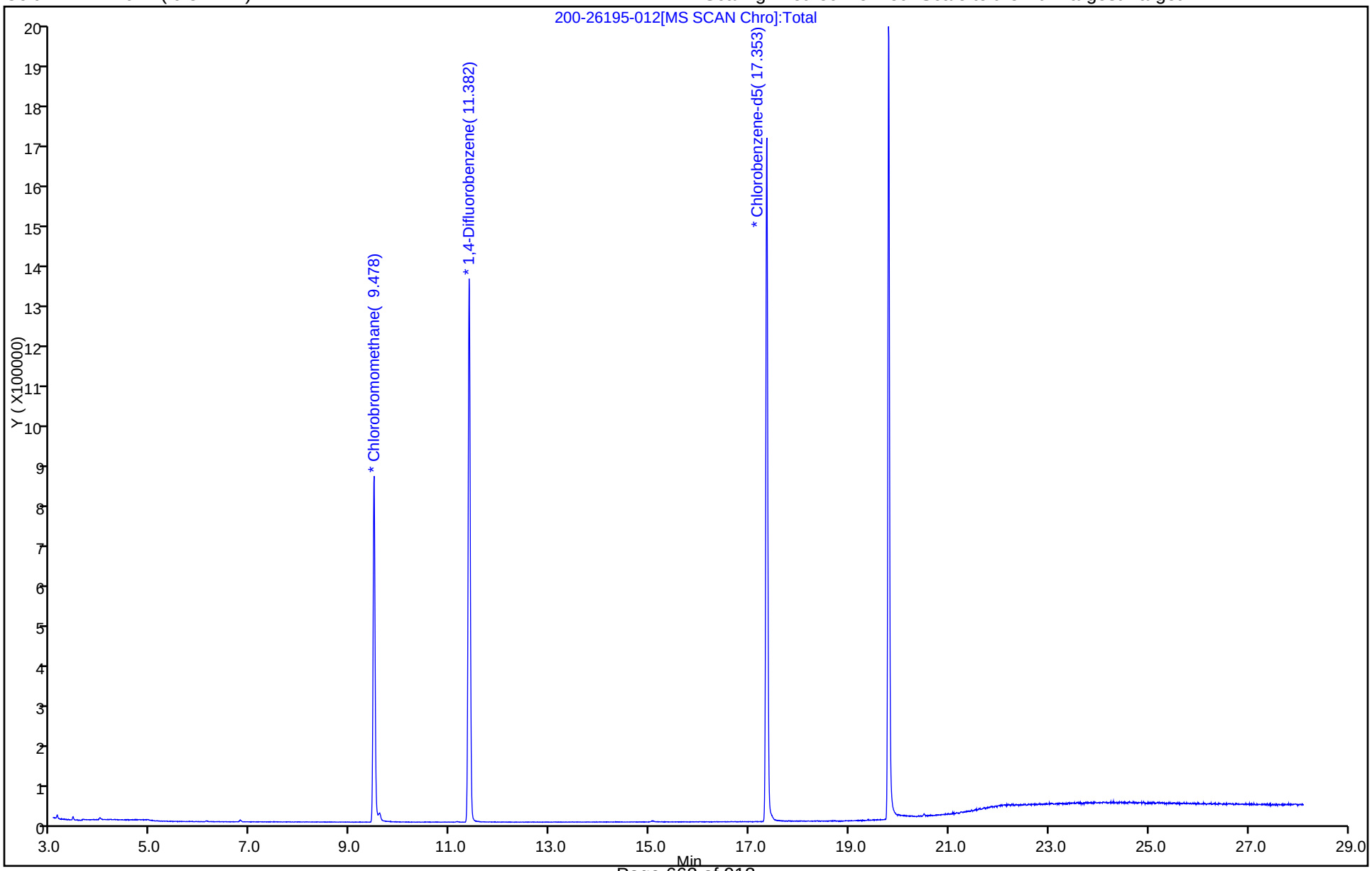
Report Date: 04-Aug-2017 14:30:35 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-012.D

Injection Date:	03-Aug-2017 19:52:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39232-A-5	Lab Sample ID:	200-39232-5	Worklist Smp#:	12
Client ID:	3346				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3419 Lab Sample ID: 200-39232-7

Matrix: Air Lab File ID: 200-26195-014.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 21:34

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3419 Lab Sample ID: 200-39232-7

Matrix: Air Lab File ID: 200-26195-014.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 21:34

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3419 Lab Sample ID: 200-39232-7

Matrix: Air Lab File ID: 200-26195-014.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 21:34

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-014.D
Lims ID: 200-39232-A-7
Client ID: 3419
Sample Type: Client
Inject. Date: 03-Aug-2017 21:34:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-014
Misc. Info.: 39232-07
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:36:40 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:36:40

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		3.139				ND	
	2 Dichlorodifluoromethane	85		3.197				ND	
	3 Chlorodifluoromethane	51		3.235				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
	5 Chloromethane	50		3.529				ND	
	6 Butane	43		3.690				ND	
	7 Vinyl chloride	62		3.727				ND	
	8 Butadiene	54		3.786				ND	
	10 Bromomethane	94		4.348				ND	
	11 Chloroethane	64		4.535				ND	
	13 Vinyl bromide	106		4.850				ND	
	14 Trichlorofluoromethane	101		4.925				ND	
	17 Ethanol	45	5.417	5.418	-0.001	94	3744	0.4093	
	20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
	21 1,1-Dichloroethene	96		5.878				ND	
	22 Acetone	43	6.123	6.123	0.010	64	3083	0.0813	7
	23 Carbon disulfide	76		6.241				ND	
	24 Isopropyl alcohol	45		6.348				ND	
	25 3-Chloro-1-propene	41		6.562				ND	
	27 Methylene Chloride	49	6.798	6.825	-0.027	91	2969	0.0863	
	28 2-Methyl-2-propanol	59		7.044				ND	
	29 Methyl tert-butyl ether	73		7.204				ND	
	31 trans-1,2-Dichloroethene	61		7.215				ND	
	33 Hexane	57		7.541				ND	
	34 1,1-Dichloroethane	63		8.028				ND	
	35 Vinyl acetate	43		8.092				ND	
	37 cis-1,2-Dichloroethene	96		9.055				ND	
	38 2-Butanone (MEK)	72		9.136				ND	
	39 Ethyl acetate	88		9.152				ND	
*	40 Chlorobromomethane	128	9.478	9.499	-0.021	87	317868	10.0	
	41 Tetrahydrofuran	42		9.542				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
42 Chloroform	83	9.595	9.612	-0.017	95	16109	0.1565	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
43 Cyclohexane	84		9.847				ND	
44 1,1,1-Trichloroethane	97		9.885				ND	
45 Carbon tetrachloride	117		10.120				ND	
46 Isooctane	57		10.527				ND	
47 Benzene	78		10.585				ND	
48 1,2-Dichloroethane	62		10.773				ND	
49 n-Heptane	43		10.901				ND	
* 50 1,4-Difluorobenzene	114	11.388	11.404	-0.016	95	1665390	10.0	
53 Trichloroethene	95		11.859				ND	
54 1,2-Dichloropropane	63		12.426				ND	
55 Methyl methacrylate	69		12.597				ND	
57 Dibromomethane	174		12.672				ND	
56 1,4-Dioxane	88		12.677				ND	
58 Dichlorobromomethane	83		12.955				ND	
60 cis-1,3-Dichloropropene	75		13.875				ND	
61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
65 Toluene	92		14.453				ND	
66 trans-1,3-Dichloropropene	75		15.058				ND	
67 1,1,2-Trichloroethane	83		15.432				ND	
68 Tetrachloroethene	166		15.512				ND	
69 2-Hexanone	43		15.914				ND	
71 Chlorodibromomethane	129		16.187				ND	
72 Ethylene Dibromide	107		16.459				ND	
* 74 Chlorobenzene-d5	117	17.353	17.358	-0.006	89	1463813	10.0	
75 Chlorobenzene	112		17.417				ND	
76 Ethylbenzene	91		17.572				ND	
78 m-Xylene & p-Xylene	106		17.829				ND	
79 o-Xylene	106		18.685				ND	
80 Styrene	104		18.744				ND	
81 Bromoform	173		19.188				ND	
82 Isopropylbenzene	105		19.412				ND	
S 73 Xylenes, Total	106		19.600				ND	
84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
85 N-Propylbenzene	91		20.167				ND	
89 2-Chlorotoluene	91		20.370				ND	
88 4-Ethyltoluene	105		20.370				ND	
90 1,3,5-Trimethylbenzene	105		20.482				ND	
92 tert-Butylbenzene	119		20.985				ND	
93 1,2,4-Trimethylbenzene	105		21.087				ND	
94 sec-Butylbenzene	105		21.322				ND	
95 4-Isopropyltoluene	119		21.531				ND	
96 1,3-Dichlorobenzene	146		21.552				ND	
97 1,4-Dichlorobenzene	146		21.691				ND	
98 Benzyl chloride	91		21.900				ND	
100 n-Butylbenzene	91		22.109				ND	
101 1,2-Dichlorobenzene	146		22.226				ND	
103 1,2,4-Trichlorobenzene	180		24.687				ND	
104 Hexachlorobutadiene	225		24.869				ND	
105 Naphthalene	128		25.169				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

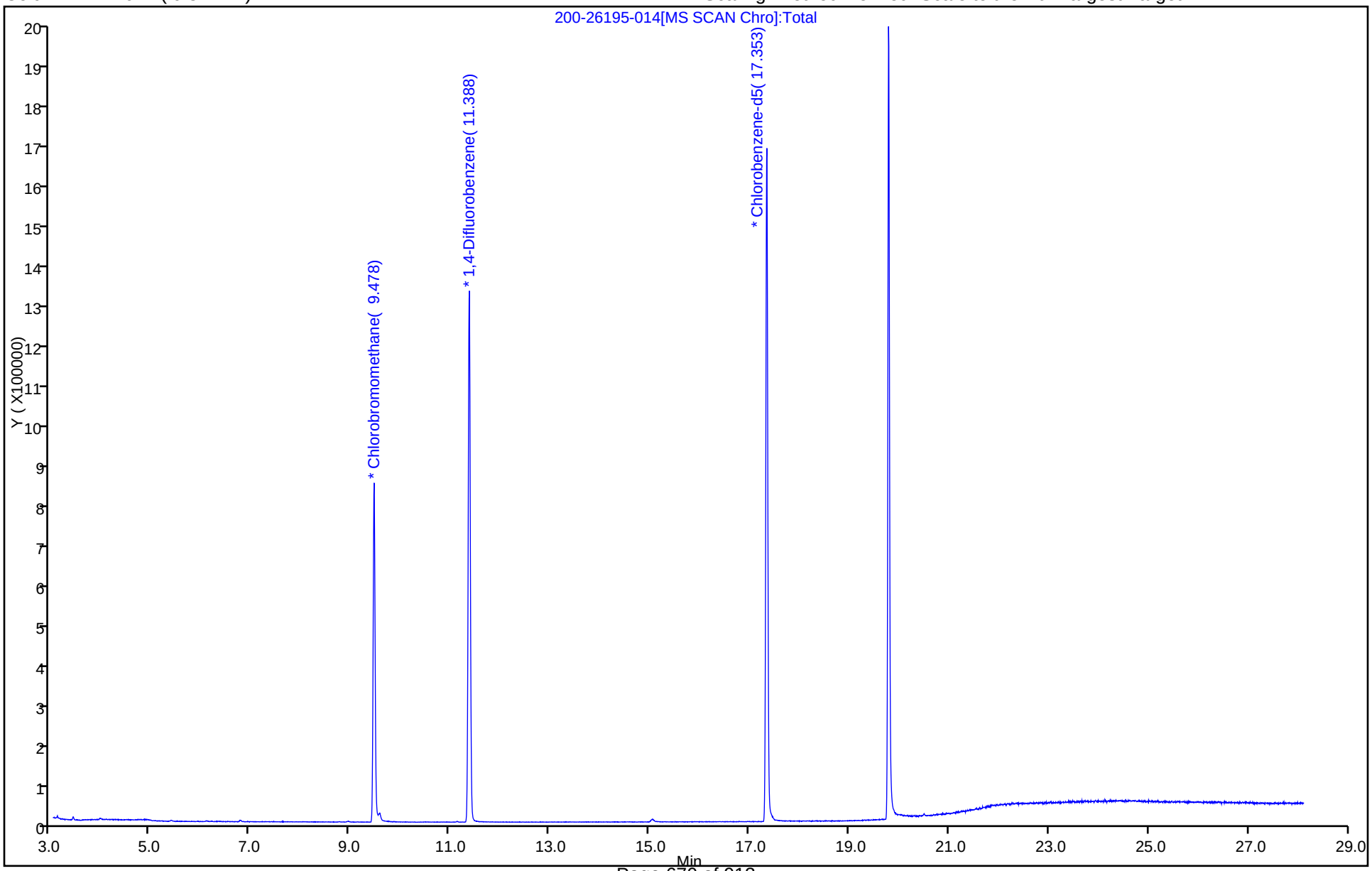
Report Date: 04-Aug-2017 14:36:41 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-014.D

Injection Date:	03-Aug-2017 21:34:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39232-A-7	Lab Sample ID:	200-39232-7	Worklist Smp#:	14
Client ID:	3419				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4925 Lab Sample ID: 200-39232-9

Matrix: Air Lab File ID: 200-26195-016.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 23:17

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4925 Lab Sample ID: 200-39232-9

Matrix: Air Lab File ID: 200-26195-016.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 23:17

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4925 Lab Sample ID: 200-39232-9

Matrix: Air Lab File ID: 200-26195-016.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/03/2017 23:17

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-016.D
Lims ID: 200-39232-A-9
Client ID: 4925
Sample Type: Client
Inject. Date: 03-Aug-2017 23:17:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-016
Misc. Info.: 39232-09
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:42:31 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:42:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	3.122	3.139	-0.017	90	18717	0.8932	
2 Dichlorodifluoromethane	85		3.197				ND	
3 Chlorodifluoromethane	51		3.235				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5 Chloromethane	50		3.529				ND	
6 Butane	43	3.673	3.690	-0.017	95	16567	0.4015	
7 Vinyl chloride	62		3.727				ND	
8 Butadiene	54		3.786				ND	
10 Bromomethane	94		4.348				ND	
11 Chloroethane	64		4.535				ND	
13 Vinyl bromide	106		4.850				ND	
14 Trichlorofluoromethane	101		4.925				ND	
17 Ethanol	45	5.412	5.423	-0.006	73	1431	0.1623	M
20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21 1,1-Dichloroethene	96		5.878				ND	
22 Acetone	43	6.118	6.118	0.005	79	2291	0.0627	7
23 Carbon disulfide	76	6.214	6.241	-0.027	100	10854	0.1304	
24 Isopropyl alcohol	45		6.348				ND	
25 3-Chloro-1-propene	41		6.562				ND	
27 Methylene Chloride	49	6.792	6.825	-0.033	91	3204	0.0967	
28 2-Methyl-2-propanol	59		7.044				ND	
29 Methyl tert-butyl ether	73		7.204				ND	
31 trans-1,2-Dichloroethene	61		7.215				ND	
33 Hexane	57		7.541				ND	
34 1,1-Dichloroethane	63		8.028				ND	
35 Vinyl acetate	43		8.092				ND	
37 cis-1,2-Dichloroethene	96		9.055				ND	
38 2-Butanone (MEK)	72		9.136				ND	
39 Ethyl acetate	88		9.152				ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	87	306291	10.0	
41 Tetrahydrofuran	42		9.542				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.585	9.612	-0.027	97	15591	0.1572	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.847				ND	
	44 1,1,1-Trichloroethane	97		9.885				ND	
	45 Carbon tetrachloride	117		10.120				ND	
	46 Isooctane	57		10.527				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.382	11.404	-0.022	95	1547541	10.0	
	53 Trichloroethene	95		11.859				ND	
	54 1,2-Dichloropropane	63		12.426				ND	
	55 Methyl methacrylate	69		12.597				ND	
	57 Dibromomethane	174		12.672				ND	
	56 1,4-Dioxane	88		12.677				ND	
	58 Dichlorobromomethane	83		12.955				ND	
	60 cis-1,3-Dichloropropene	75		13.875				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
	65 Toluene	92	14.453	14.448	0.000	38	1811	0.0226	M
	66 trans-1,3-Dichloropropene	75		15.058				ND	
	67 1,1,2-Trichloroethane	83		15.432				ND	
	68 Tetrachloroethene	166		15.512				ND	
	69 2-Hexanone	43		15.914				ND	
	71 Chlorodibromomethane	129		16.187				ND	
	72 Ethylene Dibromide	107		16.459				ND	
*	74 Chlorobenzene-d5	117	17.352	17.358	-0.006	89	1434314	10.0	
	75 Chlorobenzene	112		17.417				ND	
	76 Ethylbenzene	91	17.572	17.572	0.000	87	2218	0.0131	
	78 m-Xylene & p-Xylene	106	17.818	17.829	-0.011	0	2502	0.0382	
	79 o-Xylene	106		18.685				ND	
	80 Styrene	104		18.744				ND	
	81 Bromoform	173		19.188				ND	
	82 Isopropylbenzene	105		19.412				ND	
S	73 Xylenes, Total	106				0		0.0382	
	84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
	85 N-Propylbenzene	91		20.167				ND	
	89 2-Chlorotoluene	91		20.370				ND	
	88 4-Ethyltoluene	105		20.370				ND	
	90 1,3,5-Trimethylbenzene	105		20.482				ND	
	92 tert-Butylbenzene	119		20.985				ND	
	93 1,2,4-Trimethylbenzene	105		21.087				ND	
	94 sec-Butylbenzene	105		21.322				ND	
	95 4-Isopropyltoluene	119		21.531				ND	
	96 1,3-Dichlorobenzene	146		21.552				ND	
	97 1,4-Dichlorobenzene	146		21.691				ND	
	98 Benzyl chloride	91		21.900				ND	
	100 n-Butylbenzene	91		22.109				ND	
	101 1,2-Dichlorobenzene	146		22.226				ND	
	103 1,2,4-Trichlorobenzene	180		24.687				ND	
	104 Hexachlorobutadiene	225		24.869				ND	
	105 Naphthalene	128		25.169				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

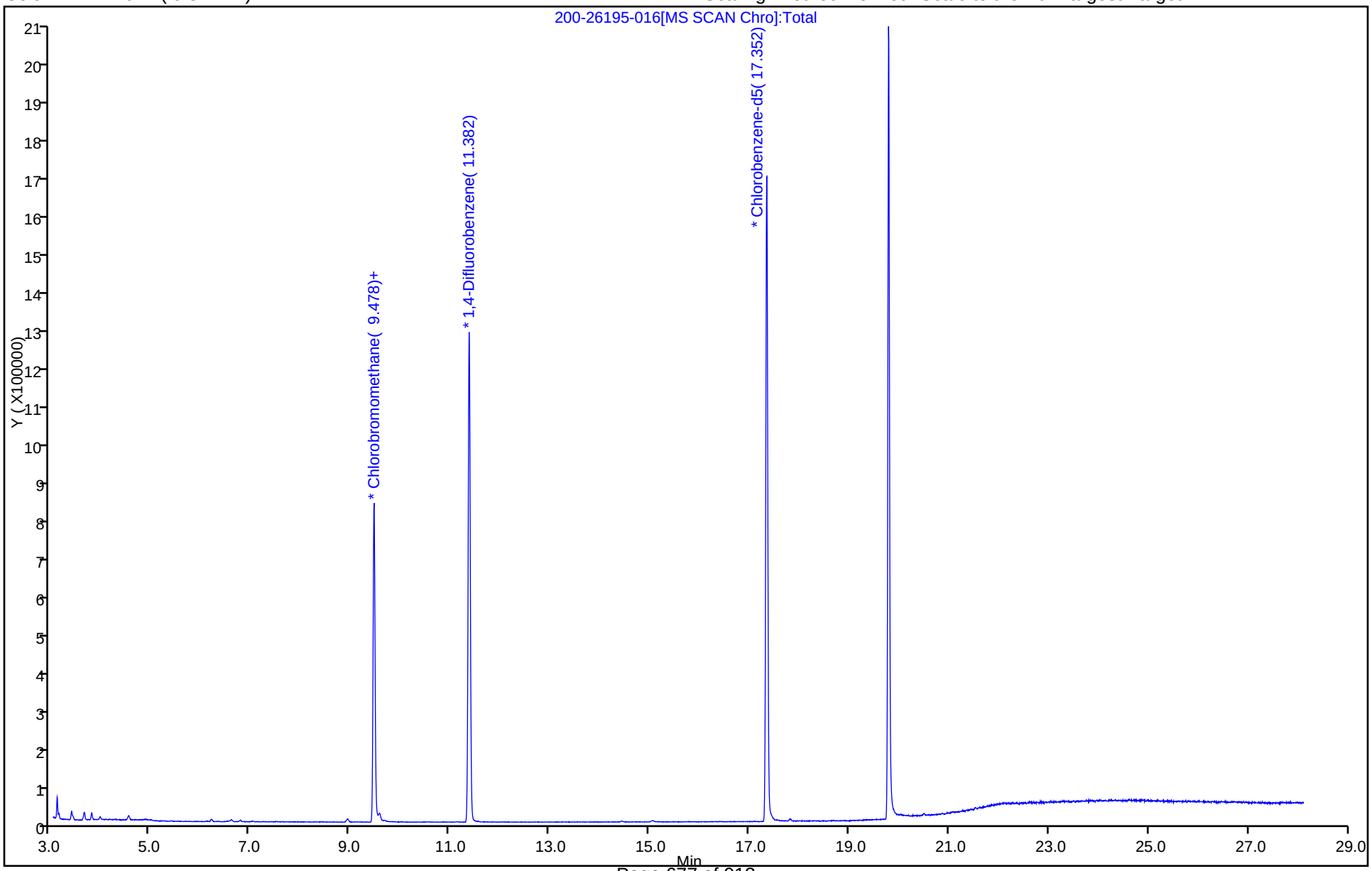
Report Date: 04-Aug-2017 14:42:32 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-016.D

Injection Date:	03-Aug-2017 23:17:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39232-A-9	Lab Sample ID:	200-39232-9	Worklist Smp#:	16
Client ID:	4925				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	15
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

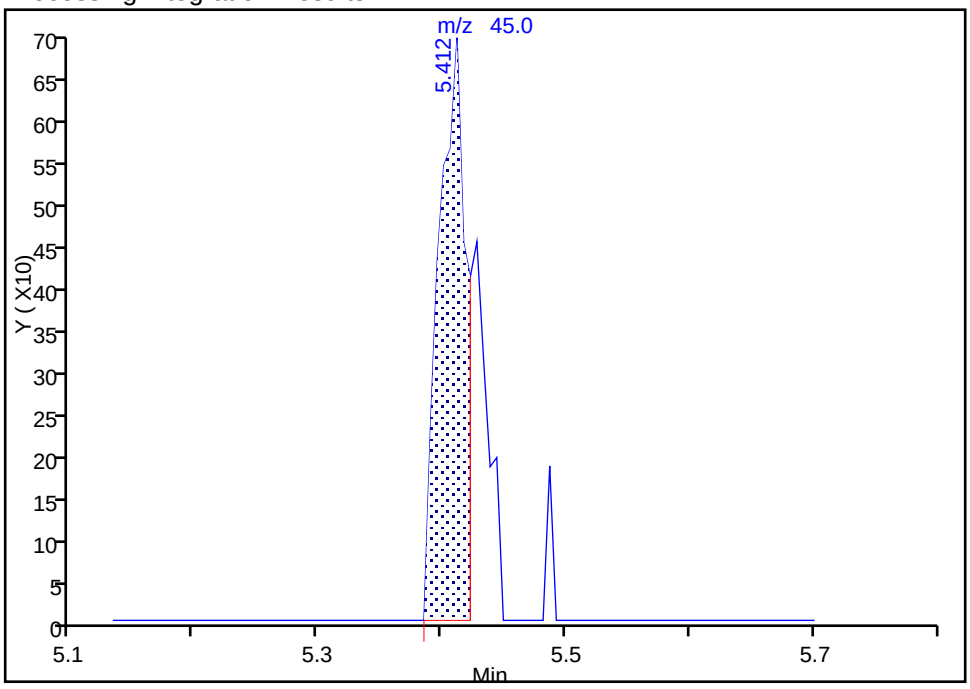
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-016.D				
Injection Date:	03-Aug-2017 23:17:30	Instrument ID:	CHG.i		
Lims ID:	200-39232-A-9	Lab Sample ID:	200-39232-9		
Client ID:	4925				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 1

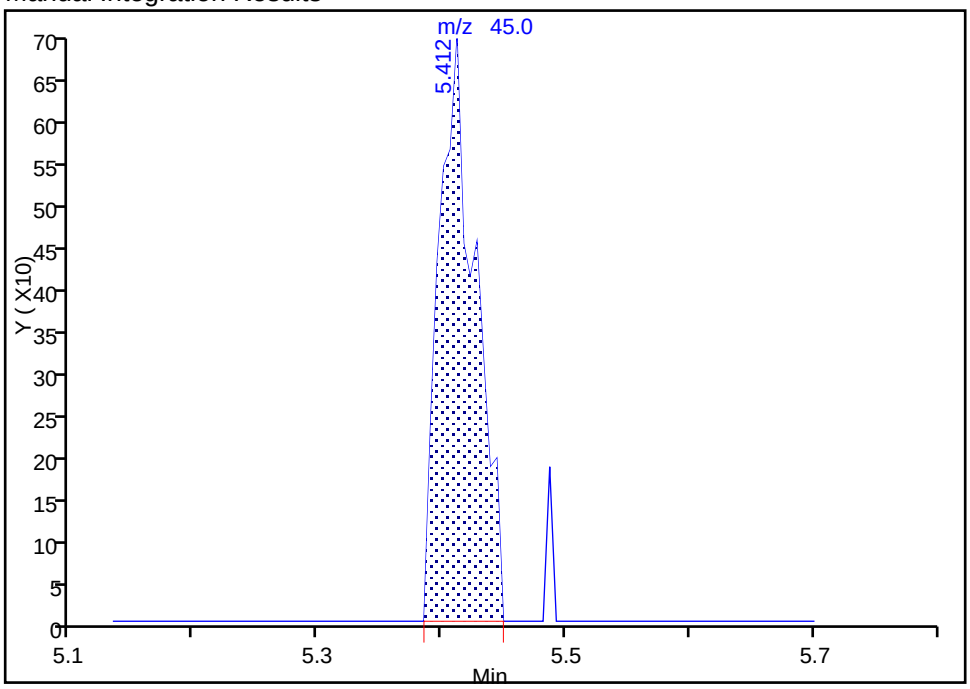
Processing Integration Results

RT: 5.41
Area: 1065
Amount: 0.120818
Amount Units: ppb v/v



Manual Integration Results

RT: 5.41
Area: 1431
Amount: 0.162339
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:40:00

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

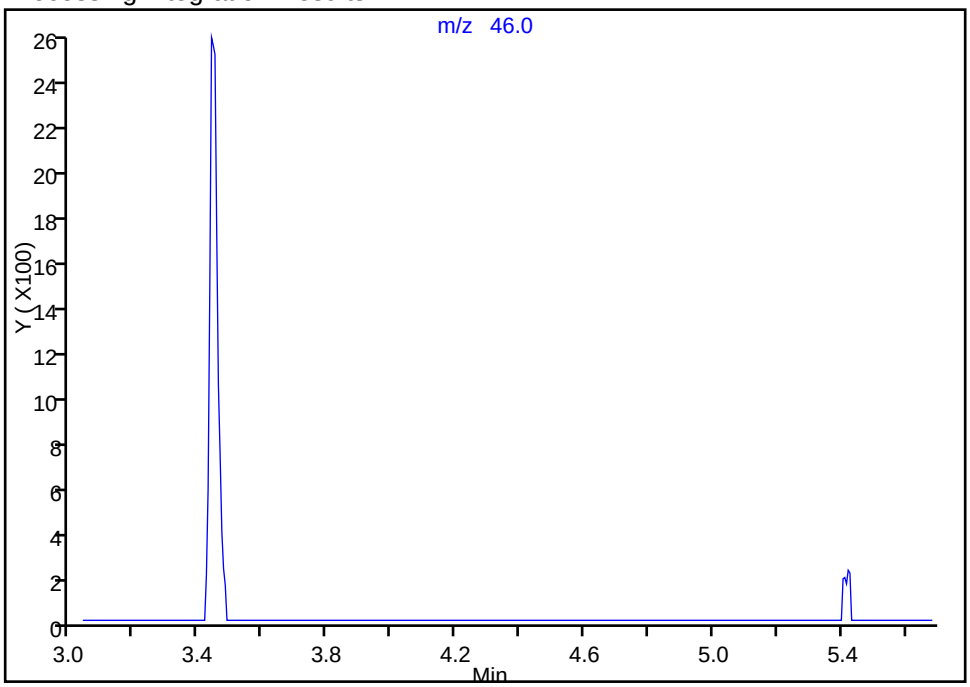
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-016.D				
Injection Date:	03-Aug-2017 23:17:30	Instrument ID:	CHG.i		
Lims ID:	200-39232-A-9	Lab Sample ID:	200-39232-9		
Client ID:	4925				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 2

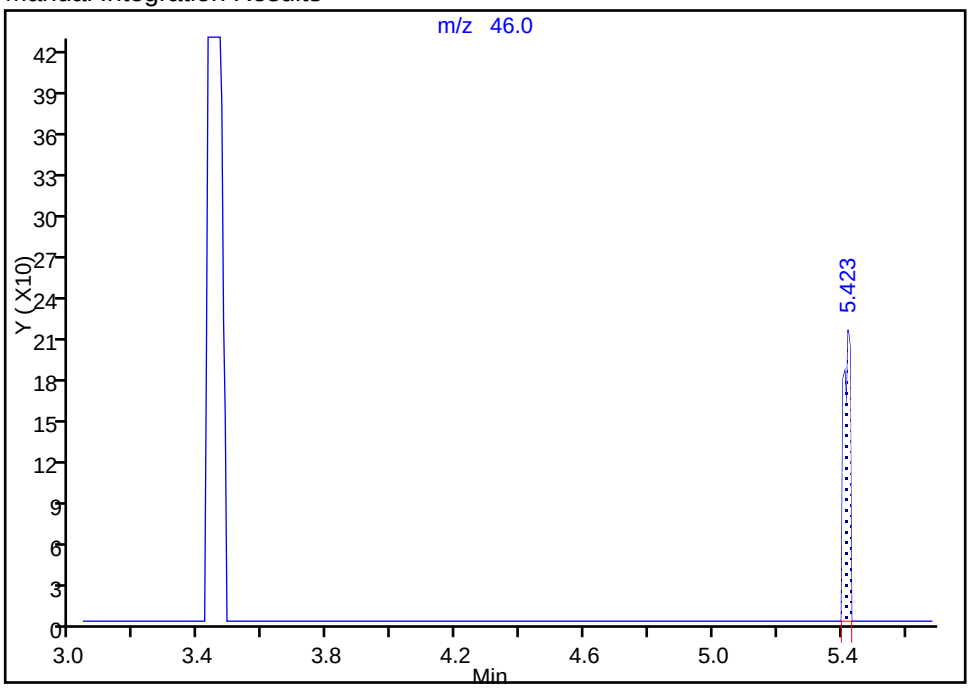
Processing Integration Results

RT: 5.42
Area: 0
Amount: 0.120818
Amount Units: ppb v/v



Manual Integration Results

RT: 5.42
Area: 301
Amount: 0.162339
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:40:07

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

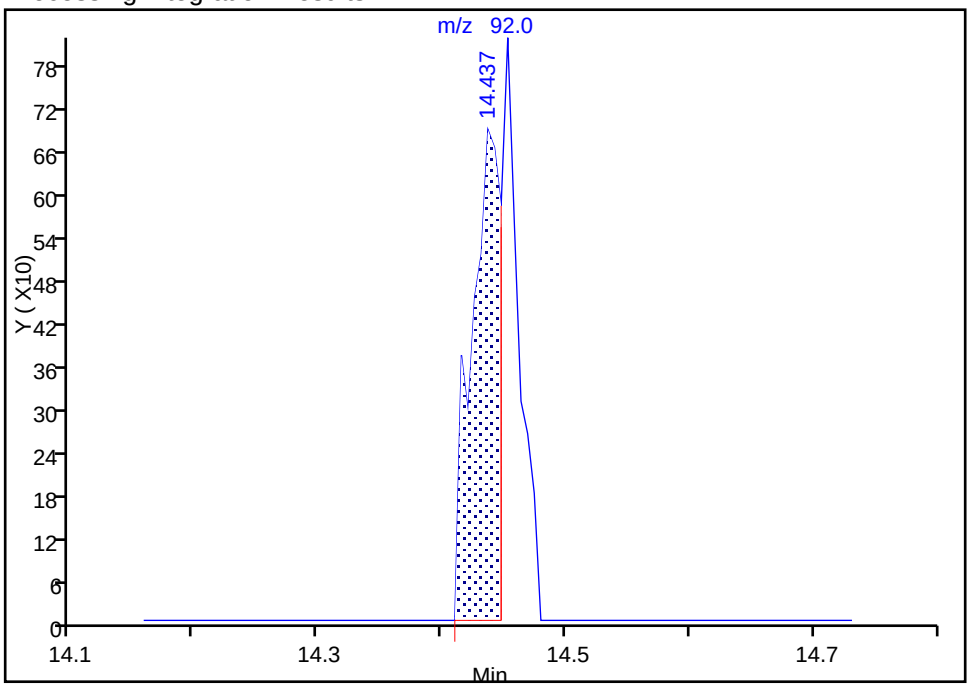
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-016.D				
Injection Date:	03-Aug-2017 23:17:30	Instrument ID:	CHG.i		
Lims ID:	200-39232-A-9	Lab Sample ID:	200-39232-9		
Client ID:	4925				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

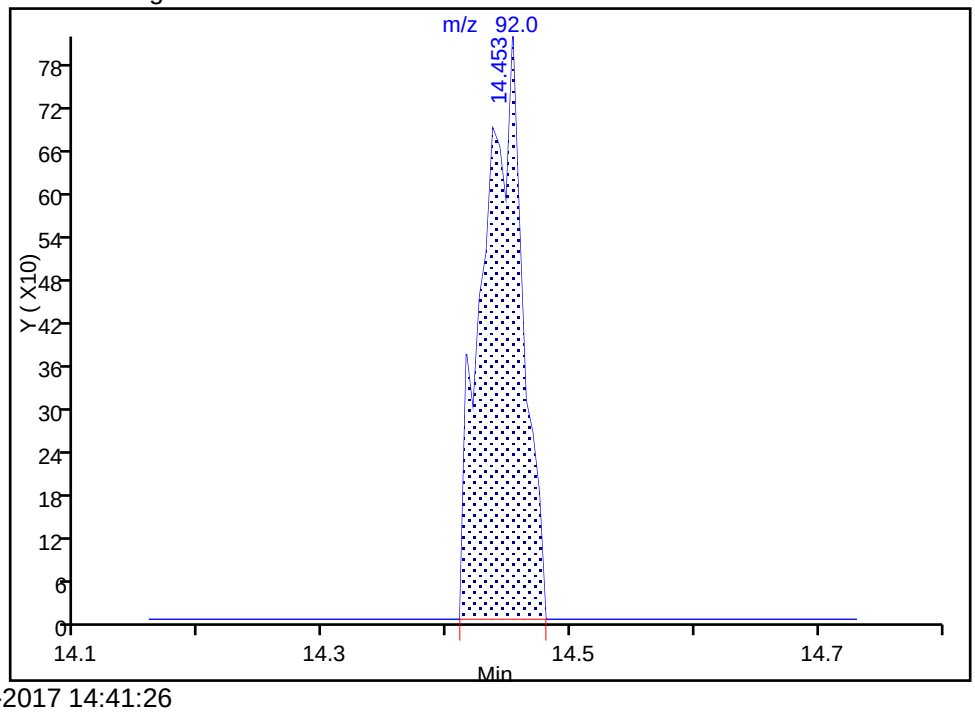
Processing Integration Results

RT: 14.44
Area: 1135
Amount: 0.014147
Amount Units: ppb v/v



Manual Integration Results

RT: 14.45
Area: 1811
Amount: 0.022573
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:41:26

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

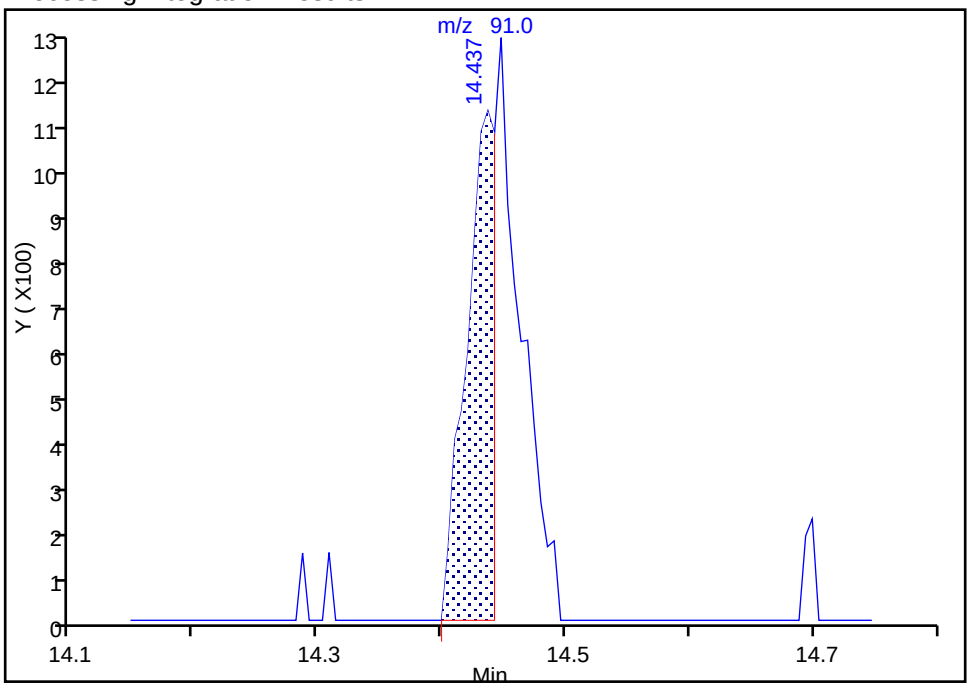
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-016.D				
Injection Date:	03-Aug-2017 23:17:30	Instrument ID:	CHG.i		
Lims ID:	200-39232-A-9	Lab Sample ID:	200-39232-9		
Client ID:	4925				
Operator ID:	pad	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 2

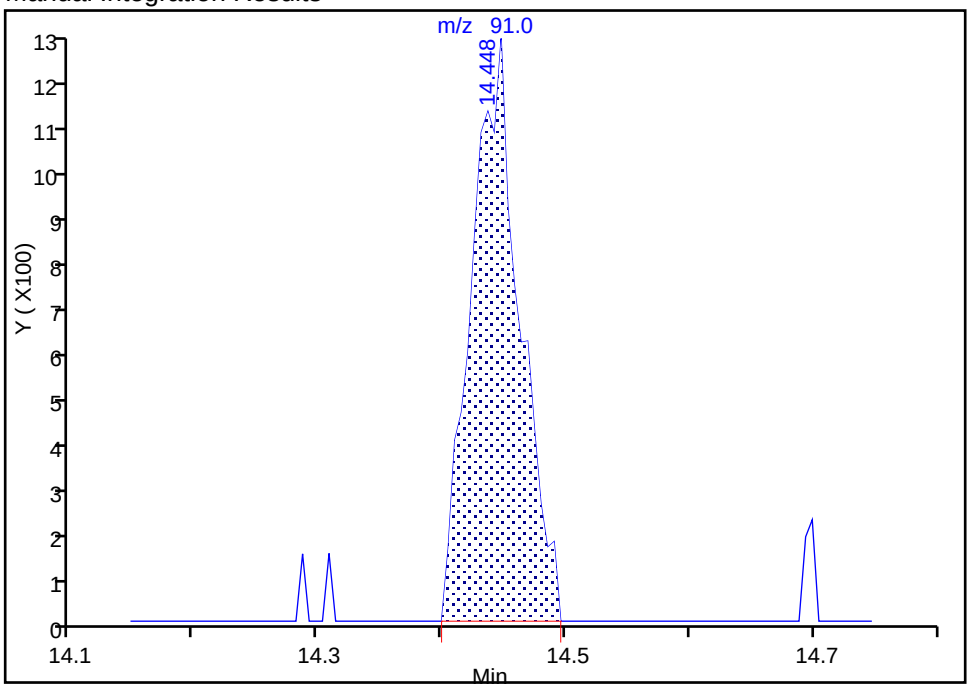
Processing Integration Results

RT: 14.44
Area: 1861
Amount: 0.014147
Amount Units: ppb v/v



Manual Integration Results

RT: 14.45
Area: 3547
Amount: 0.022573
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:41:38

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3259 Lab Sample ID: 200-39232-10

Matrix: Air Lab File ID: 200-26195-017.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 00:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3259 Lab Sample ID: 200-39232-10

Matrix: Air Lab File ID: 200-26195-017.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 00:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 3259 Lab Sample ID: 200-39232-10

Matrix: Air Lab File ID: 200-26195-017.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 00:08

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-017.D
Lims ID: 200-39232-A-10
Client ID: 3259
Sample Type: Client
Inject. Date: 04-Aug-2017 00:08:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-017
Misc. Info.: 39232-10
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:45:26 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:45:25

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		3.139				ND	
2	Dichlorodifluoromethane	85		3.197				ND	
3	Chlorodifluoromethane	51		3.235				ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5	Chloromethane	50		3.529				ND	
6	Butane	43		3.690				ND	
7	Vinyl chloride	62		3.727				ND	
8	Butadiene	54		3.786				ND	
10	Bromomethane	94		4.348				ND	
11	Chloroethane	64		4.535				ND	
13	Vinyl bromide	106		4.850				ND	
14	Trichlorofluoromethane	101		4.925				ND	
17	Ethanol	45	5.423	5.423	0.005	80	1575	0.1767	M
20	1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21	1,1-Dichloroethene	96		5.878				ND	
22	Acetone	43	6.124	6.124	0.011	62	2415	0.0653	7
23	Carbon disulfide	76	6.220	6.241	-0.021	99	9293	0.1104	
24	Isopropyl alcohol	45		6.348				ND	
25	3-Chloro-1-propene	41		6.562				ND	
27	Methylene Chloride	49	6.798	6.825	-0.027	94	3017	0.0900	
28	2-Methyl-2-propanol	59		7.044				ND	
29	Methyl tert-butyl ether	73		7.204				ND	
31	trans-1,2-Dichloroethene	61		7.215				ND	
33	Hexane	57		7.541				ND	
34	1,1-Dichloroethane	63		8.028				ND	
35	Vinyl acetate	43		8.092				ND	
37	cis-1,2-Dichloroethene	96		9.055				ND	
38	2-Butanone (MEK)	72		9.136				ND	
39	Ethyl acetate	88		9.152				ND	
* 40	Chlorobromomethane	128	9.478	9.499	-0.021	87	309763	10.0	
41	Tetrahydrofuran	42		9.542				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
42 Chloroform	83	9.590	9.612	-0.022	95	16429	0.1638	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
43 Cyclohexane	84		9.847				ND	
44 1,1,1-Trichloroethane	97		9.885				ND	
45 Carbon tetrachloride	117		10.120				ND	
46 Isooctane	57		10.527				ND	
47 Benzene	78		10.585				ND	
48 1,2-Dichloroethane	62		10.773				ND	
49 n-Heptane	43		10.901				ND	
* 50 1,4-Difluorobenzene	114	11.388	11.404	-0.016	96	1601105	10.0	
53 Trichloroethene	95		11.859				ND	
54 1,2-Dichloropropane	63		12.426				ND	
55 Methyl methacrylate	69		12.597				ND	
57 Dibromomethane	174		12.672				ND	
56 1,4-Dioxane	88		12.677				ND	
58 Dichlorobromomethane	83		12.955				ND	
60 cis-1,3-Dichloropropene	75		13.875				ND	
61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
65 Toluene	92		14.453				ND	
66 trans-1,3-Dichloropropene	75		15.058				ND	
67 1,1,2-Trichloroethane	83		15.432				ND	
68 Tetrachloroethene	166		15.512				ND	
69 2-Hexanone	43		15.914				ND	
71 Chlorodibromomethane	129		16.187				ND	
72 Ethylene Dibromide	107		16.459				ND	
* 74 Chlorobenzene-d5	117	17.347	17.358	-0.011	89	1403893	10.0	
75 Chlorobenzene	112		17.417				ND	
76 Ethylbenzene	91		17.572				ND	
78 m-Xylene & p-Xylene	106		17.829				ND	
79 o-Xylene	106		18.685				ND	
80 Styrene	104		18.744				ND	
81 Bromoform	173		19.188				ND	
82 Isopropylbenzene	105		19.412				ND	
S 73 Xylenes, Total	106		19.600				ND	
84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
85 N-Propylbenzene	91		20.167				ND	
89 2-Chlorotoluene	91		20.370				ND	
88 4-Ethyltoluene	105		20.370				ND	
90 1,3,5-Trimethylbenzene	105		20.482				ND	
92 tert-Butylbenzene	119		20.985				ND	
93 1,2,4-Trimethylbenzene	105		21.087				ND	
94 sec-Butylbenzene	105		21.322				ND	
95 4-Isopropyltoluene	119		21.531				ND	
96 1,3-Dichlorobenzene	146		21.552				ND	
97 1,4-Dichlorobenzene	146		21.691				ND	
98 Benzyl chloride	91		21.900				ND	
100 n-Butylbenzene	91		22.109				ND	
101 1,2-Dichlorobenzene	146		22.226				ND	
103 1,2,4-Trichlorobenzene	180		24.687				ND	
104 Hexachlorobutadiene	225		24.869				ND	
105 Naphthalene	128		25.169				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

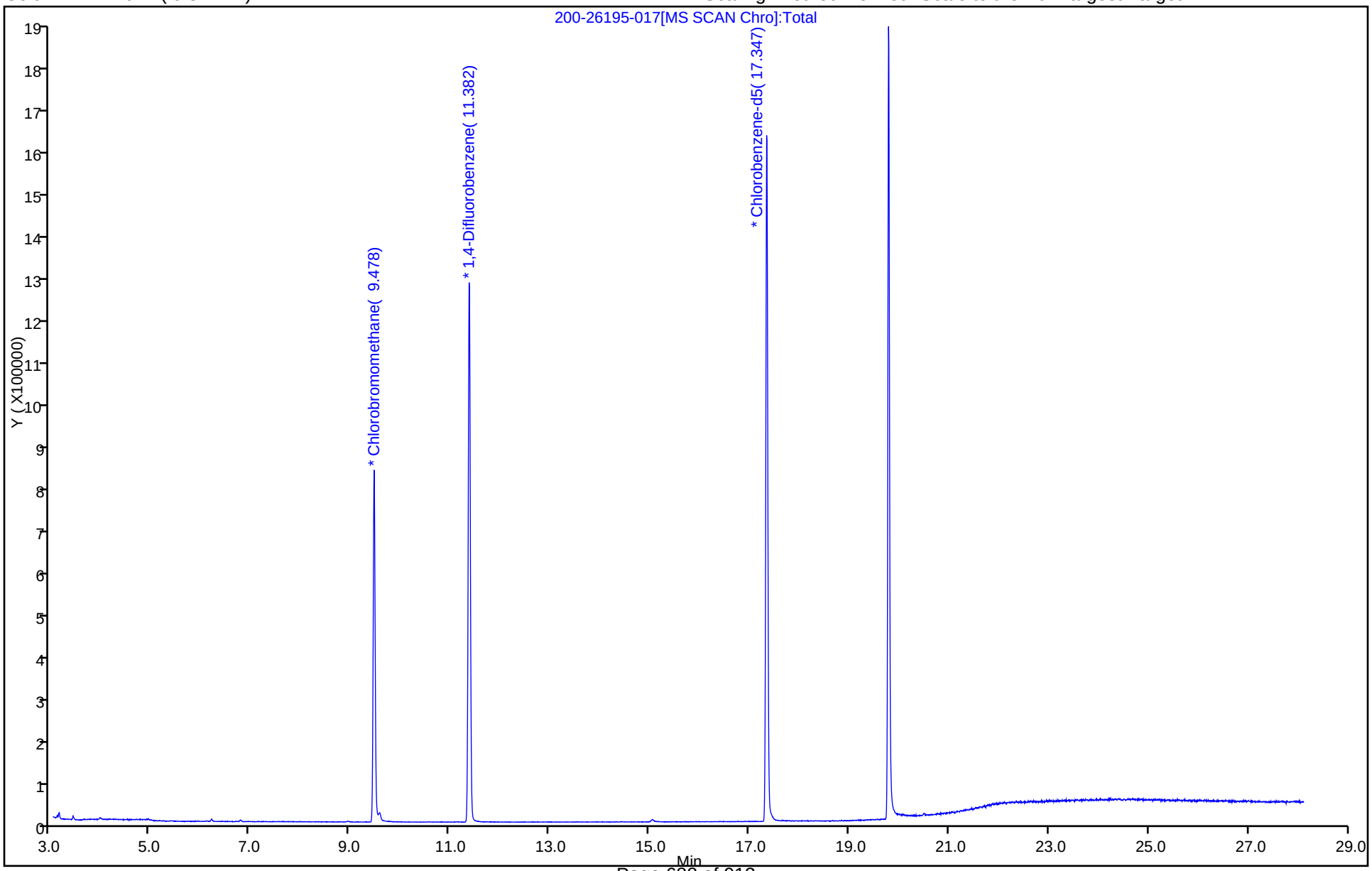
Report Date: 04-Aug-2017 14:45:26 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-017.D

Injection Date:	04-Aug-2017 00:08:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39232-A-10	Lab Sample ID:	200-39232-10	Worklist Smp#:	17
Client ID:	3259				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	16
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

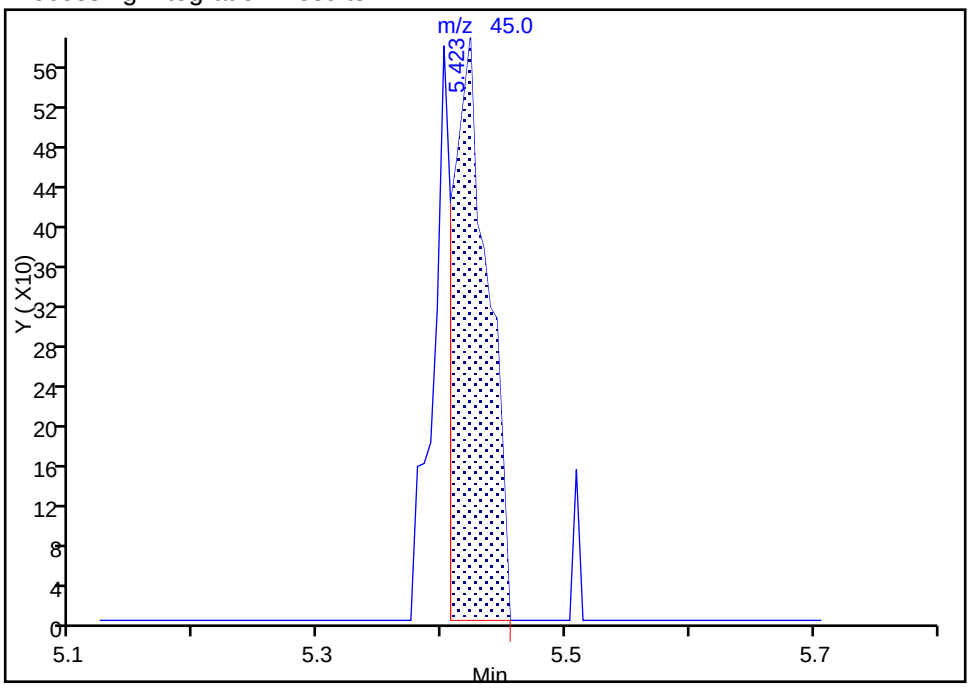
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-017.D				
Injection Date:	04-Aug-2017 00:08:30	Instrument ID:	CHG.i		
Lims ID:	200-39232-A-10	Lab Sample ID:	200-39232-10		
Client ID:	3259				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 1

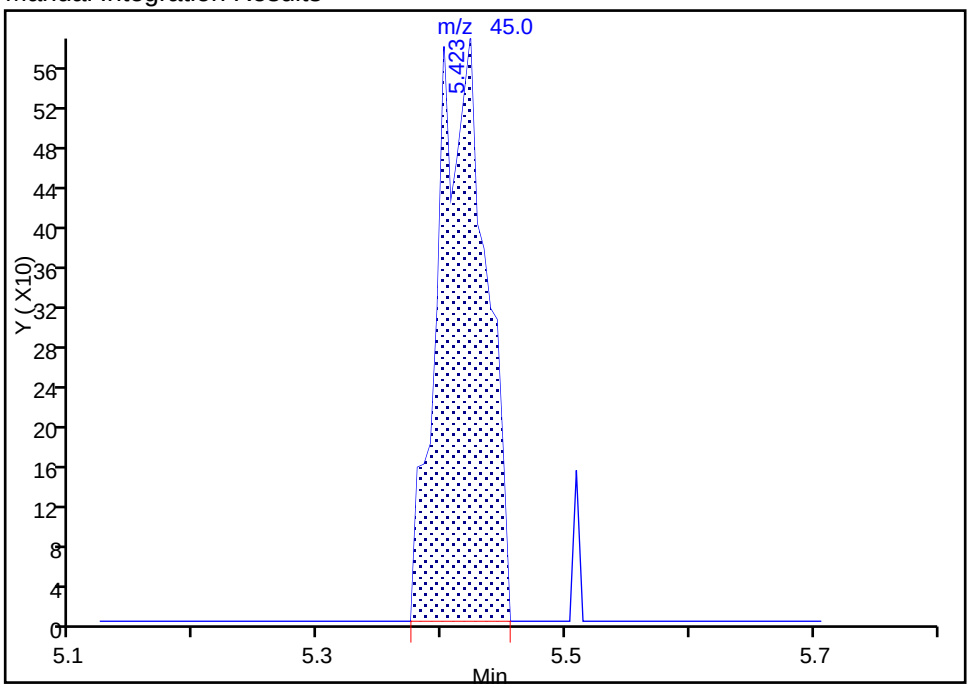
Processing Integration Results

RT: 5.42
Area: 1133
Amount: 0.127092
Amount Units: ppb v/v



Manual Integration Results

RT: 5.42
Area: 1575
Amount: 0.176672
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:43:30

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

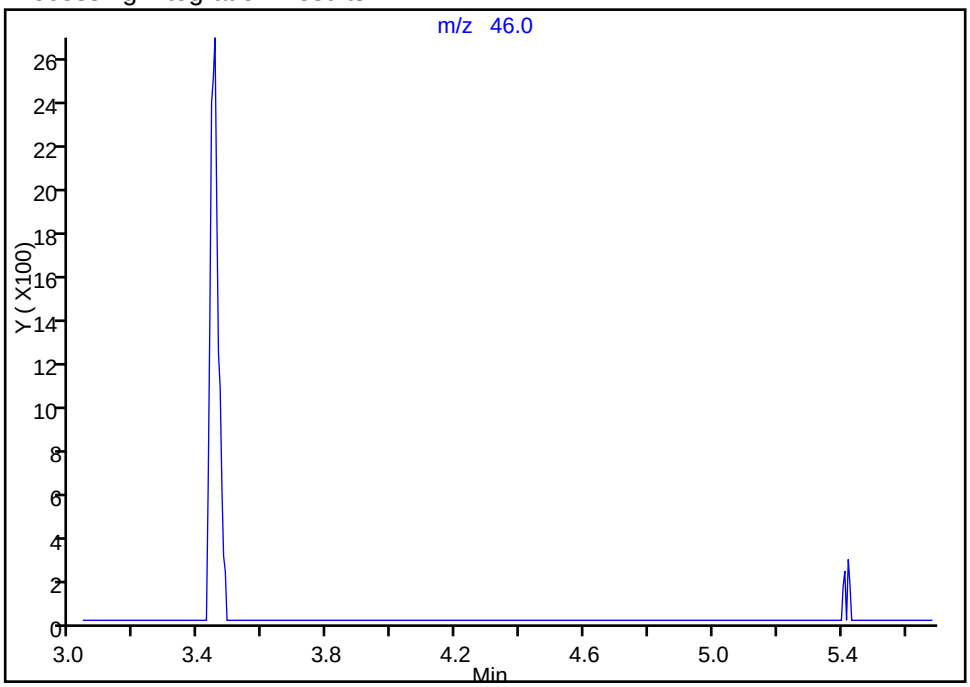
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-017.D				
Injection Date:	04-Aug-2017 00:08:30	Instrument ID:	CHG.i		
Lims ID:	200-39232-A-10	Lab Sample ID:	200-39232-10		
Client ID:	3259				
Operator ID:	pad	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 2

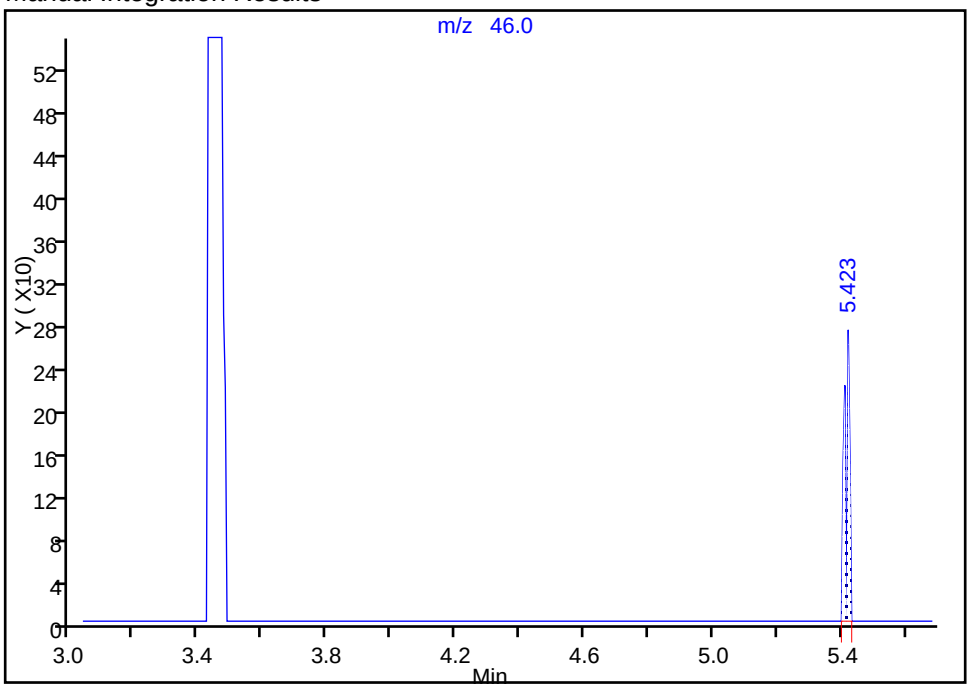
Processing Integration Results

RT: 5.42
Area: 0
Amount: 0.127092
Amount Units: ppb v/v



Manual Integration Results

RT: 5.42
Area: 257
Amount: 0.176672
Amount Units: ppb v/v



Reviewer: puangmaleek, 04-Aug-2017 14:43:36
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 2515 Lab Sample ID: 200-39232-11

Matrix: Air Lab File ID: 200-26195-018.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 01:00

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 2515 Lab Sample ID: 200-39232-11

Matrix: Air Lab File ID: 200-26195-018.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 01:00

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 2515 Lab Sample ID: 200-39232-11

Matrix: Air Lab File ID: 200-26195-018.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 01:00

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-018.D
Lims ID: 200-39232-A-11
Client ID: 2515
Sample Type: Client
Inject. Date: 04-Aug-2017 01:00:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-018
Misc. Info.: 39232-11
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:47:42 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:47:42

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		3.139				ND	
2	Dichlorodifluoromethane	85		3.197				ND	
3	Chlorodifluoromethane	51		3.235				ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5	Chloromethane	50		3.529				ND	
6	Butane	43		3.690				ND	
7	Vinyl chloride	62		3.727				ND	
8	Butadiene	54		3.786				ND	
10	Bromomethane	94		4.348				ND	
11	Chloroethane	64		4.535				ND	
13	Vinyl bromide	106		4.850				ND	
14	Trichlorofluoromethane	101		4.925				ND	
17	Ethanol	45		5.418				ND	
20	1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21	1,1-Dichloroethene	96		5.878				ND	
22	Acetone	43		6.113				ND	
23	Carbon disulfide	76		6.241				ND	
24	Isopropyl alcohol	45		6.348				ND	
25	3-Chloro-1-propene	41		6.562				ND	
27	Methylene Chloride	49	6.798	6.825	-0.027	93	2942	0.0876	
28	2-Methyl-2-propanol	59		7.044				ND	
29	Methyl tert-butyl ether	73		7.204				ND	
31	trans-1,2-Dichloroethene	61		7.215				ND	
33	Hexane	57		7.541				ND	
34	1,1-Dichloroethane	63		8.028				ND	
35	Vinyl acetate	43		8.092				ND	
37	cis-1,2-Dichloroethene	96		9.055				ND	
38	2-Butanone (MEK)	72		9.136				ND	
39	Ethyl acetate	88		9.152				ND	
* 40	Chlorobromomethane	128	9.478	9.499	-0.021	86	310216	10.0	
41	Tetrahydrofuran	42		9.542				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
42 Chloroform	83	9.590	9.612	-0.022	95	16513	0.1644	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
43 Cyclohexane	84		9.847				ND	
44 1,1,1-Trichloroethane	97		9.885				ND	
45 Carbon tetrachloride	117		10.120				ND	
46 Isooctane	57		10.527				ND	
47 Benzene	78		10.585				ND	
48 1,2-Dichloroethane	62		10.773				ND	
49 n-Heptane	43		10.901				ND	
* 50 1,4-Difluorobenzene	114	11.388	11.404	-0.016	95	1601051	10.0	
53 Trichloroethene	95		11.859				ND	
54 1,2-Dichloropropane	63		12.426				ND	
55 Methyl methacrylate	69		12.597				ND	
57 Dibromomethane	174		12.672				ND	
56 1,4-Dioxane	88		12.677				ND	
58 Dichlorobromomethane	83		12.955				ND	
60 cis-1,3-Dichloropropene	75		13.875				ND	
61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
65 Toluene	92		14.453				ND	
66 trans-1,3-Dichloropropene	75		15.058				ND	
67 1,1,2-Trichloroethane	83		15.432				ND	
68 Tetrachloroethene	166		15.512				ND	
69 2-Hexanone	43		15.914				ND	
71 Chlorodibromomethane	129		16.187				ND	
72 Ethylene Dibromide	107		16.459				ND	
* 74 Chlorobenzene-d5	117	17.352	17.358	-0.006	89	1398381	10.0	
75 Chlorobenzene	112		17.417				ND	
76 Ethylbenzene	91		17.572				ND	
78 m-Xylene & p-Xylene	106		17.829				ND	
79 o-Xylene	106		18.685				ND	
80 Styrene	104		18.744				ND	
81 Bromoform	173		19.188				ND	
82 Isopropylbenzene	105		19.412				ND	
S 73 Xylenes, Total	106		19.600				ND	
84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
85 N-Propylbenzene	91		20.167				ND	
89 2-Chlorotoluene	91		20.370				ND	
88 4-Ethyltoluene	105		20.370				ND	
90 1,3,5-Trimethylbenzene	105		20.482				ND	
92 tert-Butylbenzene	119		20.985				ND	
93 1,2,4-Trimethylbenzene	105		21.087				ND	
94 sec-Butylbenzene	105		21.322				ND	
95 4-Isopropyltoluene	119		21.531				ND	
96 1,3-Dichlorobenzene	146		21.552				ND	
97 1,4-Dichlorobenzene	146		21.691				ND	
98 Benzyl chloride	91		21.900				ND	
100 n-Butylbenzene	91		22.109				ND	
101 1,2-Dichlorobenzene	146		22.226				ND	
103 1,2,4-Trichlorobenzene	180		24.687				ND	
104 Hexachlorobutadiene	225		24.869				ND	
105 Naphthalene	128		25.169				ND	

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

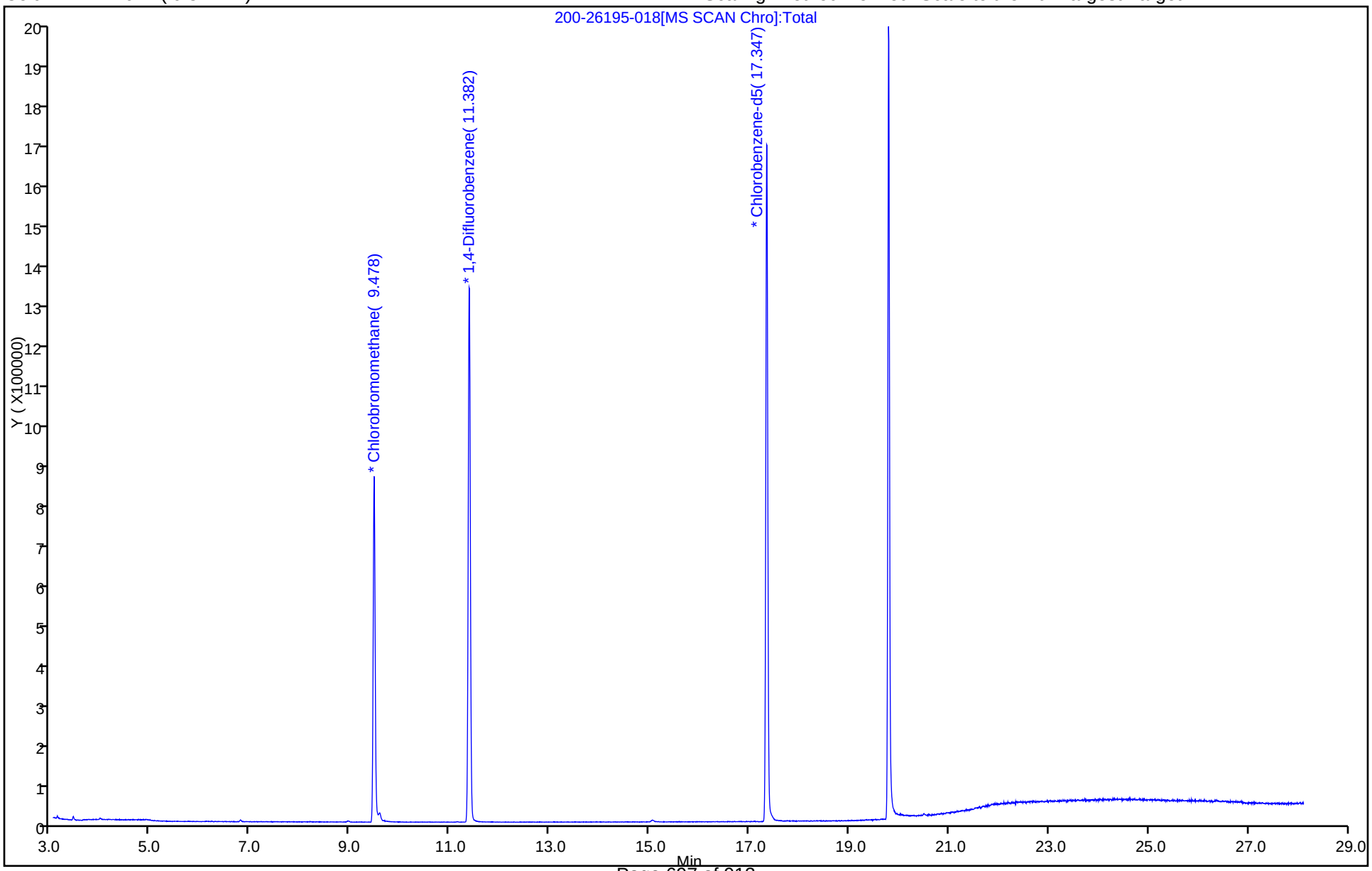
Report Date: 04-Aug-2017 14:47:43 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-018.D

Injection Date:	04-Aug-2017 01:00:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39232-A-11	Lab Sample ID:	200-39232-11	Worklist Smp#:	18
Client ID:	2515				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	17
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4344 Lab Sample ID: 200-39232-12

Matrix: Air Lab File ID: 200-26195-019.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 01:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4344 | Lab Sample ID: 200-39232-12

Matrix: Air | Lab File ID: 200-26195-019.D

Analysis Method: TO-15 | Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 08/04/2017 01:51

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 119318 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Client Sample ID: 4344 Lab Sample ID: 200-39232-12

Matrix: Air Lab File ID: 200-26195-019.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/04/2017 01:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119318 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-019.D
Lims ID: 200-39232-A-12
Client ID: 4344
Sample Type: Client
Inject. Date: 04-Aug-2017 01:51:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026195-019
Misc. Info.: 39232-12
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 04-Aug-2017 14:50:08 Calib Date: 11-Jul-2017 23:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170711-25865.b\200-25865-010.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: puangmaleek Date: 04-Aug-2017 14:50:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.139				ND	
2 Dichlorodifluoromethane	85		3.197				ND	
3 Chlorodifluoromethane	51		3.235				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.411				ND	
5 Chloromethane	50	3.518	3.529	-0.011	97	2564	0.0875	
6 Butane	43		3.690				ND	
7 Vinyl chloride	62		3.727				ND	
8 Butadiene	54		3.786				ND	
10 Bromomethane	94		4.348				ND	
11 Chloroethane	64		4.535				ND	
13 Vinyl bromide	106		4.850				ND	
14 Trichlorofluoromethane	101		4.925				ND	
17 Ethanol	45		5.418				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.813				ND	
21 1,1-Dichloroethene	96		5.878				ND	
22 Acetone	43		6.113				ND	
23 Carbon disulfide	76		6.241				ND	
24 Isopropyl alcohol	45		6.348				ND	
25 3-Chloro-1-propene	41		6.562				ND	
27 Methylene Chloride	49	6.798	6.825	-0.027	90	2864	0.0857	
28 2-Methyl-2-propanol	59		7.044				ND	
29 Methyl tert-butyl ether	73		7.204				ND	
31 trans-1,2-Dichloroethene	61		7.215				ND	
33 Hexane	57		7.541				ND	
34 1,1-Dichloroethane	63		8.028				ND	
35 Vinyl acetate	43		8.092				ND	
37 cis-1,2-Dichloroethene	96		9.055				ND	
38 2-Butanone (MEK)	72		9.136				ND	
39 Ethyl acetate	88		9.152				ND	
* 40 Chlorobromomethane	128	9.478	9.499	-0.021	87	308644	10.0	
41 Tetrahydrofuran	42		9.542				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.585	9.612	-0.027	95	16301	0.1631	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.847				ND	
	44 1,1,1-Trichloroethane	97		9.885				ND	
	45 Carbon tetrachloride	117		10.120				ND	
	46 Isooctane	57		10.527				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.382	11.404	-0.022	95	1583923	10.0	
	53 Trichloroethene	95		11.859				ND	
	54 1,2-Dichloropropane	63		12.426				ND	
	55 Methyl methacrylate	69		12.597				ND	
	57 Dibromomethane	174		12.672				ND	
	56 1,4-Dioxane	88		12.677				ND	
	58 Dichlorobromomethane	83		12.955				ND	
	60 cis-1,3-Dichloropropene	75		13.875				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.196				ND	
	65 Toluene	92		14.453				ND	
	66 trans-1,3-Dichloropropene	75		15.058				ND	
	67 1,1,2-Trichloroethane	83		15.432				ND	
	68 Tetrachloroethene	166		15.512				ND	
	69 2-Hexanone	43		15.914				ND	
	71 Chlorodibromomethane	129		16.187				ND	
	72 Ethylene Dibromide	107		16.459				ND	
*	74 Chlorobenzene-d5	117	17.353	17.358	-0.005	89	1363407	10.0	
	75 Chlorobenzene	112		17.417				ND	
	76 Ethylbenzene	91		17.572				ND	
	78 m-Xylene & p-Xylene	106		17.829				ND	
	79 o-Xylene	106		18.685				ND	
	80 Styrene	104		18.744				ND	
	81 Bromoform	173		19.188				ND	
	82 Isopropylbenzene	105		19.412				ND	
S	73 Xylenes, Total	106		19.600				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.108				ND	
	85 N-Propylbenzene	91		20.167				ND	
	89 2-Chlorotoluene	91		20.370				ND	
	88 4-Ethyltoluene	105		20.370				ND	
	90 1,3,5-Trimethylbenzene	105		20.482				ND	
	92 tert-Butylbenzene	119		20.985				ND	
	93 1,2,4-Trimethylbenzene	105		21.087				ND	
	94 sec-Butylbenzene	105		21.322				ND	
	95 4-Isopropyltoluene	119		21.531				ND	
	96 1,3-Dichlorobenzene	146		21.552				ND	
	97 1,4-Dichlorobenzene	146		21.691				ND	
	98 Benzyl chloride	91		21.900				ND	
	100 n-Butylbenzene	91		22.109				ND	
	101 1,2-Dichlorobenzene	146		22.226				ND	
	103 1,2,4-Trichlorobenzene	180		24.687				ND	
	104 Hexachlorobutadiene	225		24.869				ND	
	105 Naphthalene	128		25.169				ND	

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

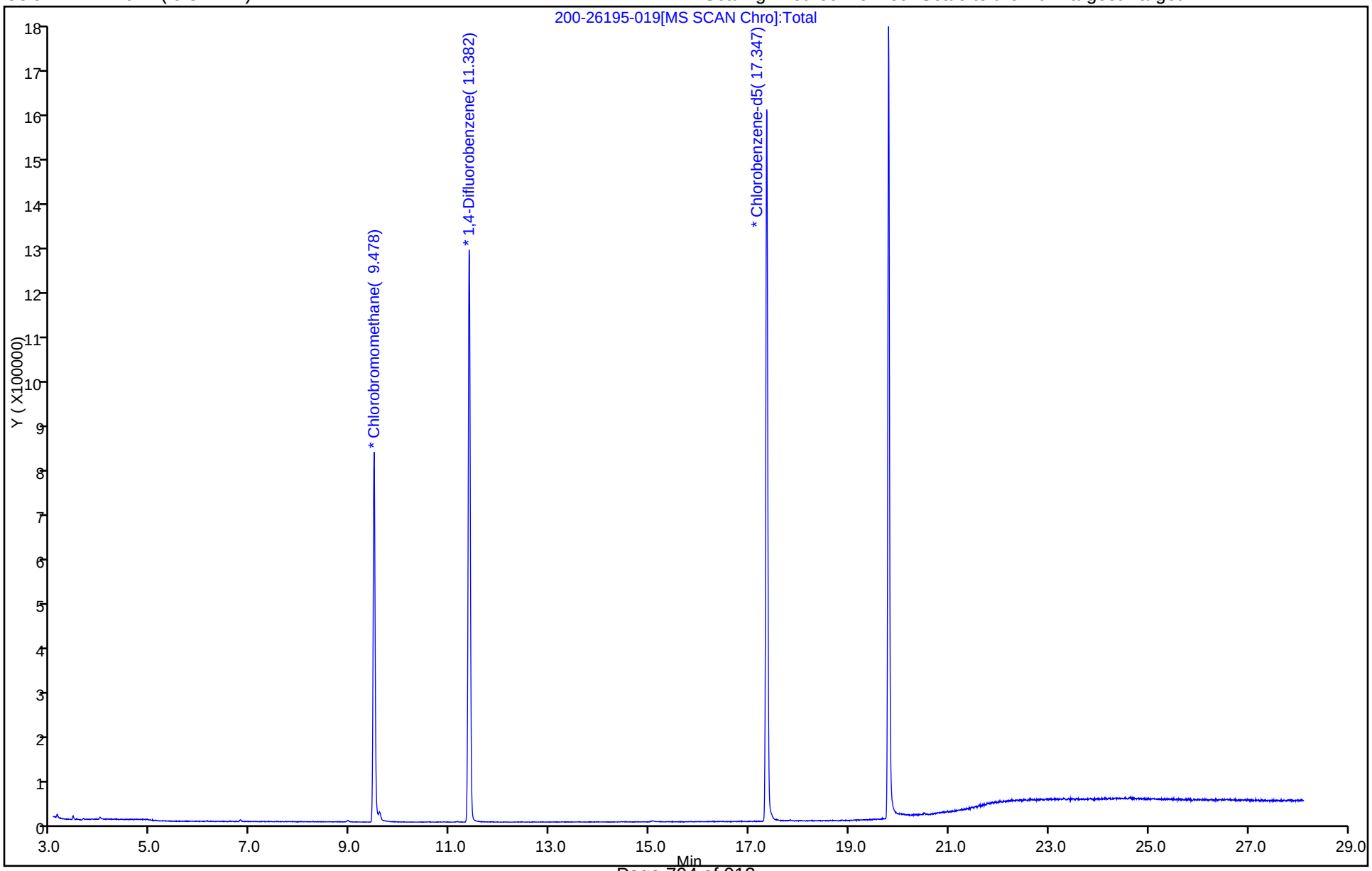
Report Date: 04-Aug-2017 14:50:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170803-26195.b\200-26195-019.D

Injection Date:	04-Aug-2017 01:51:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39232-A-12	Lab Sample ID:	200-39232-12	Worklist Smp#:	19
Client ID:	4344				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	18
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Client Sample ID: 2563 Lab Sample ID: 200-39423-10

Matrix: Air Lab File ID: 26065_14.D

Analysis Method: TO-15 Date Collected: 07/22/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/26/2017 21:45

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39423-1

SDG No.:

Client Sample ID: 2563 | Lab Sample ID: 200-39423-10

Matrix: Air | Lab File ID: 26065_14.D

Analysis Method: TO-15 | Date Collected: 07/22/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/26/2017 21:45

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118979 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Client Sample ID: 2563 Lab Sample ID: 200-39423-10

Matrix: Air Lab File ID: 26065_14.D

Analysis Method: TO-15 Date Collected: 07/22/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/26/2017 21:45

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_14.D
Lims ID: 200-39423-A-10
Client ID: 2563
Sample Type: Client
Inject. Date: 26-Jul-2017 21:45:30 ALS Bottle#: 14 Worklist Smp#: 36
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026065-015
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 31-Jul-2017 15:30:50 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: tobere Date: 31-Jul-2017 13:15:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.060				ND	
2 Dichlorodifluoromethane	85		3.124				ND	
3 Chlorodifluoromethane	51		3.172				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.376				ND	
5 Chloromethane	50	3.515	3.509	0.006	96	2947	0.0909	
6 Butane	43		3.691				ND	
7 Vinyl chloride	62		3.734				ND	
8 Butadiene	54		3.804				ND	
10 Bromomethane	94		4.451				ND	
11 Chloroethane	64		4.670				ND	
13 Vinyl bromide	106		5.039				ND	
14 Trichlorofluoromethane	101		5.130				ND	
17 Ethanol	45	5.745	5.708	0.037	95	2194	0.1299	
20 1,1,2-Trichloro-1,2,2-trif	101		6.157				ND	
21 1,1-Dichloroethene	96		6.211				ND	
22 Acetone	43		6.473				ND	
23 Carbon disulfide	76	6.601	6.601	0.000	99	20762	0.2443	
24 Isopropyl alcohol	45		6.762				ND	
25 3-Chloro-1-propene	41		6.987				ND	
27 Methylene Chloride	49		7.286				ND	
28 2-Methyl-2-propanol	59		7.538				ND	
29 Methyl tert-butyl ether	73		7.698				ND	
31 trans-1,2-Dichloroethene	61		7.719				ND	
33 Hexane	57		8.089				ND	
34 1,1-Dichloroethane	63		8.608				ND	
35 Vinyl acetate	43		8.693				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.747				ND	
38 2-Butanone (MEK)	72		9.833				ND	
39 Ethyl acetate	88		9.859				ND	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	99	284161	10.0	
41 Tetrahydrofuran	42		10.266				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.373				ND	
	43 Cyclohexane	84		10.608				ND	
	44 1,1,1-Trichloroethane	97		10.651				ND	
	45 Carbon tetrachloride	117		10.908				ND	
	46 Isooctane	57		11.363				ND	
	47 Benzene	78		11.416				ND	
	48 1,2-Dichloroethane	62		11.625				ND	
	49 n-Heptane	43		11.780				ND	
*	50 1,4-Difluorobenzene	114	12.320	12.320	0.000	95	1683272	10.0	
	53 Trichloroethene	95		12.807				ND	
	54 1,2-Dichloropropane	63		13.417				ND	
	55 Methyl methacrylate	69		13.610				ND	
	56 1,4-Dioxane	88		13.679				ND	
	57 Dibromomethane	174		13.684				ND	
	58 Dichlorobromomethane	83		13.995				ND	
	60 cis-1,3-Dichloropropene	75		14.979				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.305				ND	
	65 Toluene	92		15.589				ND	
	66 trans-1,3-Dichloropropene	75		16.231				ND	
	67 1,1,2-Trichloroethane	83		16.627				ND	
	68 Tetrachloroethene	166		16.712				ND	
	69 2-Hexanone	43		17.119				ND	
	71 Chlorodibromomethane	129		17.424				ND	
	72 Ethylene Dibromide	107		17.707				ND	
*	74 Chlorobenzene-d5	117	18.654	18.654	0.000	89	1530541	10.0	
	75 Chlorobenzene	112		18.713				ND	
	76 Ethylbenzene	91		18.879				ND	
	78 m-Xylene & p-Xylene	106		19.146				ND	
S	73 Xylenes, Total	106		19.600				ND	
	79 o-Xylene	106		20.040				ND	
	80 Styrene	104		20.104				ND	
	81 Bromoform	173		20.564				ND	
	82 Isopropylbenzene	105		20.794				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.511				ND	
	85 N-Propylbenzene	91		21.575				ND	
	88 4-Ethyltoluene	105		21.779				ND	
	89 2-Chlorotoluene	91		21.779				ND	
	90 1,3,5-Trimethylbenzene	105		21.891				ND	
	92 tert-Butylbenzene	119		22.410				ND	
	93 1,2,4-Trimethylbenzene	105		22.506				ND	
	94 sec-Butylbenzene	105		22.747				ND	
	95 4-Isopropyltoluene	119		22.966				ND	
	96 1,3-Dichlorobenzene	146		22.988				ND	
	97 1,4-Dichlorobenzene	146		23.132				ND	
	98 Benzyl chloride	91		23.346				ND	
	100 n-Butylbenzene	91		23.560				ND	
	101 1,2-Dichlorobenzene	146		23.683				ND	
	103 1,2,4-Trichlorobenzene	180		26.267				ND	
	104 Hexachlorobutadiene	225		26.454				ND	
	105 Naphthalene	128		26.770				ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

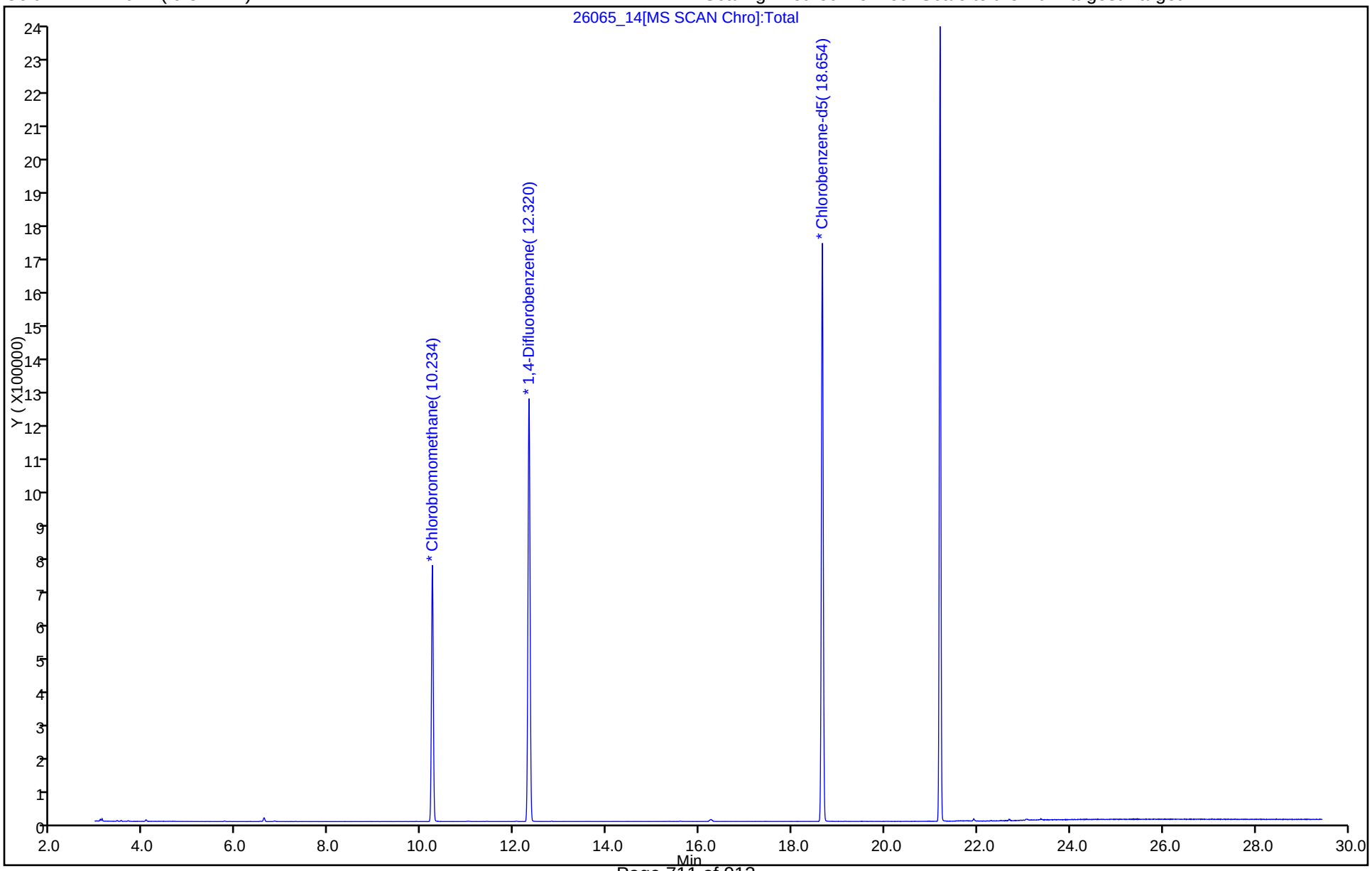
Report Date: 31-Jul-2017 15:32:17 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_14.D

Injection Date:	26-Jul-2017 21:45:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39423-A-10	Lab Sample ID:	200-39423-10	Worklist Smp#:	36
Client ID:	2563				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	14
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39424-1

SDG No.:

Client Sample ID: 3659 | Lab Sample ID: 200-39424-12

Matrix: Air | Lab File ID: 26065_13.D

Analysis Method: TO-15 | Date Collected: 07/15/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/26/2017 20:47

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118979 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39424-1

SDG No.:

Client Sample ID: 3659 | Lab Sample ID: 200-39424-12

Matrix: Air | Lab File ID: 26065_13.D

Analysis Method: TO-15 | Date Collected: 07/15/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/26/2017 20:47

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118979 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Client Sample ID: 3659 Lab Sample ID: 200-39424-12

Matrix: Air Lab File ID: 26065_13.D

Analysis Method: TO-15 Date Collected: 07/15/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/26/2017 20:47

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118979 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_13.D
Lims ID: 200-39424-A-12
Client ID: 3659
Sample Type: Client
Inject. Date: 26-Jul-2017 20:47:30 ALS Bottle#: 13 Worklist Smp#: 35
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026065-014
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 31-Jul-2017 15:30:50 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: tobere Date: 31-Jul-2017 13:14:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.060				ND	
2 Dichlorodifluoromethane	85		3.124				ND	
3 Chlorodifluoromethane	51		3.172				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.376				ND	
5 Chloromethane	50	3.515	3.509	0.006	98	3451	0.1116	
6 Butane	43		3.691				ND	
7 Vinyl chloride	62		3.734				ND	
8 Butadiene	54		3.804				ND	
10 Bromomethane	94		4.451				ND	
11 Chloroethane	64		4.670				ND	
13 Vinyl bromide	106		5.039				ND	
14 Trichlorofluoromethane	101		5.130				ND	
17 Ethanol	45	5.751	5.708	0.043	97	2384	0.1481	
20 1,1,2-Trichloro-1,2,2-trif	101		6.157				ND	
21 1,1-Dichloroethene	96		6.211				ND	
22 Acetone	43		6.473				ND	
23 Carbon disulfide	76	6.596	6.601	-0.005	99	3161	0.0390	
24 Isopropyl alcohol	45		6.762				ND	
25 3-Chloro-1-propene	41		6.987				ND	
27 Methylene Chloride	49		7.286				ND	
28 2-Methyl-2-propanol	59		7.538				ND	
29 Methyl tert-butyl ether	73		7.698				ND	
31 trans-1,2-Dichloroethene	61		7.719				ND	
33 Hexane	57		8.089				ND	
34 1,1-Dichloroethane	63		8.608				ND	
35 Vinyl acetate	43		8.693				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.747				ND	
38 2-Butanone (MEK)	72		9.833				ND	
39 Ethyl acetate	88		9.859				ND	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	98	270866	10.0	
41 Tetrahydrofuran	42		10.266				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		10.373				ND	
	43 Cyclohexane	84		10.608				ND	
	44 1,1,1-Trichloroethane	97		10.651				ND	
	45 Carbon tetrachloride	117		10.908				ND	
	46 Isooctane	57		11.363				ND	
	47 Benzene	78		11.416				ND	
	48 1,2-Dichloroethane	62		11.625				ND	
	49 n-Heptane	43		11.780				ND	
*	50 1,4-Difluorobenzene	114	12.320	12.320	0.000	95	1621317	10.0	
	53 Trichloroethene	95		12.807				ND	
	54 1,2-Dichloropropane	63		13.417				ND	
	55 Methyl methacrylate	69		13.610				ND	
	56 1,4-Dioxane	88		13.679				ND	
	57 Dibromomethane	174		13.684				ND	
	58 Dichlorobromomethane	83		13.995				ND	
	60 cis-1,3-Dichloropropene	75		14.979				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.305				ND	
	65 Toluene	92		15.589				ND	
	66 trans-1,3-Dichloropropene	75		16.231				ND	
	67 1,1,2-Trichloroethane	83		16.627				ND	
	68 Tetrachloroethene	166		16.712				ND	
	69 2-Hexanone	43		17.119				ND	
	71 Chlorodibromomethane	129		17.424				ND	
	72 Ethylene Dibromide	107		17.707				ND	
*	74 Chlorobenzene-d5	117	18.654	18.654	0.000	92	1462574	10.0	
	75 Chlorobenzene	112		18.713				ND	
	76 Ethylbenzene	91		18.879				ND	
	78 m-Xylene & p-Xylene	106		19.146				ND	
S	73 Xylenes, Total	106		19.600				ND	
	79 o-Xylene	106		20.040				ND	
	80 Styrene	104		20.104				ND	
	81 Bromoform	173		20.564				ND	
	82 Isopropylbenzene	105		20.794				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.511				ND	
	85 N-Propylbenzene	91		21.575				ND	
	88 4-Ethyltoluene	105		21.779				ND	
	89 2-Chlorotoluene	91		21.779				ND	
	90 1,3,5-Trimethylbenzene	105		21.891				ND	
	92 tert-Butylbenzene	119		22.410				ND	
	93 1,2,4-Trimethylbenzene	105		22.506				ND	
	94 sec-Butylbenzene	105		22.747				ND	
	95 4-Isopropyltoluene	119		22.966				ND	
	96 1,3-Dichlorobenzene	146		22.988				ND	
	97 1,4-Dichlorobenzene	146		23.132				ND	
	98 Benzyl chloride	91		23.346				ND	
	100 n-Butylbenzene	91		23.560				ND	
	101 1,2-Dichlorobenzene	146		23.683				ND	
	103 1,2,4-Trichlorobenzene	180		26.267				ND	
	104 Hexachlorobutadiene	225		26.454				ND	
	105 Naphthalene	128		26.770				ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

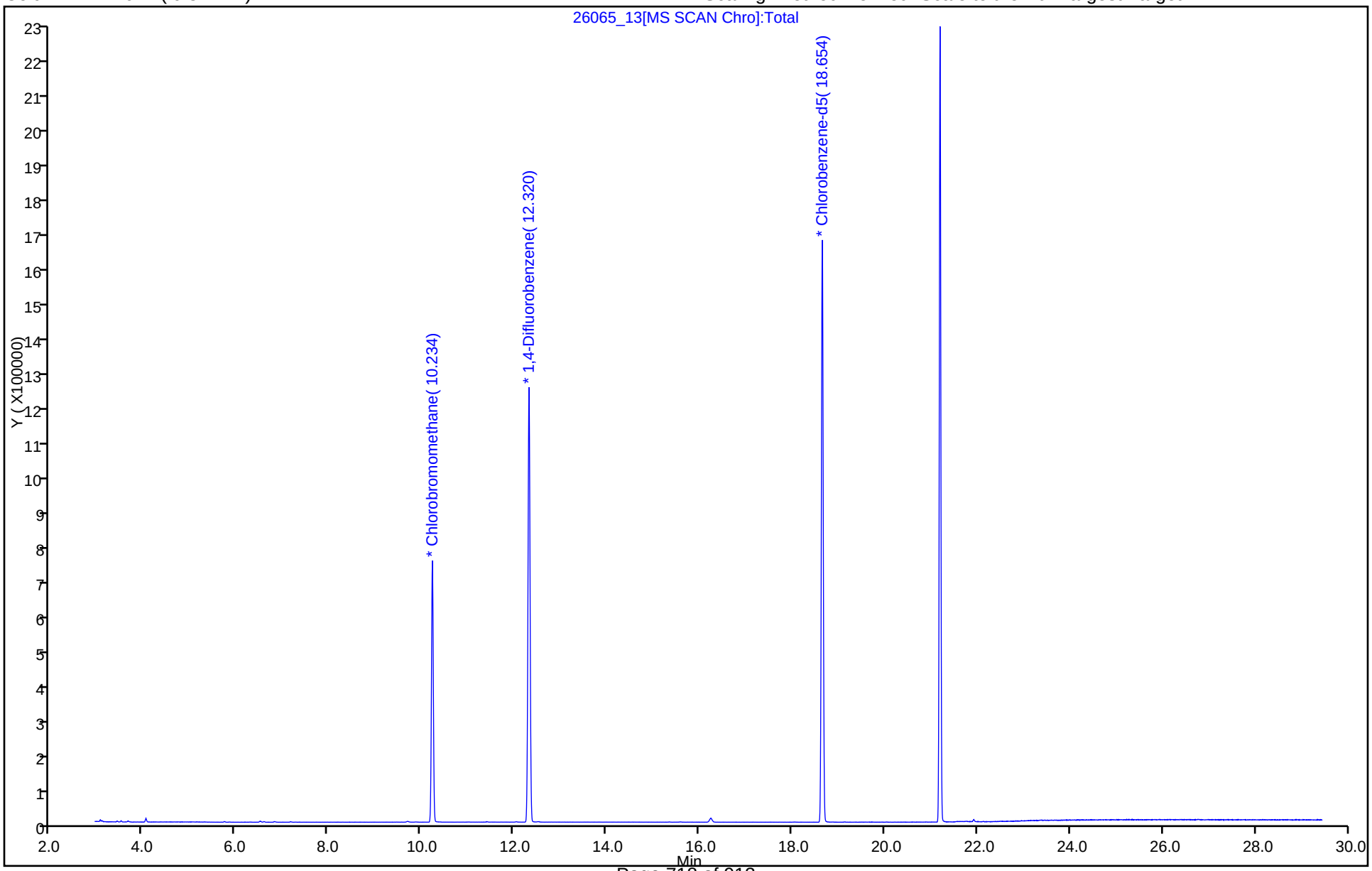
Report Date: 31-Jul-2017 15:31:43 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170726-26065.b\26065_13.D

Injection Date:	26-Jul-2017 20:47:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39424-A-12	Lab Sample ID:	200-39424-12	Worklist Smp#:	35
Client ID:	3659				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	13
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Client Sample ID: 4382 Lab Sample ID: 200-39486-1

Matrix: Air Lab File ID: 26165_12.D

Analysis Method: TO-15 Date Collected: 07/27/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 19:53

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U *	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U *	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U *	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U *	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U *	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Client Sample ID: 4382 Lab Sample ID: 200-39486-1

Matrix: Air Lab File ID: 26165_12.D

Analysis Method: TO-15 Date Collected: 07/27/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 19:53

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Client Sample ID: 4382 Lab Sample ID: 200-39486-1

Matrix: Air Lab File ID: 26165_12.D

Analysis Method: TO-15 Date Collected: 07/27/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 19:53

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_12.D
Lims ID: 200-39486-A-1
Client ID: 4382
Sample Type: Client
Inject. Date: 02-Aug-2017 19:53:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026165-012
Misc. Info.: 39486-01
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 03-Aug-2017 11:20:59 Calib Date: 08-Jun-2017 10:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20170607-25386.b\25386_18.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: puangmaleek Date: 03-Aug-2017 11:20:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.978				ND	
2 Dichlorodifluoromethane	85		3.047				ND	
3 Chlorodifluoromethane	51		3.101				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.309				ND	
5 Chloromethane	50	3.442	3.442	0.000	95	1653	0.0886	
6 Butane	43		3.645				ND	
7 Vinyl chloride	62		3.688				ND	
8 Butadiene	54		3.763				ND	
10 Bromomethane	94		4.440				ND	
11 Chloroethane	64		4.680				ND	
13 Vinyl bromide	106		5.075				ND	
14 Trichlorofluoromethane	101		5.182				ND	
17 Ethanol	45		5.775				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.282				ND	
21 1,1-Dichloroethene	96		6.314				ND	
22 Acetone	43		6.543				ND	
23 Carbon disulfide	76		6.692				ND	
24 Isopropyl alcohol	45		6.869				ND	
25 3-Chloro-1-propene	41		7.109				ND	
27 Methylene Chloride	49		7.413				ND	
28 2-Methyl-2-propanol	59		7.648				ND	
29 Methyl tert-butyl ether	73		7.819				ND	
31 trans-1,2-Dichloroethene	61		7.856				ND	
33 Hexane	57		8.256				ND	
34 1,1-Dichloroethane	63		8.737				ND	
35 Vinyl acetate	43		8.822				ND	
37 cis-1,2-Dichloroethene	96		9.857				ND	
38 2-Butanone (MEK)	72		9.900				ND	
39 Ethyl acetate	88		9.969				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
41 Tetrahydrofuran	42		10.322				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
*	40 Chlorobromomethane	128	10.316	10.327	-0.011	89	179384	10.0	
	42 Chloroform	83		10.471				ND	
	43 Cyclohexane	84		10.711				ND	
	44 1,1,1-Trichloroethane	97		10.733				ND	
	45 Carbon tetrachloride	117		10.994				ND	
	46 Isooctane	57		11.437				ND	
	47 Benzene	78		11.453				ND	
	48 1,2-Dichloroethane	62		11.634				ND	
	49 n-Heptane	43		11.843				ND	
*	50 1,4-Difluorobenzene	114	12.312	12.318	-0.006	98	998139	10.0	
	53 Trichloroethene	95		12.782				ND	
	54 1,2-Dichloropropane	63		13.337				ND	
	55 Methyl methacrylate	69		13.529				ND	
	56 1,4-Dioxane	88		13.572				ND	
	57 Dibromomethane	174		13.604				ND	
	58 Dichlorobromomethane	83		13.913				ND	
	60 cis-1,3-Dichloropropene	75		14.863				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.146				ND	
	65 Toluene	92		15.450				ND	
	66 trans-1,3-Dichloropropene	75		16.059				ND	
	67 1,1,2-Trichloroethane	83		16.432				ND	
	68 Tetrachloroethene	166		16.544				ND	
	69 2-Hexanone	43		16.881				ND	
	71 Chlorodibromomethane	129		17.195				ND	
	72 Ethylene Dibromide	107		17.457				ND	
*	74 Chlorobenzene-d5	117	18.359	18.359	0.000	95	919040	10.0	
	75 Chlorobenzene	112		18.418				ND	
	76 Ethylbenzene	91		18.572				ND	
	78 m-Xylene & p-Xylene	106		18.823				ND	
	79 o-Xylene	106		19.661				ND	
	80 Styrene	104		19.715				ND	
S	73 Xylenes, Total	106		20.100				ND	
	81 Bromoform	173		20.141				ND	
	82 Isopropylbenzene	105		20.360				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.027				ND	
	85 N-Propylbenzene	91		21.097				ND	
	88 4-Ethyltoluene	105		21.284				ND	
	89 2-Chlorotoluene	91		21.289				ND	
	90 1,3,5-Trimethylbenzene	105		21.396				ND	
	92 tert-Butylbenzene	119		21.887				ND	
	93 1,2,4-Trimethylbenzene	105		21.983				ND	
	94 sec-Butylbenzene	105		22.212				ND	
	95 4-Isopropyltoluene	119		22.420				ND	
	96 1,3-Dichlorobenzene	146		22.447				ND	
	97 1,4-Dichlorobenzene	146		22.580				ND	
	98 Benzyl chloride	91		22.773				ND	
	100 n-Butylbenzene	91		22.986				ND	
	101 1,2-Dichlorobenzene	146		23.103				ND	
	103 1,2,4-Trichlorobenzene	180		25.532				ND	
	104 Hexachlorobutadiene	225		25.724				ND	
	105 Naphthalene	128		25.996				ND	

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

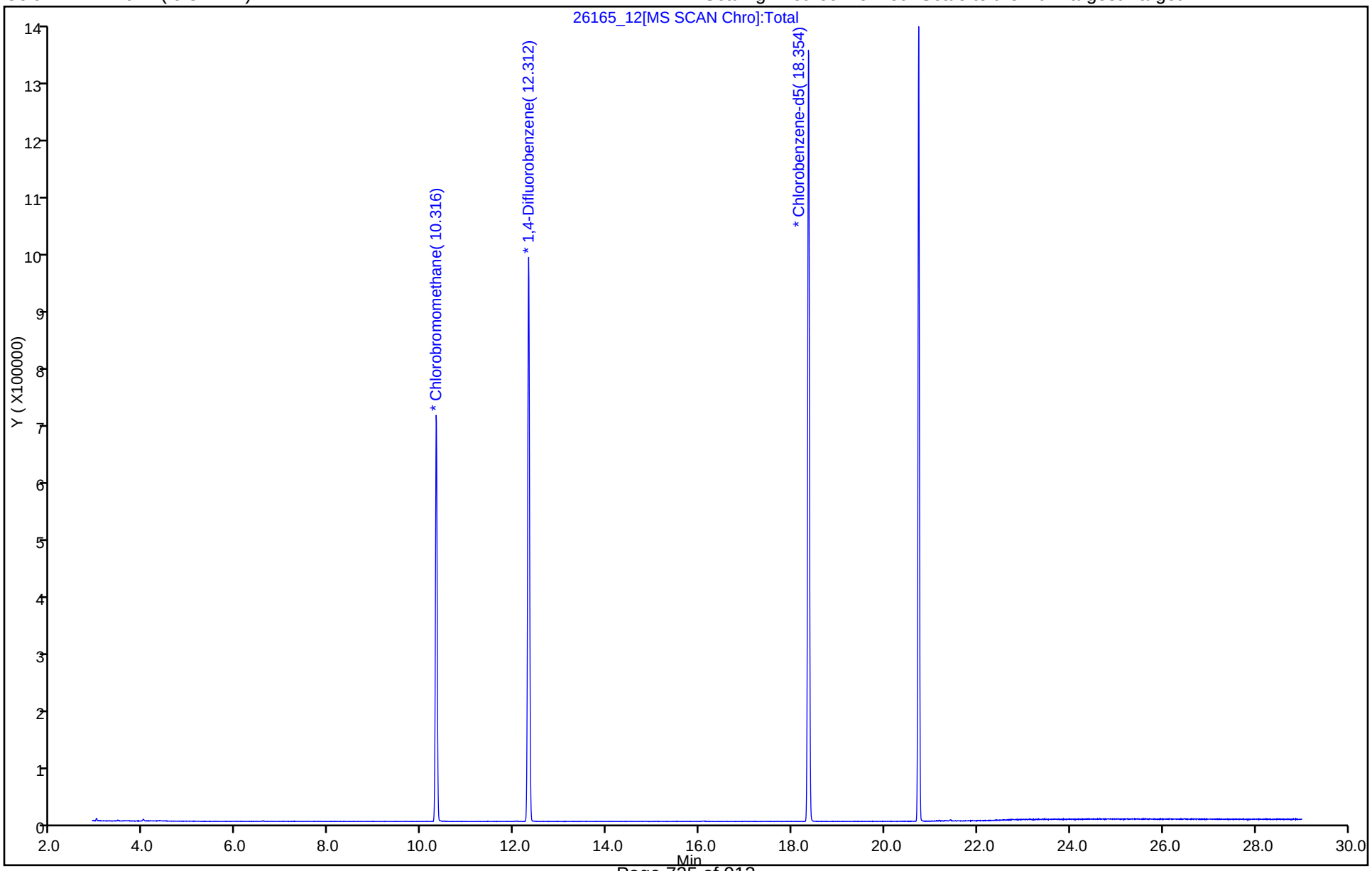
Report Date: 03-Aug-2017 11:20:59 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_12.D

Injection Date:	02-Aug-2017 19:53:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-39486-A-1	Lab Sample ID:	200-39486-1	Worklist Smp#:	12
Client ID:	4382				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Client Sample ID: 4794 Lab Sample ID: 200-39500-1

Matrix: Air Lab File ID: 26148-23.D

Analysis Method: TO-15 Date Collected: 07/28/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 06:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119211 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Client Sample ID: 4794 Lab Sample ID: 200-39500-1

Matrix: Air Lab File ID: 26148-23.D

Analysis Method: TO-15 Date Collected: 07/28/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 06:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119211 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Client Sample ID: 4794 Lab Sample ID: 200-39500-1

Matrix: Air Lab File ID: 26148-23.D

Analysis Method: TO-15 Date Collected: 07/28/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 06:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119211 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170801-26148.b\26148-23.D
Lims ID: 200-39500-A-1
Client ID: 4794
Sample Type: Client
Inject. Date: 02-Aug-2017 06:10:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026148-023
Misc. Info.: 39500-01
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20170801-26148.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 02-Aug-2017 12:30:30 Calib Date: 09-Jun-2017 10:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20170608-25406.b\25406-17.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK033

First Level Reviewer: daiglep Date: 02-Aug-2017 09:20:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.140				ND	
2 Dichlorodifluoromethane	85		3.193				ND	
3 Chlorodifluoromethane	51		3.230				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.417				ND	
5 Chloromethane	50		3.540				ND	
6 Butane	43		3.716				ND	
7 Vinyl chloride	62		3.753				ND	
8 Butadiene	54		3.818				ND	
10 Bromomethane	94		4.485				ND	
11 Chloroethane	64		4.719				ND	
13 Vinyl bromide	106		5.130				ND	
14 Trichlorofluoromethane	101		5.232				ND	
16 Ethanol	45		5.707				ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.262				ND	
20 1,1-Dichloroethene	96		6.331				ND	
21 Acetone	43		6.486				ND	
22 Isopropyl alcohol	45		6.715				ND	
23 Carbon disulfide	76		6.763				ND	
24 3-Chloro-1-propene	41		7.036				ND	
27 Methylene Chloride	49		7.292				ND	
28 2-Methyl-2-propanol	59		7.420				ND	
29 Methyl tert-butyl ether	73		7.644				ND	
30 trans-1,2-Dichloroethene	61		7.703				ND	
32 Hexane	57		8.034				ND	
33 1,1-Dichloroethane	63		8.445				ND	
34 Vinyl acetate	43		8.450				ND	
36 2-Butanone (MEK)	72		9.341				ND	
37 cis-1,2-Dichloroethene	96		9.347				ND	
35 Ethyl acetate	88		9.352				ND	
* 39 Chlorobromomethane	128	9.715	9.715	0.000	80	298989	10.0	
38 Tetrahydrofuran	42		9.731				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.790				ND	
S	41 1,2-Dichloroethene, Total	61		10.000				ND	
	42 1,1,1-Trichloroethane	97		10.051				ND	
	43 Cyclohexane	84		10.062				ND	
	44 Carbon tetrachloride	117		10.254				ND	
	45 Isooctane	57		10.537				ND	
	46 Benzene	78		10.579				ND	
	47 1,2-Dichloroethane	62		10.681				ND	
	48 n-Heptane	43		10.788				ND	
*	50 1,4-Difluorobenzene	114	11.118	11.124	-0.006	92	1504284	10.0	
	53 Trichloroethene	95		11.492				ND	
	54 1,2-Dichloropropane	63		11.860				ND	
	55 Methyl methacrylate	69		11.898				ND	
	56 1,4-Dioxane	88		11.988				ND	
	57 Dibromomethane	174		12.047				ND	
	58 Dichlorobromomethane	83		12.218				ND	
	60 cis-1,3-Dichloropropene	75		12.848				ND	
	61 4-Methyl-2-pentanone (MIBK	43		12.997				ND	
	64 Toluene	92		13.275				ND	
	66 trans-1,3-Dichloropropene	75		13.637				ND	
	67 1,1,2-Trichloroethane	83		13.910				ND	
	68 Tetrachloroethene	166		14.048				ND	
	69 2-Hexanone	43		14.171				ND	
	70 Chlorodibromomethane	129		14.465				ND	
	71 Ethylene Dibromide	107		14.667				ND	
*	72 Chlorobenzene-d5	117	15.223	15.228	-0.006	82	1181684	10.0	
	73 Chlorobenzene	112		15.265				ND	
	74 Ethylbenzene	91		15.335				ND	
	76 m-Xylene & p-Xylene	106		15.479				ND	
	78 o-Xylene	106		15.991				ND	
S	77 Xylenes, Total	106		16.000				ND	
	79 Styrene	104		16.018				ND	
	80 Bromoform	173		16.306				ND	
	81 Isopropylbenzene	105		16.402				ND	
	83 1,1,2,2-Tetrachloroethane	83		16.813				ND	
	84 N-Propylbenzene	91		16.882				ND	
	87 4-Ethyltoluene	105		17.005				ND	
	88 2-Chlorotoluene	91		17.048				ND	
	89 1,3,5-Trimethylbenzene	105		17.074				ND	
	91 tert-Butylbenzene	119		17.448				ND	
	92 1,2,4-Trimethylbenzene	105		17.517				ND	
	93 sec-Butylbenzene	105		17.704				ND	
	94 4-Isopropyltoluene	119		17.859				ND	
	95 1,3-Dichlorobenzene	146		17.939				ND	
	96 1,4-Dichlorobenzene	146		18.051				ND	
	97 Benzyl chloride	91		18.200				ND	
	99 n-Butylbenzene	91		18.366				ND	
	100 1,2-Dichlorobenzene	146		18.537				ND	
	103 1,2,4-Trichlorobenzene	180		20.901				ND	
	104 Hexachlorobutadiene	225		21.066				ND	
	105 Naphthalene	128		21.381				ND	

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

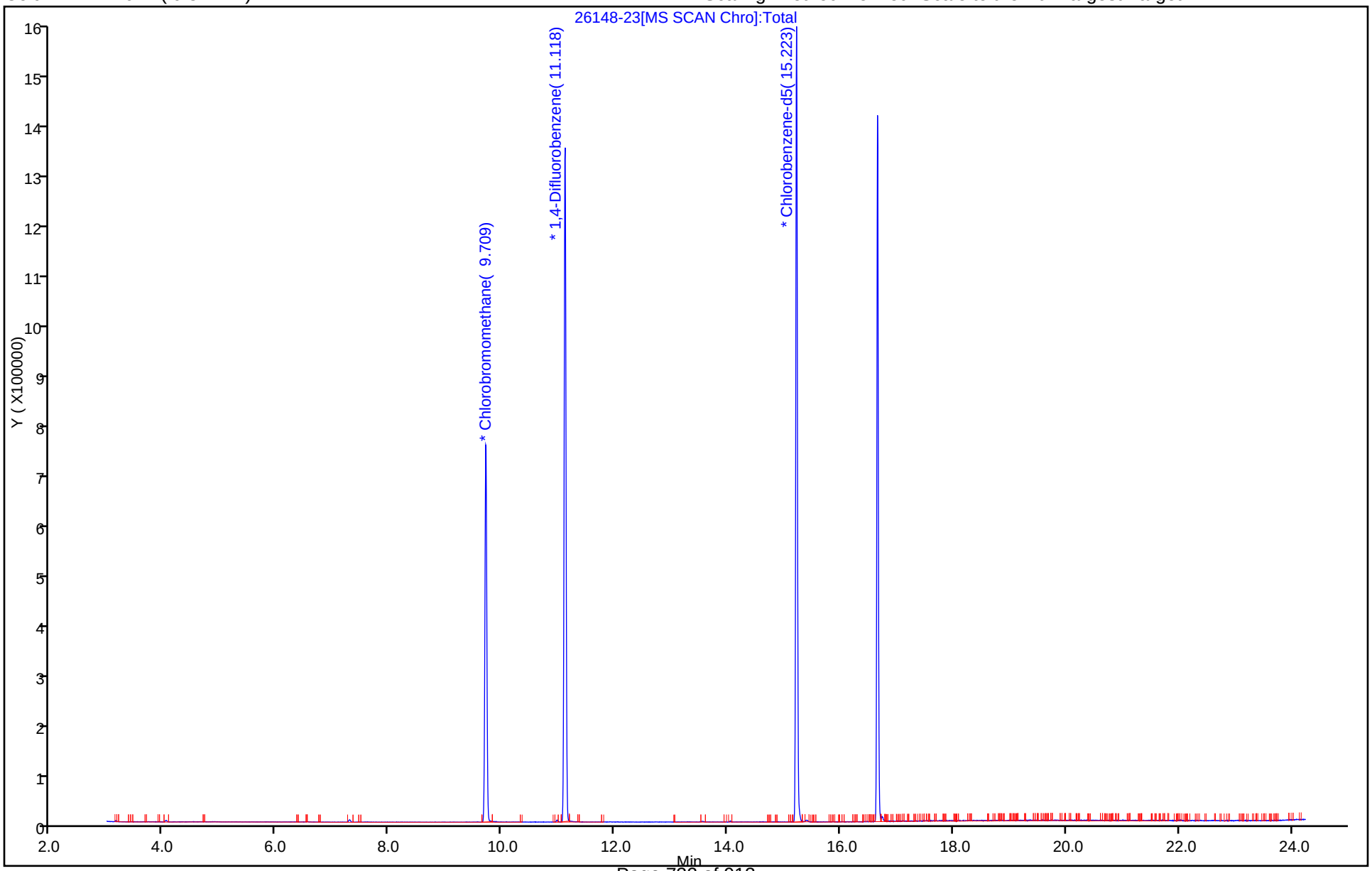
Report Date: 02-Aug-2017 12:30:48 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170801-26148.b\26148-23.D

Injection Date:	02-Aug-2017 06:10:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	200-39500-A-1	Lab Sample ID:	200-39500-1	Worklist Smp#:	23
Client ID:	4794				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	23
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Client Sample ID: 4343 Lab Sample ID: 200-39531-3

Matrix: Air Lab File ID: 26165_13.D

Analysis Method: TO-15 Date Collected: 07/31/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 20:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U *	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U *	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U *	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U *	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U *	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U *	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Client Sample ID: 4343 Lab Sample ID: 200-39531-3

Matrix: Air Lab File ID: 26165_13.D

Analysis Method: TO-15 Date Collected: 07/31/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 20:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Client Sample ID: 4343 Lab Sample ID: 200-39531-3

Matrix: Air Lab File ID: 26165_13.D

Analysis Method: TO-15 Date Collected: 07/31/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 08/02/2017 20:51

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119262 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D
Lims ID: 200-39531-A-3
Client ID: 4343
Sample Type: Client
Inject. Date: 02-Aug-2017 20:51:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0026165-013
Misc. Info.: 39531-03
Operator ID: pad Instrument ID: CHC.i

Method: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 03-Aug-2017 11:25:03 Calib Date: 08-Jun-2017 10:01:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHC.i\20170607-25386.b\25386_18.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: puangmaleek Date: 03-Aug-2017 11:25:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	2.983	2.978	0.005	78	2516	0.1399	
2 Dichlorodifluoromethane	85		3.047				ND	
3 Chlorodifluoromethane	51		3.101				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.309				ND	
5 Chloromethane	50		3.442				ND	
6 Butane	43		3.645				ND	
7 Vinyl chloride	62		3.688				ND	
8 Butadiene	54		3.763				ND	
10 Bromomethane	94		4.440				ND	
11 Chloroethane	64		4.680				ND	
13 Vinyl bromide	106		5.075				ND	
14 Trichlorofluoromethane	101		5.182				ND	
17 Ethanol	45		5.775				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.282				ND	
21 1,1-Dichloroethene	96		6.314				ND	
22 Acetone	43		6.543				ND	
23 Carbon disulfide	76	6.682	6.682	-0.010	71	1332	0.0324	M
24 Isopropyl alcohol	45		6.869				ND	
25 3-Chloro-1-propene	41		7.109				ND	
27 Methylene Chloride	49		7.413				ND	
28 2-Methyl-2-propanol	59		7.648				ND	
29 Methyl tert-butyl ether	73		7.819				ND	
31 trans-1,2-Dichloroethene	61		7.856				ND	
33 Hexane	57		8.256				ND	
34 1,1-Dichloroethane	63		8.737				ND	
35 Vinyl acetate	43		8.822				ND	
37 cis-1,2-Dichloroethene	96		9.857				ND	
38 2-Butanone (MEK)	72		9.900				ND	
39 Ethyl acetate	88		9.969				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
41 Tetrahydrofuran	42		10.322				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 40 Chlorobromomethane	128	10.322	10.327	-0.005	88	182831	10.0	
42 Chloroform	83		10.471				ND	
43 Cyclohexane	84		10.711				ND	
44 1,1,1-Trichloroethane	97		10.733				ND	
45 Carbon tetrachloride	117		10.994				ND	
46 Isooctane	57		11.437				ND	
47 Benzene	78		11.453				ND	
48 1,2-Dichloroethane	62		11.634				ND	
49 n-Heptane	43		11.843				ND	
* 50 1,4-Difluorobenzene	114	12.312	12.318	-0.006	98	1002949	10.0	
53 Trichloroethene	95		12.782				ND	
54 1,2-Dichloropropane	63		13.337				ND	
55 Methyl methacrylate	69		13.529				ND	
56 1,4-Dioxane	88		13.572				ND	
57 Dibromomethane	174		13.604				ND	
58 Dichlorobromomethane	83		13.913				ND	
60 cis-1,3-Dichloropropene	75		14.863				ND	
61 4-Methyl-2-pentanone (MIBK	43		15.146				ND	
65 Toluene	92	15.461	15.450	0.011	23	690	0.0170	M
66 trans-1,3-Dichloropropene	75		16.059				ND	
67 1,1,2-Trichloroethane	83		16.432				ND	
68 Tetrachloroethene	166		16.544				ND	
69 2-Hexanone	43		16.881				ND	
71 Chlorodibromomethane	129		17.195				ND	
72 Ethylene Dibromide	107		17.457				ND	
* 74 Chlorobenzene-d5	117	18.354	18.359	-0.005	95	928462	10.0	
75 Chlorobenzene	112		18.418				ND	
76 Ethylbenzene	91	18.572	18.572	0.000	1	1304	0.0141	
78 m-Xylene & p-Xylene	106	18.818	18.818	-0.005	0	699	0.0201	M
79 o-Xylene	106		19.661				ND	
80 Styrene	104		19.715				ND	
S 73 Xylenes, Total	106				0		0.0201	7
81 Bromoform	173		20.141				ND	
82 Isopropylbenzene	105		20.360				ND	
84 1,1,2,2-Tetrachloroethane	83		21.027				ND	
85 N-Propylbenzene	91		21.097				ND	
88 4-Ethyltoluene	105		21.284				ND	
89 2-Chlorotoluene	91		21.289				ND	
90 1,3,5-Trimethylbenzene	105		21.396				ND	
92 tert-Butylbenzene	119		21.887				ND	
93 1,2,4-Trimethylbenzene	105		21.983				ND	
94 sec-Butylbenzene	105		22.212				ND	
95 4-Isopropyltoluene	119		22.420				ND	
96 1,3-Dichlorobenzene	146		22.447				ND	
97 1,4-Dichlorobenzene	146		22.580				ND	
98 Benzyl chloride	91		22.773				ND	
100 n-Butylbenzene	91		22.986				ND	
101 1,2-Dichlorobenzene	146		23.103				ND	
103 1,2,4-Trichlorobenzene	180		25.532				ND	
104 Hexachlorobutadiene	225		25.724				ND	
105 Naphthalene	128		25.996				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

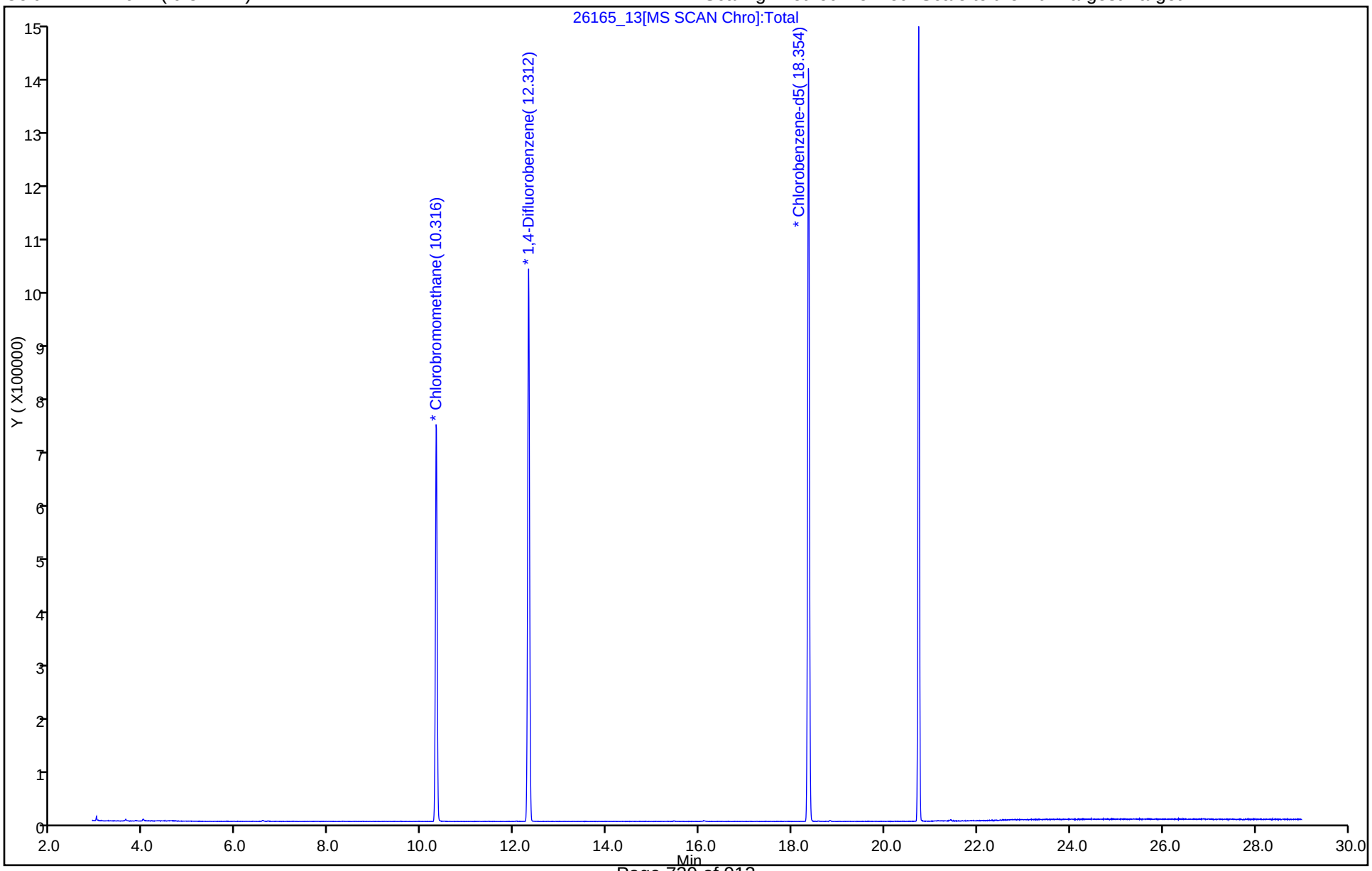
Report Date: 03-Aug-2017 11:25:04 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D

Injection Date:	02-Aug-2017 20:51:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-39531-A-3	Lab Sample ID:	200-39531-3	Worklist Smp#:	13
Client ID:	4343				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

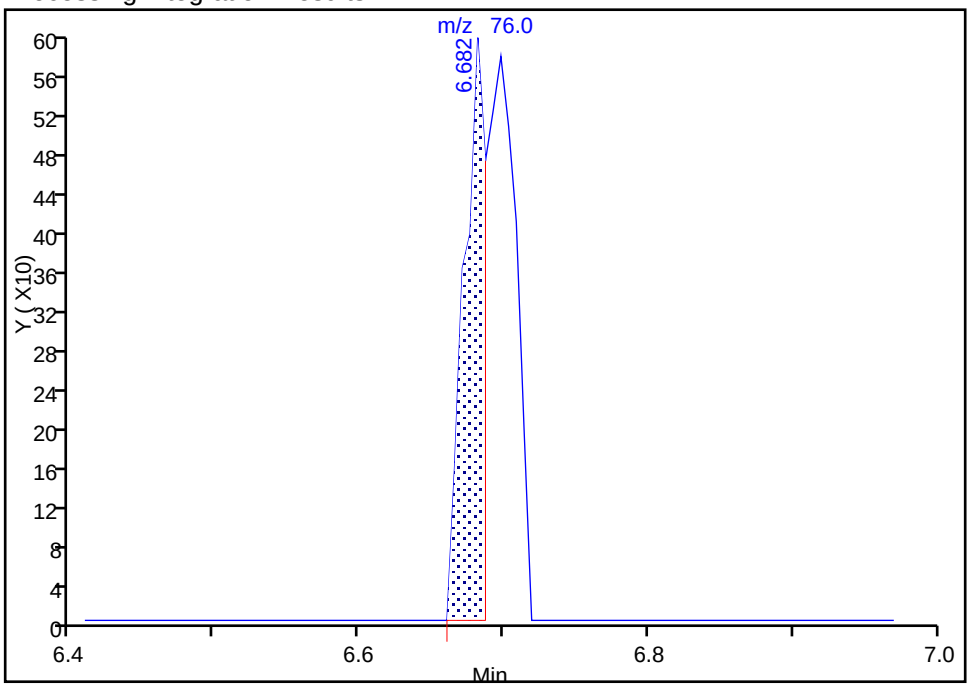
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D				
Injection Date:	02-Aug-2017 20:51:30	Instrument ID:	CHC.i		
Lims ID:	200-39531-A-3	Lab Sample ID:	200-39531-3		
Client ID:	4343				
Operator ID:	pad	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

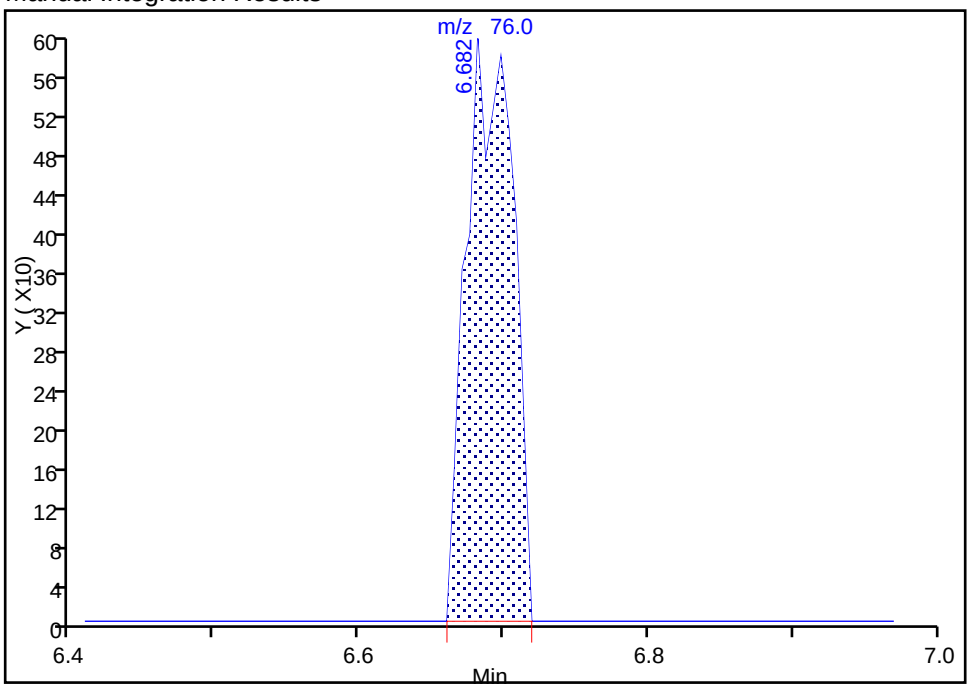
Processing Integration Results

RT: 6.68
Area: 630
Amount: 0.015307
Amount Units: ppb v/v



Manual Integration Results

RT: 6.68
Area: 1332
Amount: 0.032363
Amount Units: ppb v/v



Reviewer: puangmaleek, 03-Aug-2017 11:22:37

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

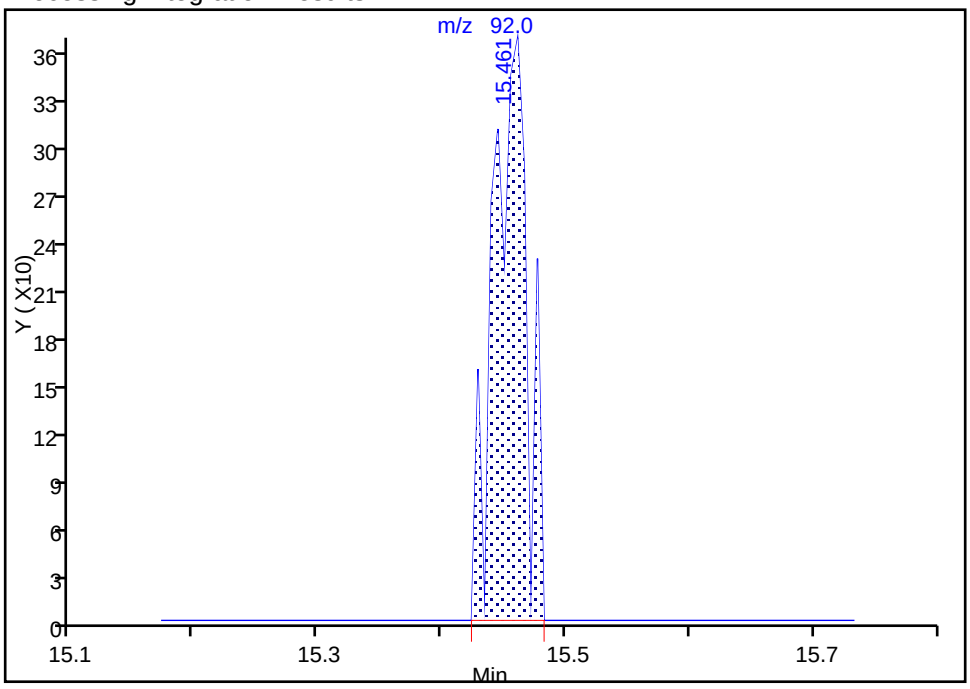
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D				
Injection Date:	02-Aug-2017 20:51:30	Instrument ID:	CHC.i		
Lims ID:	200-39531-A-3	Lab Sample ID:	200-39531-3		
Client ID:	4343				
Operator ID:	pad	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

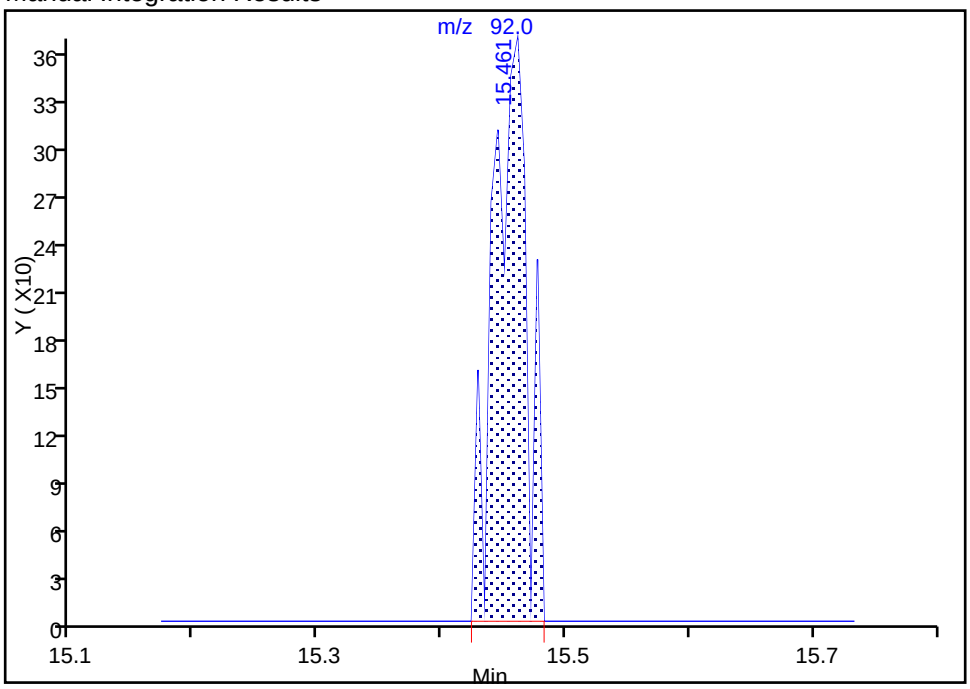
Processing Integration Results

RT: 15.46
Area: 690
Amount: 0.017047
Amount Units: ppb v/v



Manual Integration Results

RT: 15.46
Area: 690
Amount: 0.017047
Amount Units: ppb v/v



Reviewer: puangmaleek, 03-Aug-2017 11:23:51

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

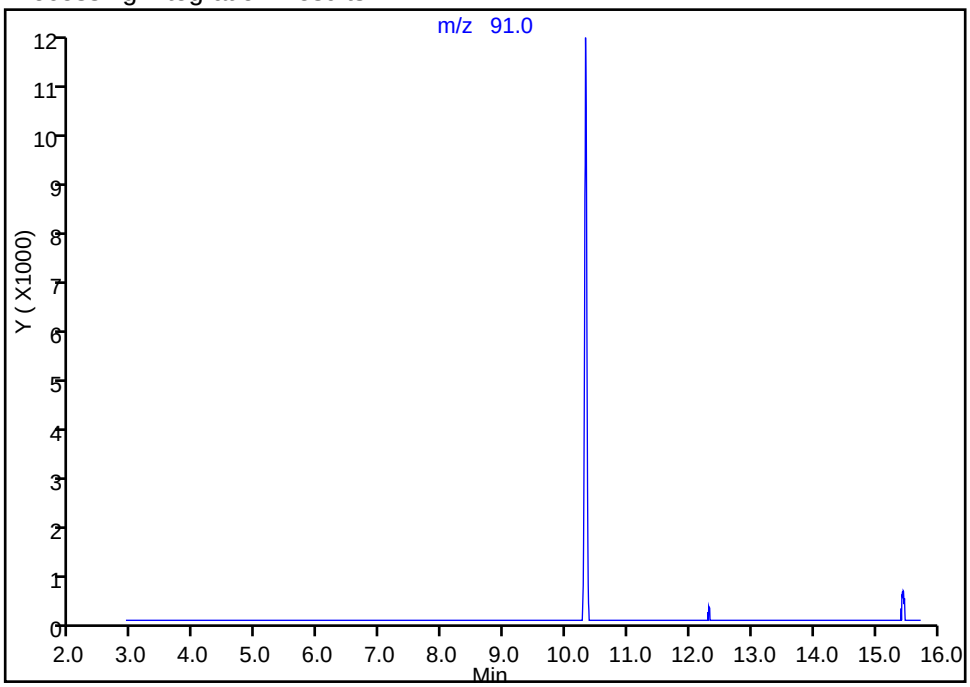
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D				
Injection Date:	02-Aug-2017 20:51:30	Instrument ID:	CHC.i		
Lims ID:	200-39531-A-3	Lab Sample ID:	200-39531-3		
Client ID:	4343				
Operator ID:	pad	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 2

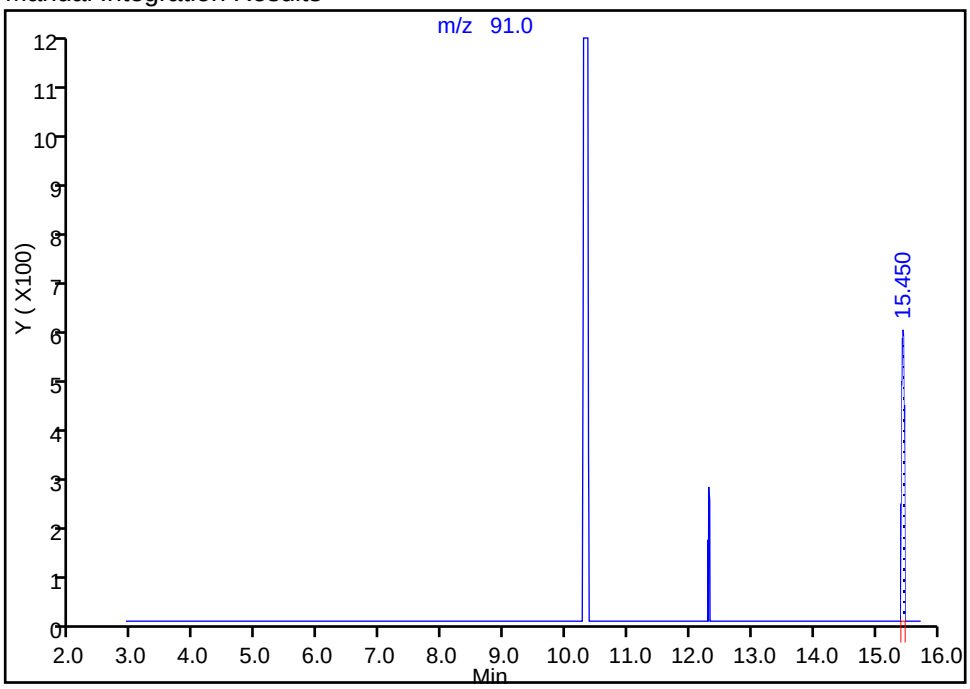
Processing Integration Results

RT: 15.45
Area: 0
Amount: 0.017047
Amount Units: ppb v/v



Manual Integration Results

RT: 15.45
Area: 1455
Amount: 0.017047
Amount Units: ppb v/v



Reviewer: puangmaleek, 03-Aug-2017 11:24:04
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

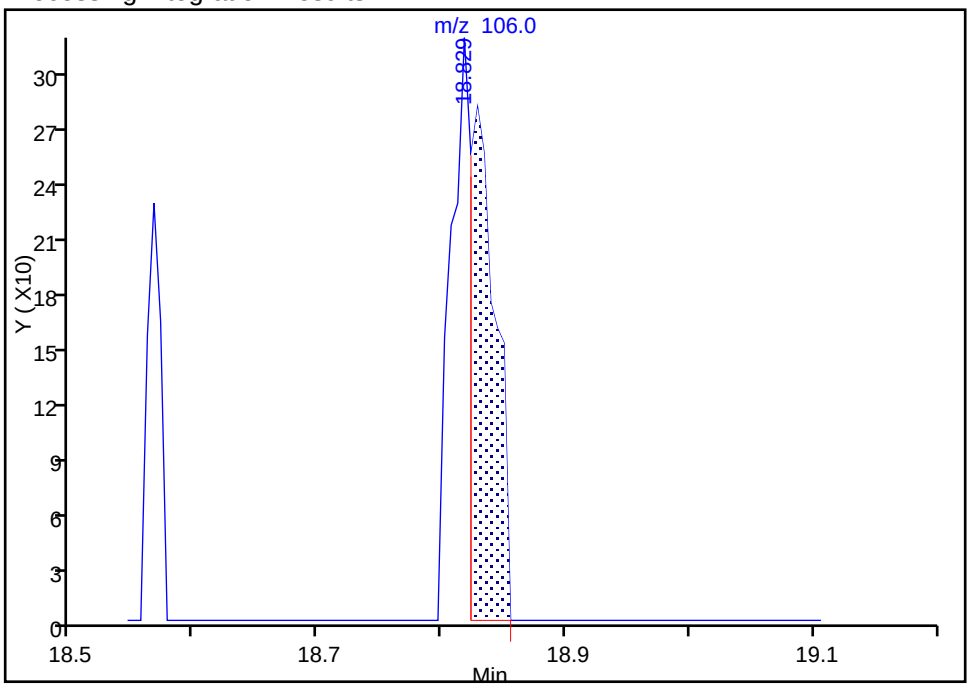
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D				
Injection Date:	02-Aug-2017 20:51:30	Instrument ID:	CHC.i		
Lims ID:	200-39531-A-3	Lab Sample ID:	200-39531-3		
Client ID:	4343				
Operator ID:	pad	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

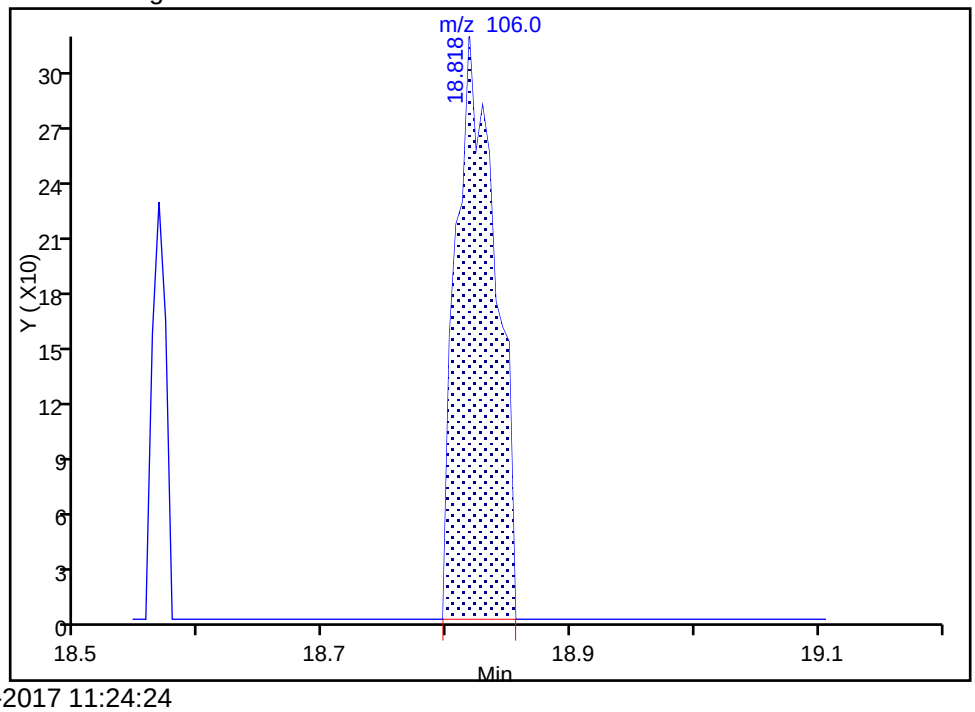
Processing Integration Results

RT: 18.83
Area: 407
Amount: 0.011732
Amount Units: ppb v/v



Manual Integration Results

RT: 18.82
Area: 699
Amount: 0.020149
Amount Units: ppb v/v



Reviewer: puangmaleek, 03-Aug-2017 11:24:24

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

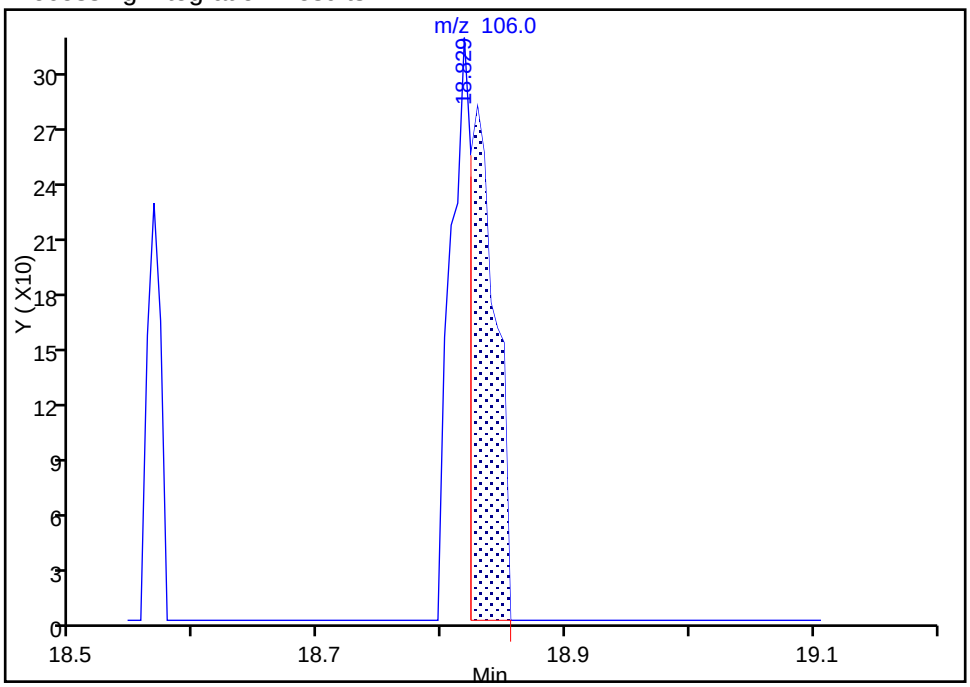
Data File:	\\ChromNA\Burlington\ChromData\CHC.i\20170802-26165.b\26165_13.D				
Injection Date:	02-Aug-2017 20:51:30	Instrument ID:	CHC.i		
Lims ID:	200-39531-A-3	Lab Sample ID:	200-39531-3		
Client ID:	4343				
Operator ID:	pad	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

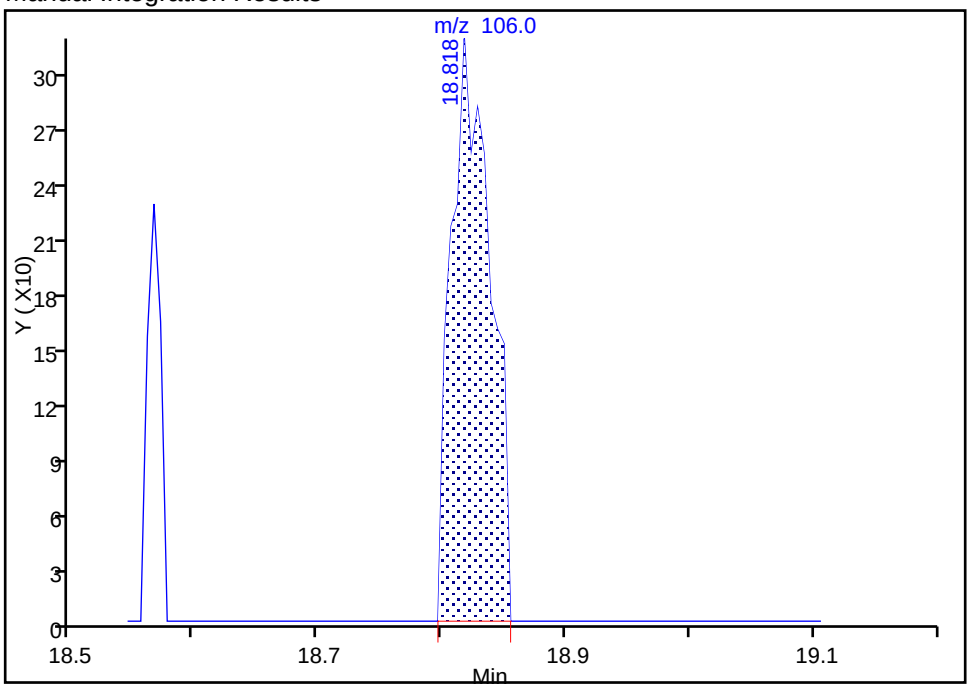
Processing Integration Results

RT: 18.83
Area: 407
Amount: 0.011732
Amount Units: ppb v/v



Manual Integration Results

RT: 18.82
Area: 699
Amount: 0.020149
Amount Units: ppb v/v



Reviewer: puangmaleek, 03-Aug-2017 11:24:35

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118437/3	200-25865-003.D
Level 2	IC 200-118437/4	200-25865-004.D
Level 3	IC 200-118437/5	200-25865-005.D
Level 4	IC 200-118437/6	200-25865-006.D
Level 5	ICIS 200-118437/7	200-25865-007.D
Level 6	IC 200-118437/8	200-25865-008.D
Level 7	IC 200-118437/9	200-25865-009.D
Level 8	IC 200-118437/10	200-25865-010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.7120	+++++ 0.6230	+++++ 0.6498	0.7394	0.6968	Ave		0.6842				6.9		30.0			
Dichlorodifluoromethane	+++++ 3.7191	+++++ 3.1800	4.6046 3.0790	3.9787	3.6787	Ave		3.7067				15.0		30.0			
Freon 22	+++++ 1.8984	+++++ 1.6405	2.3104 1.6664	2.0270	1.8961	Ave		1.9064				13.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.0896	3.4667 2.6654	3.8561 2.6433	3.2790	3.0377	Ave		3.1483				13.7		30.0			
Chloromethane	+++++ 0.9343	+++++ 0.8152	1.1916 0.8769	0.9616	0.9199	Ave		0.9499				13.6		30.0			
n-Butane	+++++ 1.3376	+++++ 1.1586	1.6729 1.2353	1.3749	1.3036	Ave		1.3471				13.2		30.0			
Vinyl chloride	1.3089 1.0903	1.2256 0.9558	1.3140 1.0316	1.1087	1.0591	Ave		1.1368				11.6		30.0			
1,3-Butadiene	0.8106 0.7159	0.7465 0.6255	0.8371 0.6816	0.7235	0.6958	Ave		0.7296				9.4		30.0			
Bromomethane	+++++ 1.1804	1.2780 1.0315	1.4546 1.1197	1.2518	1.1651	Ave		1.2116				11.1		30.0			
Chloroethane	+++++ 0.4355	+++++ 0.3789	0.5119 0.4251	0.4306	0.4248	Ave		0.4345				9.9		30.0			
Isopentane	+++++ 0.8060	0.9391 0.6976	0.9762 0.7777	0.8371	0.7802	Ave		0.8306				11.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.1309	1.2328 0.9978	1.3780 1.0532	1.1799	1.1211	Ave		1.1562				10.8		30.0			
Trichlorofluoromethane	+++++ 3.1390	4.0300 2.6735	4.1261 2.7096	3.4861	3.1782	Ave		3.3346				17.4		30.0			
n-Pentane	+++++ 1.2034	+++++ 1.0673	1.4974 1.2022	1.2119	1.1612	Ave		1.2239				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.3023	+++++ 0.2493	0.3500 0.2195	0.2794	0.3262	Ave		0.2878				16.9		30.0			
Ethyl ether	+++++ 0.5091	0.4675 0.4633	0.5212 0.5085	0.4526	0.4834	Ave		0.4865				5.5		30.0			
Freon TF	+++++ 2.1854	2.6585 1.9231	2.6211 2.0079	2.2533	2.1344	Ave		2.2548				12.6		30.0			
Acrolein	+++++ 0.1436	+++++ 0.1534	+++++ 0.1621	0.1375	0.1457	Ave		0.1485				6.4		30.0			
1,1-Dichloroethene	+++++ 0.9540	1.1910 0.8671	1.1526 0.9453	0.9724	0.9225	Ave		1.0007				12.2		30.0			
Acetone	+++++ 1.2469	+++++ 1.1117	+++++ 1.1822	1.1309	1.2967	Ave		1.1937				6.5		30.0			
Carbon disulfide	+++++ 2.7115	+++++ 2.4615	3.0747 2.7250	2.7145	2.6146	Ave		2.7170				7.4		30.0			
Isopropyl alcohol	+++++ 1.1627	+++++ 1.0314	+++++ 1.0949	1.1350	1.1960	Ave		1.1240				5.7		30.0			
3-Chloropropene	+++++ 0.9271	1.0360 0.8353	1.0740 0.8589	0.9545	0.9215	Ave		0.9439				9.2		30.0			
Acetonitrile	+++++ 0.4446	+++++ 0.4102	+++++ 0.4543	0.3975	0.4236	Ave		0.4260				5.5		30.0			
Methylene Chloride	+++++ 1.0513	+++++ 0.9338	1.3759 1.0254	1.0791	1.0275	Ave		1.0822				14.0		30.0			
tert-Butyl alcohol	+++++ 1.7338	+++++ 1.5690	+++++ 1.6427	1.5603	1.7007	Ave		1.6413				4.7		30.0			
Methyl tert-butyl ether	+++++ 2.5865	2.5149 2.3709	2.7372 2.4746	2.2606	2.4754	Ave		2.4886				6.1		30.0			
trans-1,2-Dichloroethene	+++++ 1.4261	1.5300 1.2860	1.6666 1.3732	1.4530	1.3944	Ave		1.4471				8.5		30.0			
Acrylonitrile	+++++ 0.4846	+++++ 0.4632	0.4324 0.5017	0.4097	0.4583	Ave		0.4583				7.3		30.0			
n-Hexane	+++++ 1.1707	1.2626 1.0989	1.2823 1.1699	1.1368	1.1140	Ave		1.1765				6.0		30.0			
1,1-Dichloroethane	2.2783 1.9081	2.0387 1.7965	2.1717 1.8701	1.9038	1.8324	Ave		1.9750				8.7		30.0			
Vinyl acetate	+++++ 1.8844	+++++ 1.7983	+++++ 1.8466	1.6252	1.8046	Ave		1.7918				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.2040	1.1927 1.1429	1.2941 1.1923	1.1573	1.1423	Ave		1.1894				4.4		30.0			
Methyl Ethyl Ketone	+++++ 0.4096	+++++ 0.3925	0.4908 0.4015	0.3284	0.3949	Ave		0.4029				12.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0557	+++++ 0.0542	+++++ 0.0557	0.0480	0.0541	Ave		0.0535				6.0		30.0			
Tetrahydrofuran	+++++ 0.1750	+++++ 0.1547	+++++ 0.1681	0.1593	0.1729	Ave		0.1660				5.3		30.0			
Chloroform	+++++ 2.8198	4.8946 2.6523	3.9983 2.7411	2.8431	2.7154	Ave		3.2378				26.8		30.0			
Cyclohexane	+++++ 0.2704	0.2705 0.2397	0.3400 0.2680	0.2645	0.2577	Ave		0.2730				11.5		30.0			
1,1,1-Trichloroethane	+++++ 0.5961	0.6445 0.5155	0.8193 0.5643	0.6103	0.5821	Ave		0.6189				15.7		30.0			
Carbon tetrachloride	0.6690 0.6483	0.5651 0.5496	0.7179 0.6039	0.6540	0.5983	Ave		0.6258				9.0		30.0			
2,2,4-Trimethylpentane	+++++ 1.0166	1.0845 0.9010	1.2596 0.9830	1.0109	0.9726	Ave		1.0326				11.1		30.0			
Benzene	+++++ 0.6816	0.7976 0.6253	0.8803 0.7035	0.6815	0.6642	Ave		0.7191				12.3		30.0			
1,2-Dichloroethane	+++++ 0.4206	0.4564 0.3722	0.5388 0.4112	0.4366	0.4207	Ave		0.4366				11.9		30.0			
n-Heptane	+++++ 0.3886	0.4492 0.3330	0.5212 0.3561	0.4004	0.3838	Ave		0.4046				15.6		30.0			
n-Butanol	+++++ 0.1115	+++++ 0.0982	+++++ 0.0997	0.0964	0.1126	Ave		0.1037				7.4		30.0			
Trichloroethene	0.6503 0.3934	0.3968 0.3484	0.4983 0.3903	0.3743	0.3658	Ave		0.4272				23.6		30.0			
1,2-Dichloropropane	+++++ 0.2850	0.2880 0.2529	0.3417 0.2614	0.2944	0.2797	Ave		0.2862				10.0		30.0			
Methyl methacrylate	+++++ 0.2231	+++++ 0.2014	0.2213 0.2139	0.1691	0.2101	Ave		0.2065				9.7		30.0			
1,4-Dioxane	+++++ 0.1317	+++++ 0.1153	+++++ 0.1143	0.1141	0.1340	Ave		0.1219				8.3		30.0			
Dibromomethane	+++++ 0.3133	0.3059 0.2737	0.3751 0.3099	0.3126	0.2930	Ave		0.3119				10.0		30.0			
Bromodichloromethane	+++++ 0.7013	0.6094 0.6168	0.8125 0.6619	0.6632	0.6591	Ave		0.6749				10.1		30.0			
cis-1,3-Dichloropropene	+++++ 0.4571	0.3973 0.4118	0.4797 0.4254	0.4421	0.4380	Ave		0.4359				6.3		30.0			
methyl isobutyl ketone	+++++ 0.5162	+++++ 0.4337	0.6561 0.4193	0.3989	0.5078	Ave		0.4887				19.4		30.0			
Toluene	+++++ 0.5601	0.5722 0.5319	0.6257 0.5810	0.5170	0.5275	Ave		0.5593				6.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.5758	0.6540 0.4824	0.7673 0.4616	0.6160	0.5831	Ave		0.5915				17.5		30.0			
trans-1,3-Dichloropropene	+++++ 0.4886	0.4786 0.4357	0.5626 0.4494	0.4386	0.4619	Ave		0.4736				9.3		30.0			
1,1,2-Trichloroethane	+++++ 0.3188	0.3238 0.3016	0.3654 0.3174	0.3077	0.3071	Ave		0.3203				6.7		30.0			
Tetrachloroethene	0.6304 0.4899	0.5123 0.4442	0.6010 0.5058	0.4738	0.4556	Ave		0.5141				13.1		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5298	+++++ 0.4667	0.6426 0.4692	0.3751	0.5352	Ave		0.5031				17.8		30.0			
Dibromochloromethane	+++++ 0.7303	0.5273 0.6853	0.6700 0.7440	0.6336	0.6906	Ave		0.6687				10.8		30.0			
1,2-Dibromoethane	+++++ 0.5913	0.5266 0.5589	0.6127 0.6203	0.5636	0.5558	Ave		0.5756				5.9		30.0			
Chlorobenzene	+++++ 0.7630	0.7447 0.7231	0.8706 0.8061	0.7329	0.7159	Ave		0.7652				7.2		30.0			
Ethylbenzene	+++++ 1.2052	1.1633 1.1457	1.2992 1.2444	1.0700	1.1463	Ave		1.1820				6.3		30.0			
n-Nonane	+++++ 0.5604	0.5714 0.5112	0.6228 0.5256	0.5593	0.5525	Ave		0.5576				6.4		30.0			
m,p-Xylene	+++++ 0.4767	0.4280 0.4534	0.4929 0.4917	0.4103	0.4464	Ave		0.4570				6.9		30.0			
Xylene, o-	+++++ 0.4821	0.4303 0.4576	0.5005 0.5112	0.4173	0.4534	Ave		0.4646				7.5		30.0			
Styrene	+++++ 0.7022	0.4831 0.6771	0.5868 0.7875	0.5823	0.6544	Ave		0.6391				15.4		30.0			
Bromoform	+++++ 0.6183	0.3238 0.5396	0.4848 0.5492	0.4029	0.5837	Ave		0.5003				20.9		30.0			
Cumene	+++++ 1.3235	1.2011 1.2499	1.3663 1.3694	1.2029	1.2504	Ave		1.2805				5.6		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7741	0.6986 0.7331	0.8533 0.7635	0.7002	0.7373	Ave		0.7514				7.1		30.0			
n-Propylbenzene	+++++ 1.6293	1.3478 1.5454	1.6665 1.6441	1.4245	1.5466	Ave		1.5434				7.7		30.0			
1,2,3-Trichloropropane	+++++ 0.6029	+++++ 0.5671	0.6969 0.5937	0.5478	0.5859	Ave		0.5991				8.7		30.0			
n-Decane	+++++ 0.6519	+++++ 0.5923	0.7634 0.5424	0.6551	0.6626	Ave		0.6446				11.6		30.0			
4-Ethyltoluene	+++++ 1.3398	0.9696 1.2187	1.3059 1.1051	1.1083	1.2661	Ave		1.1877				11.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.1835	1.0322 1.0834	1.2660 0.9753	1.0696	1.1426	Ave		1.1075				8.8		30.0			
1,3,5-Trimethylbenzene	+++++ 1.0996	0.9443 1.0471	1.0914 1.1470	0.9230	1.0237	Ave		1.0394				7.9		30.0			
Alpha Methyl Styrene	+++++ 0.5488	0.3279 0.5233	0.4387 0.6107	0.4038	0.4959	Ave		0.4784				19.9		30.0			
tert-Butylbenzene	+++++ 1.0107	0.8698 0.9501	1.0016 1.0544	0.8396	0.9357	Ave		0.9517				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 1.1025	0.8020 1.0423	1.0897 1.1430	0.9221	1.0371	Ave		1.0198				11.6		30.0			
sec-Butylbenzene	+++++ 1.5802	1.2838 1.4859	1.5391 1.5871	1.3269	1.4881	Ave		1.4702				8.2		30.0			
4-Isopropyltoluene	+++++ 1.3232	0.8434 1.2166	1.2233 1.2141	1.0530	1.2307	Ave		1.1578				13.8		30.0			
1,3-Dichlorobenzene	+++++ 0.7776	0.5403 0.7112	0.7633 0.7343	0.6499	0.7237	Ave		0.7000				11.6		30.0			
1,4-Dichlorobenzene	+++++ 0.7548	0.5300 0.6980	0.6925 0.7932	0.6326	0.7000	Ave		0.6859				12.5		30.0			
Benzyl chloride	+++++ 0.9861	0.5808 0.9553	0.7813 1.0942	0.8077	0.8987	Ave		0.8720				19.1		30.0			
n-Butylbenzene	+++++ 1.2610	0.7477 1.1823	1.1228 1.2154	1.0447	1.2114	Ave		1.1122				15.8		30.0			
n-Undecane	+++++ 0.6811	+++++ 0.6298	+++++ 0.6299	0.5958	0.6888	Ave		0.6451				6.1		30.0			
1,2-Dichlorobenzene	+++++ 0.7075	0.5138 0.6586	0.7153 0.7489	0.5951	0.6581	Ave		0.6567				12.2		30.0			
n-Dodecane	+++++ 0.5180	+++++ 0.4692	+++++ 0.3000	0.4517	0.5089	Ave		0.4496				19.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4161	+++++ 0.3947	0.3525 0.4141	0.3136	0.4243	Ave		0.3859				11.4		30.0			
Hexachlorobutadiene	+++++ 0.3839	0.3450 0.3228	0.4573 0.2822	0.3434	0.3872	Ave		0.3603				15.5		30.0			
Naphthalene	+++++ 0.8529	+++++ 0.8928	0.6674 0.9752	0.6768	0.9141	Ave		0.8299				15.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3532	+++++ 0.3339	0.3284 0.3044	0.2949	0.3561	Ave		0.3285				7.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118437/3	200-25865-003.D
Level 2	IC 200-118437/4	200-25865-004.D
Level 3	IC 200-118437/5	200-25865-005.D
Level 4	IC 200-118437/6	200-25865-006.D
Level 5	ICIS 200-118437/7	200-25865-007.D
Level 6	IC 200-118437/8	200-25865-008.D
Level 7	IC 200-118437/9	200-25865-009.D
Level 8	IC 200-118437/10	200-25865-010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 485736	+++++ 634079	+++++ 1375464	155067	301682	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 2537382	+++++ 3236246	95583 6517429	834442	1592821	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 1295170	+++++ 1669576	47959 3527283	425105	820962	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 2107870	30176 2712560	80046 5595180	687697	1315264	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 637441	+++++ 829612	24736 1856164	201667	398317	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 912549	+++++ 1179120	34726 2614836	288355	564443	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	2267 743867	10668 972748	27277 2183742	232523	458585	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1404 488436	6498 636562	17376 1442813	151731	301287	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 805308	11124 1049729	30195 2370101	262530	504487	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 297117	+++++ 385646	10627 899777	90300	183939	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 549921	8174 709919	20264 1646219	175568	337800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 771536	10731 1015429	28605 2229376	247453	485429	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 2141561	35079 2720834	85649 5735545	731129	1376113	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 821027	+++++ 1086168	31084 2544832	254163	502773	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 275623	+++++ 507443	72743 1161682	117287	211947	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 347309	4069 471493	10819 1076420	94923	209305	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1490966	23141 1957104	54408 4250117	472572	924141	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97953	+++++ 156123	+++++ 343211	28847	63084	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 650864	10367 882441	23925 2001032	203936	399412	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 850669	+++++ 1131356	+++++ 2502433	237186	561448	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1849906	+++++ 2505093	63824 5768045	569299	1132080	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 793242	+++++ 1049674	+++++ 2317562	238042	517856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 632519	9018 850120	22295 1818061	200182	399014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 303348	+++++ 417455	+++++ 961591	83367	183431	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 717238	+++++ 950283	28561 2170542	226324	444900	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1182873	+++++ 1596824	+++++ 3477214	327238	736369	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1764642	21891 2412825	56818 5238067	474114	1071801	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 972976	13318 1308762	34596 2906789	304735	603732	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 330649	+++++ 471372	8975 1061941	85916	198432	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 798744	10990 1118370	26618 2476428	238420	482325	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3946 1301841	17746 1828336	45080 3958532	399271	793393	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1285628	+++++ 1830177	+++++ 3908830	340848	781367	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 821448	10382 1163152	26864 2523862	242723	494616	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 279423	+++++ 399456	10188 849801	68870	170983	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 38002	+++++ 55187	+++++ 117826	10061	23437	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 597977	+++++ 850535	+++++ 1813421	161656	369128	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1923795	42605 2699248	82997 5802258	596277	1175700	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 923765	11258 1317704	29741 2891611	268423	550181	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 2036281	26821 2833903	71662 6088268	619329	1242800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	5473 2214595	23516 3021593	62790 6515861	663670	1277509	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3472837	45128 4952858	110171 10605655	1025835	2076697	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2328361	33190 3437673	76995 7589713	691585	1418093	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1436697	18991 2045991	47129 4436346	443006	898368	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1327680	18694 1830778	45586 3841812	406303	819399	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 380802	+++++ 539700	+++++ 1075410	97869	240384	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	5320 1343911	16512 1915360	43582 4211310	379810	781145	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 973727	11985 1390193	29885 2820471	298718	597131	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 762141	+++++ 1107212	19359 2307272	171596	448627	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 450067	+++++ 633883	+++++ 1232930	115779	286161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1070357	12731 1504529	32805 3343097	317211	625513	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 2395818	25360 3390738	71070 7140857	673010	1407383	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1561511	16531 2263947	41955 4589936	448649	935265	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1763603	+++++ 2384456	57387 4523462	404788	1084230	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1802263	21261 2619034	52124 5440846	482334	1047759	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1967003	27213 2652118	67112 4980407	625101	1245075	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1669265	19915 2395344	49205 4848557	445079	986245	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 1025742	12032 1485056	30441 2972199	287141	609878	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	4739 1576552	19035 2186991	50071 4736222	442034	904846	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1704960	+++++ 2298015	53531 4393190	350014	1062999	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2350094	19595 3374215	55818 6966923	591192	1371600	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1902714	19566 2751857	51045 5809018	525886	1103867	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2455367	27671 3560069	72525 7548606	683812	1421880	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3878048	43228 5640602	108236 11652545	998300	2276642	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1803303	21232 2517099	51886 4922114	521865	1097337	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 3067802	31804 4464418	82121 9208657	765704	1773055	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1551278	15991 2252837	41697 4787149	389320	900541	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2259447	17952 3333540	48889 7374013	543310	1299703	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1989668	12031 2656781	40389 5142366	375873	1159218	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 4258736	44631 6153935	113823 12823001	1122353	2483482	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2490998	25959 3609281	71089 7149860	653304	1464317	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 5242741	50082 7608552	138837 15395454	1329066	3071625	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1940200	+++++ 2792124	58058 5559689	511071	1163651	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2097643	+++++ 2916192	63598 5078952	611234	1315922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 4311432	36028 6000438	108791 10348490	1034103	2514581	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3808164	38355 5334172	105467 9133109	997986	2269261	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3538440	35090 5155153	90921 10740213	861183	2033158	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1765871	12186 2576471	36544 5719001	376719	984829	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3252140	32319 4677981	83440 9873786	783360	1858495	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3547540	29801 5131752	90780 10703136	860317	2059742	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 5084892	47704 7315741	128220 14861792	1238042	2955540	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 4257701	31339 5989885	101915 11369283	982515	2444373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2502131	20077 3501582	63593 6875634	606360	1437414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2428810	19693 3436567	57688 7427193	590279	1390317	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 3173188	21583 4703192	65085 10245858	753639	1784857	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4057773	27782 5821208	93541 11381354	974709	2405898	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2191737	+++++ 3100833	+++++ 5898644	555929	1367963	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2276568	19092 3242469	59590 7012578	555224	1307072	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1666896	+++++ 2310101	+++++ 2809617	421484	1010732	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1338902	+++++ 1943333	29369 3877487	292577	842782	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1235276	12820 1589522	38100 2642388	320373	768938	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2744401	+++++ 4395873	55601 9131612	631516	1815566	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1136594	+++++ 1644037	27358 2850039	275118	707259	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117699/3	25526-03.d
Level 2	IC 200-117699/4	25526-04.d
Level 3	IC 200-117699/5	25526-05.d
Level 4	IC 200-117699/6	25526-06.d
Level 5	ICIS 200-117699/7	25526-07.d
Level 6	IC 200-117699/8	25526-08.d
Level 7	IC 200-117699/9	25526-09.d
Level 8	IC 200-117699/10	25526-10.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9248	+++++ 0.8281	+++++ 0.8262	1.0155	0.9720	Ave		0.9133				9.3		30.0			
Dichlorodifluoromethane	+++++ 3.6998	+++++ 3.3692	4.4638 3.4086	3.8732	3.7752	Ave		3.7650				10.5		30.0			
Freon 22	+++++ 2.0067	+++++ 1.8225	2.5393 1.8140	2.1744	2.0703	Ave		2.0712				13.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.7863	4.2180 3.4827	4.6289 3.5279	3.9610	3.8545	Ave		3.9227				10.2		30.0			
Chloromethane	+++++ 1.1582	+++++ 1.0506	1.5624 1.0336	1.2839	1.2124	Ave		1.2168				16.0		30.0			
n-Butane	+++++ 2.2994	+++++ 2.0359	2.8872 2.0181	2.4905	2.3869	Ave		2.3530				13.7		30.0			
Vinyl chloride	2.2033 1.7620	2.0170 1.5840	2.0766 1.5594	1.8392	1.7845	Ave		1.8532				12.4		30.0			
1,3-Butadiene	1.6968 1.4229	1.5146 1.2678	1.6882 1.2530	1.4794	1.4697	Ave		1.4740				11.2		30.0			
Bromomethane	+++++ 1.4808	1.6824 1.3840	1.7867 1.4182	1.5236	1.4566	Ave		1.5332				9.6		30.0			
Chloroethane	+++++ 0.8846	+++++ 0.8165	1.0882 0.8214	0.9209	0.8878	Ave		0.9032				11.0		30.0			
Isopentane	+++++ 1.7699	2.1711 1.5904	2.1753 1.5638	1.9010	1.8191	Ave		1.8558				13.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.5722	1.5151 1.4896	1.7251 1.5532	1.5738	1.5052	Ave		1.5620				5.1		30.0			
Trichlorofluoromethane	+++++ 3.9199	4.4598 3.6829	4.5398 3.7854	4.0169	3.8060	Ave		4.0301				8.4		30.0			
n-Pentane	+++++ 2.8430	+++++ 2.5383	3.4545 2.4955	3.0694	2.9355	Ave		2.8894				12.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.7527	+++++ 0.6409	0.9692 0.5124	0.8739	0.7872	Ave		0.7560				21.6		30.0			
Ethyl ether	+++++ 1.2025	1.1806 1.1067	1.3450 1.1109	1.2349	1.2035	Ave		1.1977				6.8		30.0			
Acrolein	+++++ 0.4773	+++++ 0.4977	+++++ 0.4913	0.5525	0.5450	Ave		0.5128				6.6		30.0			
Freon TF	+++++ 3.2341	3.7475 3.0583	3.7917 3.2085	3.2916	3.1714	Ave		3.3576				8.7		30.0			
1,1-Dichloroethene	+++++ 1.5936	1.7377 1.4993	1.7752 1.5568	1.6157	1.5512	Ave		1.6185				6.3		30.0			
Acetone	+++++ 2.6172	+++++ 2.3197	+++++ 2.1975	2.9018	2.7689	Ave		2.5610				11.6		30.0			
Isopropyl alcohol	+++++ 2.9948	+++++ 2.6626	+++++ 2.5784	3.4747	2.8922	Ave		2.9205				12.1		30.0			
Carbon disulfide	+++++ 4.5731	+++++ 4.2524	5.3443 4.2326	4.7374	4.6312	Ave		4.6285				8.8		30.0			
3-Chloropropene	+++++ 2.0713	2.2980 1.8347	2.3883 1.6850	2.3346	2.1762	Ave		2.1126				12.6		30.0			
Acetonitrile	+++++ 1.2679	+++++ 1.1265	+++++ 1.0953	1.4515	1.3567	Ave		1.2596				12.0		30.0			
Methylene Chloride	+++++ 1.9610	+++++ 1.7366	2.7678 1.7093	2.2015	2.0373	Ave		2.0689				18.8		30.0			
tert-Butyl alcohol	+++++ 3.8037	+++++ 3.4859	+++++ 3.4387	4.0347	3.5760	Ave		3.6678				6.8		30.0			
Methyl tert-butyl ether	+++++ 5.0118	4.8854 4.6743	5.3498 4.6671	5.0242	4.9371	Ave		4.9357				4.7		30.0			
trans-1,2-Dichloroethene	+++++ 2.5269	2.6326 2.3102	2.9295 2.3290	2.6296	2.5141	Ave		2.5531				8.2		30.0			
Acrylonitrile	+++++ 1.2785	+++++ 1.1472	1.4377 1.1503	1.3394	1.2786	Ave		1.2720				8.8		30.0			
n-Hexane	+++++ 2.8413	3.0062 2.5817	3.1520 2.5740	3.0036	2.8963	Ave		2.8650				7.6		30.0			
1,1-Dichloroethane	4.2711 3.2862	3.7720 2.9996	4.0230 2.9960	3.5293	3.3316	Ave		3.5261				13.2		30.0			
Vinyl acetate	+++++ 4.4521	+++++ 4.0509	+++++ 4.0274	4.5706	4.4902	Ave		4.3183				6.0		30.0			
cis-1,2-Dichloroethene	+++++ 1.8716	1.8745 1.7658	2.0582 1.8460	1.8268	1.7998	Ave		1.8633				5.1		30.0			
Methyl Ethyl Ketone	+++++ 0.9819	+++++ 0.9134	1.1636 0.9521	0.9695	0.9585	Ave		0.9898				8.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1500	+++++ 0.1435	+++++ 0.1515	0.1428	0.1458	Ave		0.1467				2.6		30.0			
Tetrahydrofuran	+++++ 0.4430	+++++ 0.4003	+++++ 0.4151	0.4832	0.4525	Ave		0.4388				7.4		30.0			
Chloroform	+++++ 3.6098	3.9096 3.3324	4.1438 3.3816	3.7093	3.5653	Ave		3.6645				7.8		30.0			
Cyclohexane	+++++ 0.5149	0.4632 0.4918	0.5265 0.5495	0.4975	0.4891	Ave		0.5046				5.6		30.0			
1,1,1-Trichloroethane	+++++ 0.7219	0.7335 0.6959	0.7817 0.7820	0.7078	0.6860	Ave		0.7298				5.3		30.0			
Carbon tetrachloride	0.6654 0.7052	0.6684 0.6843	0.7178 0.7620	0.6830	0.6671	Ave		0.6942				4.8		30.0			
2,2,4-Trimethylpentane	+++++ 1.9538	1.8784 1.8022	2.0800 1.8764	2.0094	1.9307	Ave		1.9330				4.8		30.0			
Benzene	+++++ 1.1661	1.2550 1.0928	1.3442 1.1614	1.1807	1.1343	Ave		1.1906				7.0		30.0			
1,2-Dichloroethane	+++++ 0.4562	0.4692 0.4301	0.5157 0.4662	0.4686	0.4455	Ave		0.4645				5.8		30.0			
n-Heptane	+++++ 0.7112	0.7634 0.6512	0.8110 0.6887	0.7600	0.7164	Ave		0.7288				7.3		30.0			
n-Butanol	+++++ 0.2434	+++++ 0.2264	+++++ 0.2385	0.2486	0.2299	Ave		0.2374				3.9		30.0			
Trichloroethene	0.5175 0.4916	0.5259 0.4751	0.5351 0.5292	0.4727	0.4713	Ave		0.5023				5.5		30.0			
1,2-Dichloropropane	+++++ 0.4597	0.4775 0.4304	0.5157 0.4563	0.4769	0.4567	Ave		0.4676				5.7		30.0			
Methyl methacrylate	+++++ 0.4421	+++++ 0.4145	0.4261 0.4505	0.4190	0.4233	Ave		0.4293				3.3		30.0			
1,4-Dioxane	+++++ 0.2404	+++++ 0.2244	+++++ 0.2342	0.2489	0.2147	Ave		0.2325				5.8		30.0			
Dibromomethane	+++++ 0.4386	0.3928 0.4339	0.4472 0.5157	0.4180	0.3993	Ave		0.4351				9.4		30.0			
Bromodichloromethane	+++++ 0.8389	0.8099 0.7942	0.8834 0.8603	0.8244	0.8098	Ave		0.8316				3.8		30.0			
cis-1,3-Dichloropropene	+++++ 0.6372	0.5757 0.6070	0.6257 0.6569	0.6132	0.6102	Ave		0.6180				4.1		30.0			
methyl isobutyl ketone	+++++ 0.9489	+++++ 0.8675	1.0122 0.9033	0.9580	0.9559	Ave		0.9410				5.3		30.0			
n-Octane	+++++ 1.0343	0.9451 0.9540	1.0732 1.0191	1.0949	1.0360	Ave		1.0224				5.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.9126	0.9250 0.8855	0.9755 1.0000	0.9019	0.8467	Ave		0.9210				5.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.6275	0.5530 0.5980	0.5977 0.6533	0.5976	0.5999	Ave		0.6039				5.1		30.0			
1,1,2-Trichloroethane	+++++ 0.4642	0.4849 0.4430	0.5078 0.4850	0.4737	0.4392	Ave		0.4711				5.2		30.0			
Tetrachloroethene	0.7045 0.6704	0.6858 0.6750	0.7051 0.7861	0.6380	0.6224	Ave		0.6859				7.3		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.9447	+++++ 0.8773	1.1355 0.9306	0.8974	0.9283	Ave		0.9523				9.8		30.0			
Dibromochloromethane	+++++ 0.8751	0.7817 0.8627	0.8718 0.9507	0.7929	0.8102	Ave		0.8493				7.0		30.0			
1,2-Dibromoethane	+++++ 0.7913	0.7113 0.7690	0.7648 0.8623	0.7539	0.7278	Ave		0.7686				6.4		30.0			
Chlorobenzene	+++++ 1.1268	1.1208 1.0958	1.2328 1.2051	1.0972	1.0478	Ave		1.1323				5.7		30.0			
Ethylbenzene	+++++ 1.9657	1.9181 1.8821	2.0593 1.9925	1.9599	1.8554	Ave		1.9476				3.5		30.0			
n-Nonane	+++++ 1.0176	0.9178 0.9581	1.0834 1.0499	1.0634	0.9723	Ave		1.0089				6.1		30.0			
m,p-Xylene	+++++ 0.7821	0.6584 0.7643	0.7547 0.8542	0.7533	0.7189	Ave		0.7551				7.9		30.0			
Xylene, o-	+++++ 0.7583	0.6214 0.7391	0.7131 0.8269	0.7284	0.7048	Ave		0.7274				8.5		30.0			
Styrene	+++++ 1.1984	0.8400 1.1625	1.0660 1.2983	1.1405	1.1079	Ave		1.1162				12.7		30.0			
Bromoform	+++++ 0.8587	0.6225 0.8422	0.7397 0.9183	0.6465	0.7709	Ave		0.7713				14.3		30.0			
Cumene	+++++ 2.2020	1.8197 2.1019	2.1208 2.1955	2.2178	2.0769	Ave		2.1049				6.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 1.2174	1.1742 1.1599	1.3363 1.2506	1.2601	1.1554	Ave		1.2220				5.4		30.0			
n-Propylbenzene	+++++ 2.7570	2.3872 2.6156	2.7634 2.6506	2.8081	2.6351	Ave		2.6596				5.3		30.0			
1,2,3-Trichloropropane	+++++ 0.9170	+++++ 0.8724	0.9871 0.9852	0.9357	0.8651	Ave		0.9271				5.7		30.0			
n-Decane	+++++ 1.3308	+++++ 1.2512	1.3285 1.3673	1.4066	1.2953	Ave		1.3300				4.1		30.0			
4-Ethyltoluene	+++++ 2.2526	1.7885 2.1748	2.1526 2.3186	2.1890	2.1076	Ave		2.1405				7.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.9144	1.6422 1.8430	1.9124 2.0431	1.8973	1.7967	Ave		1.8642				6.7		30.0			
1,3,5-Trimethylbenzene	+++++ 1.8556	1.5371 1.7789	1.7771 1.9087	1.8432	1.7474	Ave		1.7783				6.7		30.0			
Alpha Methyl Styrene	+++++ 0.9238	0.5907 0.9049	0.7330 1.0295	0.8338	0.8471	Ave		0.8375				16.9		30.0			
tert-Butylbenzene	+++++ 1.7585	1.4001 1.6801	1.6629 1.8131	1.7371	1.6473	Ave		1.6713				8.0		30.0			
1,2,4-Trimethylbenzene	+++++ 1.8763	1.3960 1.7826	1.7653 1.9080	1.8743	1.7697	Ave		1.7675				9.8		30.0			
sec-Butylbenzene	+++++ 2.7698	2.2299 2.5964	2.6383 2.5959	2.8334	2.6526	Ave		2.6166				7.4		30.0			
4-Isopropyltoluene	+++++ 2.2681	1.6434 2.1572	1.9977 2.2597	2.2477	2.1389	Ave		2.1018				10.6		30.0			
1,3-Dichlorobenzene	+++++ 1.2208	0.8384 1.1968	1.0731 1.3678	1.1491	1.1290	Ave		1.1393				14.2		30.0			
1,4-Dichlorobenzene	+++++ 1.1765	0.7418 1.1575	0.9625 1.3479	1.0837	1.0688	Ave		1.0770				17.6		30.0			
Benzyl chloride	+++++ 1.4483	0.8351 1.4070	1.0924 1.5954	1.3985	1.2520	Ave		1.2898				19.8		30.0			
n-Undecane	+++++ 1.5269	+++++ 1.4385	+++++ 1.5223	1.5905	1.4447	Ave		1.5046				4.2		30.0			
n-Butylbenzene	+++++ 2.3415	1.3980 2.2349	1.9619 2.2838	2.3792	2.2237	Ave		2.1176				16.3		30.0			
1,2-Dichlorobenzene	+++++ 1.1454	0.7784 1.1197	1.0340 1.2771	1.0915	1.0498	Ave		1.0708				14.2		30.0			
n-Dodecane	+++++ 1.1147	+++++ 1.0008	+++++ 1.1601	1.2049	0.9930	Ave		1.0947				8.7		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6384	+++++ 0.6457	0.3200 0.8523	0.5936	0.5600	Ave		0.6017				28.5		30.0			
Hexachlorobutadiene	+++++ 0.6901	0.5483 0.6611	0.6560 0.8717	0.6874	0.6176	Ave		0.6760				14.7		30.0			
Naphthalene	+++++ 1.2998	+++++ 1.3736	0.6325 1.7514	1.3001	1.1356	Ave		1.2488				29.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5287	+++++ 0.5385	0.3375 0.7490	0.5133	0.4521	Ave		0.5199				25.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117699/3	25526-03.d
Level 2	IC 200-117699/4	25526-04.d
Level 3	IC 200-117699/5	25526-05.d
Level 4	IC 200-117699/6	25526-06.d
Level 5	ICIS 200-117699/7	25526-07.d
Level 6	IC 200-117699/8	25526-08.d
Level 7	IC 200-117699/9	25526-09.d
Level 8	IC 200-117699/10	25526-10.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 350184	+++++ 473351	+++++ 1070431	100239	198554	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1401029	+++++ 1925776	42299 4415996	382318	771164	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 759878	+++++ 1041715	24062 2350133	214635	422908	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1433777	16314 1990632	43864 4570477	390984	787373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 438599	+++++ 600512	14805 1339036	126735	247658	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 870716	+++++ 1163663	27359 2614528	245834	487590	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1740 667217	7801 905410	19678 2020284	181545	364518	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1340 538807	5858 724657	15997 1623334	146032	300219	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 560726	6507 791088	16931 1837301	150391	297539	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 334982	+++++ 466703	10312 1064166	90905	181355	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 670207	8397 909022	20613 2026029	187646	371596	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 595343	5860 851421	16347 2012169	155345	307469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1484375	17249 2105105	43019 4904140	396504	777464	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 1076558	+++++ 1450857	32735 3233007	302980	599635	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 380841	+++++ 732785	91951 1659745	172627	241296	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 455369	4566 632588	12745 1439211	121897	245837	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 180757	+++++ 284494	+++++ 636560	54538	111333	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1224685	14494 1748105	35930 4156772	324913	647827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 603446	6721 856969	16822 2016903	159482	316865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 991072	+++++ 1325881	+++++ 2846975	286435	565617	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 1134066	+++++ 1521899	+++++ 3340441	342982	590803	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1731736	+++++ 2430594	50643 5483537	467626	946027	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 784358	8888 1048690	22632 2182939	230443	444544	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 480117	+++++ 643919	+++++ 1419050	143275	277140	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 742577	+++++ 992587	26228 2214409	217307	416158	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1440369	+++++ 1992489	+++++ 4455028	398259	730480	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1897853	18895 2671750	50695 6046355	495935	1008517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 956886	10182 1320504	27760 3017359	259564	513572	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 484135	+++++ 655746	13624 1490269	132210	261185	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1075924	11627 1475682	29868 3334729	296487	591630	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3373 1244413	14589 1714504	38122 3881497	348377	680552	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1685900	+++++ 2315456	+++++ 5217692	451164	917228	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 708713	7250 1009283	19504 2391614	180325	367656	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 371841	+++++ 522080	11026 1233525	95697	195787	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 56783	+++++ 82007	+++++ 196265	14099	29775	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 822834	+++++ 1100592	+++++ 2432571	240635	464671	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1366962	15121 1904768	39267 4380968	366144	728287	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 956449	9103 1352346	25550 3219983	247755	502298	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1340906	14416 1913551	37934 4582516	352471	704520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2660 1309865	13136 1881778	34837 4465532	340100	685108	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3629049	36918 4955592	100945 10995865	1000580	1982805	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2165925	24665 3005050	65236 6806050	587912	1164845	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 847386	9221 1182533	25029 2731651	233345	457534	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1320967	15003 1790690	39360 4035746	378449	735681	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 452178	+++++ 622513	+++++ 1397845	123769	236094	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2069 913124	10336 1306383	25969 3100927	235392	483976	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 853868	9384 1183455	25026 2673689	237467	468982	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 821276	+++++ 1139836	20681 2640178	208665	434702	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 446478	+++++ 617177	+++++ 1372649	123949	220467	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 814652	7719 1193160	21705 3021988	208167	410095	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1558195	15918 2183715	42874 5041488	410523	831676	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1183664	11314 1669075	30365 3849492	305362	626639	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1762593	+++++ 2385523	49123 5293444	477043	981706	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1921229	18575 2623379	52083 5972171	545203	1063948	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1597639	16158 2270158	42194 5445072	411750	837632	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1165472	10869 1644416	29006 3828599	297589	616063	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 812575	8470 1135638	21964 2641046	216264	434493	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2456 1173625	11979 1730511	30498 4280070	291292	615755	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1653732	+++++ 2249055	49110 5067322	409721	918379	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1531947	13655 2211637	37706 5176615	362018	801518	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1385240	12425 1971371	33077 4694992	344174	719979	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1972583	19577 2809351	53322 6561726	500922	1036563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3441030	33505 4825160	89066 10848983	894769	1835501	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1781359	16031 2456194	46860 5716746	485477	961881	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2738087	23002 3918810	65286 9302285	687876	1422370	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1327397	10855 1894943	30844 4502511	332547	697255	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2097958	14673 2980212	46105 7069037	520688	1096082	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1503303	10873 2159204	31991 5000258	295155	762669	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3854693	31785 5388585	91728 11954443	1012534	2054662	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2131135	20511 2973548	57795 6809473	575281	1143069	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4826348	41698 6705573	119522 14432269	1282043	2606889	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1605326	+++++ 2236576	42692 5364115	427195	855869	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2329622	+++++ 3207816	57460 7445061	642185	1281427	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3943306	31240 5575560	93105 12624779	999372	2085021	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3351333	28686 4724937	82714 11124660	866202	1777412	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3248335	26849 4560658	76861 10392634	841524	1728674	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1617109	10318 2319756	31703 5605561	380692	837988	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3078385	24456 4307328	71922 9872155	793052	1629613	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39198-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3284627	24384 4570151	76352 10389025	855716	1750762	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4848810	38950 6656484	114112 14134547	1293599	2624164	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3970488	28706 5530303	86404 12303850	1026206	2115991	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2137179	14645 3068300	46415 7447783	524609	1116901	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2059593	12957 2967556	41630 7339348	494766	1057321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2535385	14587 3607088	47246 8686603	638479	1238563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2672949	+++++ 3687884	+++++ 8288876	726152	1429236	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4098925	24420 5729480	84856 12435408	1086238	2199868	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2005026	13596 2870647	44724 6953949	498305	1038538	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1951368	+++++ 2565655	+++++ 6316762	550101	982327	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1117586	+++++ 1655444	13841 4640694	271003	554006	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1208054	9578 1694760	28373 4746439	313822	611005	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2275427	+++++ 3521407	27356 9536200	593571	1123446	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 925571	+++++ 1380513	14598 4078239	234363	447248	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118437/3	200-25865-003.D
Level 2	IC 200-118437/4	200-25865-004.D
Level 3	IC 200-118437/5	200-25865-005.D
Level 4	IC 200-118437/6	200-25865-006.D
Level 5	ICIS 200-118437/7	200-25865-007.D
Level 6	IC 200-118437/8	200-25865-008.D
Level 7	IC 200-118437/9	200-25865-009.D
Level 8	IC 200-118437/10	200-25865-010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.7120	+++++ 0.6230	+++++ 0.6498	0.7394	0.6968	Ave		0.6842				6.9		30.0			
Dichlorodifluoromethane	+++++ 3.7191	+++++ 3.1800	4.6046 3.0790	3.9787	3.6787	Ave		3.7067				15.0		30.0			
Freon 22	+++++ 1.8984	+++++ 1.6405	2.3104 1.6664	2.0270	1.8961	Ave		1.9064				13.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.0896	3.4667 2.6654	3.8561 2.6433	3.2790	3.0377	Ave		3.1483				13.7		30.0			
Chloromethane	+++++ 0.9343	+++++ 0.8152	1.1916 0.8769	0.9616	0.9199	Ave		0.9499				13.6		30.0			
n-Butane	+++++ 1.3376	+++++ 1.1586	1.6729 1.2353	1.3749	1.3036	Ave		1.3471				13.2		30.0			
Vinyl chloride	1.3089 1.0903	1.2256 0.9558	1.3140 1.0316	1.1087	1.0591	Ave		1.1368				11.6		30.0			
1,3-Butadiene	0.8106 0.7159	0.7465 0.6255	0.8371 0.6816	0.7235	0.6958	Ave		0.7296				9.4		30.0			
Bromomethane	+++++ 1.1804	1.2780 1.0315	1.4546 1.1197	1.2518	1.1651	Ave		1.2116				11.1		30.0			
Chloroethane	+++++ 0.4355	+++++ 0.3789	0.5119 0.4251	0.4306	0.4248	Ave		0.4345				9.9		30.0			
Isopentane	+++++ 0.8060	0.9391 0.6976	0.9762 0.7777	0.8371	0.7802	Ave		0.8306				11.7		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.1309	1.2328 0.9978	1.3780 1.0532	1.1799	1.1211	Ave		1.1562				10.8		30.0			
Trichlorofluoromethane	+++++ 3.1390	4.0300 2.6735	4.1261 2.7096	3.4861	3.1782	Ave		3.3346				17.4		30.0			
n-Pentane	+++++ 1.2034	+++++ 1.0673	1.4974 1.2022	1.2119	1.1612	Ave		1.2239				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.3023	+++++ 0.2493	0.3500 0.2195	0.2794	0.3262	Ave		0.2878				16.9		30.0			
Ethyl ether	+++++ 0.5091	0.4675 0.4633	0.5212 0.5085	0.4526	0.4834	Ave		0.4865				5.5		30.0			
Freon TF	+++++ 2.1854	2.6585 1.9231	2.6211 2.0079	2.2533	2.1344	Ave		2.2548				12.6		30.0			
Acrolein	+++++ 0.1436	+++++ 0.1534	+++++ 0.1621	0.1375	0.1457	Ave		0.1485				6.4		30.0			
1,1-Dichloroethene	+++++ 0.9540	1.1910 0.8671	1.1526 0.9453	0.9724	0.9225	Ave		1.0007				12.2		30.0			
Acetone	+++++ 1.2469	+++++ 1.1117	+++++ 1.1822	1.1309	1.2967	Ave		1.1937				6.5		30.0			
Carbon disulfide	+++++ 2.7115	+++++ 2.4615	3.0747 2.7250	2.7145	2.6146	Ave		2.7170				7.4		30.0			
Isopropyl alcohol	+++++ 1.1627	+++++ 1.0314	+++++ 1.0949	1.1350	1.1960	Ave		1.1240				5.7		30.0			
3-Chloropropene	+++++ 0.9271	1.0360 0.8353	1.0740 0.8589	0.9545	0.9215	Ave		0.9439				9.2		30.0			
Acetonitrile	+++++ 0.4446	+++++ 0.4102	+++++ 0.4543	0.3975	0.4236	Ave		0.4260				5.5		30.0			
Methylene Chloride	+++++ 1.0513	+++++ 0.9338	1.3759 1.0254	1.0791	1.0275	Ave		1.0822				14.0		30.0			
tert-Butyl alcohol	+++++ 1.7338	+++++ 1.5690	+++++ 1.6427	1.5603	1.7007	Ave		1.6413				4.7		30.0			
Methyl tert-butyl ether	+++++ 2.5865	2.5149 2.3709	2.7372 2.4746	2.2606	2.4754	Ave		2.4886				6.1		30.0			
trans-1,2-Dichloroethene	+++++ 1.4261	1.5300 1.2860	1.6666 1.3732	1.4530	1.3944	Ave		1.4471				8.5		30.0			
Acrylonitrile	+++++ 0.4846	+++++ 0.4632	0.4324 0.5017	0.4097	0.4583	Ave		0.4583				7.3		30.0			
n-Hexane	+++++ 1.1707	1.2626 1.0989	1.2823 1.1699	1.1368	1.1140	Ave		1.1765				6.0		30.0			
1,1-Dichloroethane	2.2783 1.9081	2.0387 1.7965	2.1717 1.8701	1.9038	1.8324	Ave		1.9750				8.7		30.0			
Vinyl acetate	+++++ 1.8844	+++++ 1.7983	+++++ 1.8466	1.6252	1.8046	Ave		1.7918				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.2040	1.1927 1.1429	1.2941 1.1923	1.1573	1.1423	Ave		1.1894				4.4		30.0			
Methyl Ethyl Ketone	+++++ 0.4096	+++++ 0.3925	0.4908 0.4015	0.3284	0.3949	Ave		0.4029				12.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0557	+++++ 0.0542	+++++ 0.0557	0.0480	0.0541	Ave		0.0535				6.0		30.0			
Tetrahydrofuran	+++++ 0.1750	+++++ 0.1547	+++++ 0.1681	0.1593	0.1729	Ave		0.1660				5.3		30.0			
Chloroform	+++++ 2.8198	4.8946 2.6523	3.9983 2.7411	2.8431	2.7154	Ave		3.2378				26.8		30.0			
Cyclohexane	+++++ 0.2704	0.2705 0.2397	0.3400 0.2680	0.2645	0.2577	Ave		0.2730				11.5		30.0			
1,1,1-Trichloroethane	+++++ 0.5961	0.6445 0.5155	0.8193 0.5643	0.6103	0.5821	Ave		0.6189				15.7		30.0			
Carbon tetrachloride	0.6690 0.6483	0.5651 0.5496	0.7179 0.6039	0.6540	0.5983	Ave		0.6258				9.0		30.0			
2,2,4-Trimethylpentane	+++++ 1.0166	1.0845 0.9010	1.2596 0.9830	1.0109	0.9726	Ave		1.0326				11.1		30.0			
Benzene	+++++ 0.6816	0.7976 0.6253	0.8803 0.7035	0.6815	0.6642	Ave		0.7191				12.3		30.0			
1,2-Dichloroethane	+++++ 0.4206	0.4564 0.3722	0.5388 0.4112	0.4366	0.4207	Ave		0.4366				11.9		30.0			
n-Heptane	+++++ 0.3886	0.4492 0.3330	0.5212 0.3561	0.4004	0.3838	Ave		0.4046				15.6		30.0			
n-Butanol	+++++ 0.1115	+++++ 0.0982	+++++ 0.0997	0.0964	0.1126	Ave		0.1037				7.4		30.0			
Trichloroethene	0.6503 0.3934	0.3968 0.3484	0.4983 0.3903	0.3743	0.3658	Ave		0.4272				23.6		30.0			
1,2-Dichloropropane	+++++ 0.2850	0.2880 0.2529	0.3417 0.2614	0.2944	0.2797	Ave		0.2862				10.0		30.0			
Methyl methacrylate	+++++ 0.2231	+++++ 0.2014	0.2213 0.2139	0.1691	0.2101	Ave		0.2065				9.7		30.0			
1,4-Dioxane	+++++ 0.1317	+++++ 0.1153	+++++ 0.1143	0.1141	0.1340	Ave		0.1219				8.3		30.0			
Dibromomethane	+++++ 0.3133	0.3059 0.2737	0.3751 0.3099	0.3126	0.2930	Ave		0.3119				10.0		30.0			
Bromodichloromethane	+++++ 0.7013	0.6094 0.6168	0.8125 0.6619	0.6632	0.6591	Ave		0.6749				10.1		30.0			
cis-1,3-Dichloropropene	+++++ 0.4571	0.3973 0.4118	0.4797 0.4254	0.4421	0.4380	Ave		0.4359				6.3		30.0			
methyl isobutyl ketone	+++++ 0.5162	+++++ 0.4337	0.6561 0.4193	0.3989	0.5078	Ave		0.4887				19.4		30.0			
Toluene	+++++ 0.5601	0.5722 0.5319	0.6257 0.5810	0.5170	0.5275	Ave		0.5593				6.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.5758	0.6540 0.4824	0.7673 0.4616	0.6160	0.5831	Ave		0.5915				17.5		30.0			
trans-1,3-Dichloropropene	+++++ 0.4886	0.4786 0.4357	0.5626 0.4494	0.4386	0.4619	Ave		0.4736				9.3		30.0			
1,1,2-Trichloroethane	+++++ 0.3188	0.3238 0.3016	0.3654 0.3174	0.3077	0.3071	Ave		0.3203				6.7		30.0			
Tetrachloroethene	0.6304 0.4899	0.5123 0.4442	0.6010 0.5058	0.4738	0.4556	Ave		0.5141				13.1		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5298	+++++ 0.4667	0.6426 0.4692	0.3751	0.5352	Ave		0.5031				17.8		30.0			
Dibromochloromethane	+++++ 0.7303	0.5273 0.6853	0.6700 0.7440	0.6336	0.6906	Ave		0.6687				10.8		30.0			
1,2-Dibromoethane	+++++ 0.5913	0.5266 0.5589	0.6127 0.6203	0.5636	0.5558	Ave		0.5756				5.9		30.0			
Chlorobenzene	+++++ 0.7630	0.7447 0.7231	0.8706 0.8061	0.7329	0.7159	Ave		0.7652				7.2		30.0			
Ethylbenzene	+++++ 1.2052	1.1633 1.1457	1.2992 1.2444	1.0700	1.1463	Ave		1.1820				6.3		30.0			
n-Nonane	+++++ 0.5604	0.5714 0.5112	0.6228 0.5256	0.5593	0.5525	Ave		0.5576				6.4		30.0			
m,p-Xylene	+++++ 0.4767	0.4280 0.4534	0.4929 0.4917	0.4103	0.4464	Ave		0.4570				6.9		30.0			
Xylene, o-	+++++ 0.4821	0.4303 0.4576	0.5005 0.5112	0.4173	0.4534	Ave		0.4646				7.5		30.0			
Styrene	+++++ 0.7022	0.4831 0.6771	0.5868 0.7875	0.5823	0.6544	Ave		0.6391				15.4		30.0			
Bromoform	+++++ 0.6183	0.3238 0.5396	0.4848 0.5492	0.4029	0.5837	Ave		0.5003				20.9		30.0			
Cumene	+++++ 1.3235	1.2011 1.2499	1.3663 1.3694	1.2029	1.2504	Ave		1.2805				5.6		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7741	0.6986 0.7331	0.8533 0.7635	0.7002	0.7373	Ave		0.7514				7.1		30.0			
n-Propylbenzene	+++++ 1.6293	1.3478 1.5454	1.6665 1.6441	1.4245	1.5466	Ave		1.5434				7.7		30.0			
1,2,3-Trichloropropane	+++++ 0.6029	+++++ 0.5671	0.6969 0.5937	0.5478	0.5859	Ave		0.5991				8.7		30.0			
n-Decane	+++++ 0.6519	+++++ 0.5923	0.7634 0.5424	0.6551	0.6626	Ave		0.6446				11.6		30.0			
4-Ethyltoluene	+++++ 1.3398	0.9696 1.2187	1.3059 1.1051	1.1083	1.2661	Ave		1.1877				11.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.1835	1.0322 1.0834	1.2660 0.9753	1.0696	1.1426	Ave		1.1075				8.8		30.0			
1,3,5-Trimethylbenzene	+++++ 1.0996	0.9443 1.0471	1.0914 1.1470	0.9230	1.0237	Ave		1.0394				7.9		30.0			
Alpha Methyl Styrene	+++++ 0.5488	0.3279 0.5233	0.4387 0.6107	0.4038	0.4959	Ave		0.4784				19.9		30.0			
tert-Butylbenzene	+++++ 1.0107	0.8698 0.9501	1.0016 1.0544	0.8396	0.9357	Ave		0.9517				8.1		30.0			
1,2,4-Trimethylbenzene	+++++ 1.1025	0.8020 1.0423	1.0897 1.1430	0.9221	1.0371	Ave		1.0198				11.6		30.0			
sec-Butylbenzene	+++++ 1.5802	1.2838 1.4859	1.5391 1.5871	1.3269	1.4881	Ave		1.4702				8.2		30.0			
4-Isopropyltoluene	+++++ 1.3232	0.8434 1.2166	1.2233 1.2141	1.0530	1.2307	Ave		1.1578				13.8		30.0			
1,3-Dichlorobenzene	+++++ 0.7776	0.5403 0.7112	0.7633 0.7343	0.6499	0.7237	Ave		0.7000				11.6		30.0			
1,4-Dichlorobenzene	+++++ 0.7548	0.5300 0.6980	0.6925 0.7932	0.6326	0.7000	Ave		0.6859				12.5		30.0			
Benzyl chloride	+++++ 0.9861	0.5808 0.9553	0.7813 1.0942	0.8077	0.8987	Ave		0.8720				19.1		30.0			
n-Butylbenzene	+++++ 1.2610	0.7477 1.1823	1.1228 1.2154	1.0447	1.2114	Ave		1.1122				15.8		30.0			
n-Undecane	+++++ 0.6811	+++++ 0.6298	+++++ 0.6299	0.5958	0.6888	Ave		0.6451				6.1		30.0			
1,2-Dichlorobenzene	+++++ 0.7075	0.5138 0.6586	0.7153 0.7489	0.5951	0.6581	Ave		0.6567				12.2		30.0			
n-Dodecane	+++++ 0.5180	+++++ 0.4692	+++++ 0.3000	0.4517	0.5089	Ave		0.4496				19.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4161	+++++ 0.3947	0.3525 0.4141	0.3136	0.4243	Ave		0.3859				11.4		30.0			
Hexachlorobutadiene	+++++ 0.3839	0.3450 0.3228	0.4573 0.2822	0.3434	0.3872	Ave		0.3603				15.5		30.0			
Naphthalene	+++++ 0.8529	+++++ 0.8928	0.6674 0.9752	0.6768	0.9141	Ave		0.8299				15.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3532	+++++ 0.3339	0.3284 0.3044	0.2949	0.3561	Ave		0.3285				7.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118437/3	200-25865-003.D
Level 2	IC 200-118437/4	200-25865-004.D
Level 3	IC 200-118437/5	200-25865-005.D
Level 4	IC 200-118437/6	200-25865-006.D
Level 5	ICIS 200-118437/7	200-25865-007.D
Level 6	IC 200-118437/8	200-25865-008.D
Level 7	IC 200-118437/9	200-25865-009.D
Level 8	IC 200-118437/10	200-25865-010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 485736	+++++ 634079	+++++ 1375464	155067	301682	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 2537382	+++++ 3236246	95583 6517429	834442	1592821	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 1295170	+++++ 1669576	47959 3527283	425105	820962	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 2107870	30176 2712560	80046 5595180	687697	1315264	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 637441	+++++ 829612	24736 1856164	201667	398317	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 912549	+++++ 1179120	34726 2614836	288355	564443	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	2267 743867	10668 972748	27277 2183742	232523	458585	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1404 488436	6498 636562	17376 1442813	151731	301287	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 805308	11124 1049729	30195 2370101	262530	504487	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 297117	+++++ 385646	10627 899777	90300	183939	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 549921	8174 709919	20264 1646219	175568	337800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 771536	10731 1015429	28605 2229376	247453	485429	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 2141561	35079 2720834	85649 5735545	731129	1376113	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 821027	+++++ 1086168	31084 2544832	254163	502773	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 275623	+++++ 507443	72743 1161682	117287	211947	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 347309	4069 471493	10819 1076420	94923	209305	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1490966	23141 1957104	54408 4250117	472572	924141	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97953	+++++ 156123	+++++ 343211	28847	63084	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 650864	10367 882441	23925 2001032	203936	399412	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 850669	+++++ 1131356	+++++ 2502433	237186	561448	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1849906	+++++ 2505093	63824 5768045	569299	1132080	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 793242	+++++ 1049674	+++++ 2317562	238042	517856	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 632519	9018 850120	22295 1818061	200182	399014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 303348	+++++ 417455	+++++ 961591	83367	183431	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 717238	+++++ 950283	28561 2170542	226324	444900	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1182873	+++++ 1596824	+++++ 3477214	327238	736369	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1764642	21891 2412825	56818 5238067	474114	1071801	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 972976	13318 1308762	34596 2906789	304735	603732	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 330649	+++++ 471372	8975 1061941	85916	198432	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 798744	10990 1118370	26618 2476428	238420	482325	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3946 1301841	17746 1828336	45080 3958532	399271	793393	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1285628	+++++ 1830177	+++++ 3908830	340848	781367	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 821448	10382 1163152	26864 2523862	242723	494616	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 279423	+++++ 399456	10188 849801	68870	170983	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 38002	+++++ 55187	+++++ 117826	10061	23437	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 597977	+++++ 850535	+++++ 1813421	161656	369128	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1923795	42605 2699248	82997 5802258	596277	1175700	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 923765	11258 1317704	29741 2891611	268423	550181	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 2036281	26821 2833903	71662 6088268	619329	1242800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	5473 2214595	23516 3021593	62790 6515861	663670	1277509	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3472837	45128 4952858	110171 10605655	1025835	2076697	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2328361	33190 3437673	76995 7589713	691585	1418093	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1436697	18991 2045991	47129 4436346	443006	898368	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1327680	18694 1830778	45586 3841812	406303	819399	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 380802	+++++ 539700	+++++ 1075410	97869	240384	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	5320 1343911	16512 1915360	43582 4211310	379810	781145	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 973727	11985 1390193	29885 2820471	298718	597131	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 762141	+++++ 1107212	19359 2307272	171596	448627	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 450067	+++++ 633883	+++++ 1232930	115779	286161	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1070357	12731 1504529	32805 3343097	317211	625513	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 2395818	25360 3390738	71070 7140857	673010	1407383	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1561511	16531 2263947	41955 4589936	448649	935265	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1763603	+++++ 2384456	57387 4523462	404788	1084230	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1802263	21261 2619034	52124 5440846	482334	1047759	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1967003	27213 2652118	67112 4980407	625101	1245075	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1669265	19915 2395344	49205 4848557	445079	986245	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 1025742	12032 1485056	30441 2972199	287141	609878	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	4739 1576552	19035 2186991	50071 4736222	442034	904846	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1704960	+++++ 2298015	53531 4393190	350014	1062999	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2350094	19595 3374215	55818 6966923	591192	1371600	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1902714	19566 2751857	51045 5809018	525886	1103867	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2455367	27671 3560069	72525 7548606	683812	1421880	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3878048	43228 5640602	108236 11652545	998300	2276642	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1803303	21232 2517099	51886 4922114	521865	1097337	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 3067802	31804 4464418	82121 9208657	765704	1773055	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1551278	15991 2252837	41697 4787149	389320	900541	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2259447	17952 3333540	48889 7374013	543310	1299703	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1989668	12031 2656781	40389 5142366	375873	1159218	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 4258736	44631 6153935	113823 12823001	1122353	2483482	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2490998	25959 3609281	71089 7149860	653304	1464317	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 5242741	50082 7608552	138837 15395454	1329066	3071625	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1940200	+++++ 2792124	58058 5559689	511071	1163651	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2097643	+++++ 2916192	63598 5078952	611234	1315922	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 4311432	36028 6000438	108791 10348490	1034103	2514581	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3808164	38355 5334172	105467 9133109	997986	2269261	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3538440	35090 5155153	90921 10740213	861183	2033158	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1765871	12186 2576471	36544 5719001	376719	984829	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3252140	32319 4677981	83440 9873786	783360	1858495	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 118437

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2017 17:26 Calibration End Date: 07/11/2017 23:20 Calibration ID: 37510

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3547540	29801 5131752	90780 10703136	860317	2059742	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 5084892	47704 7315741	128220 14861792	1238042	2955540	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 4257701	31339 5989885	101915 11369283	982515	2444373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2502131	20077 3501582	63593 6875634	606360	1437414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2428810	19693 3436567	57688 7427193	590279	1390317	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 3173188	21583 4703192	65085 10245858	753639	1784857	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4057773	27782 5821208	93541 11381354	974709	2405898	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2191737	+++++ 3100833	+++++ 5898644	555929	1367963	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2276568	19092 3242469	59590 7012578	555224	1307072	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1666896	+++++ 2310101	+++++ 2809617	421484	1010732	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1338902	+++++ 1943333	29369 3877487	292577	842782	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1235276	12820 1589522	38100 2642388	320373	768938	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2744401	+++++ 4395873	55601 9131612	631516	1815566	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1136594	+++++ 1644037	27358 2850039	275118	707259	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117699/3	25526-03.d
Level 2	IC 200-117699/4	25526-04.d
Level 3	IC 200-117699/5	25526-05.d
Level 4	IC 200-117699/6	25526-06.d
Level 5	ICIS 200-117699/7	25526-07.d
Level 6	IC 200-117699/8	25526-08.d
Level 7	IC 200-117699/9	25526-09.d
Level 8	IC 200-117699/10	25526-10.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9248	+++++ 0.8281	+++++ 0.8262	1.0155	0.9720	Ave		0.9133				9.3		30.0			
Dichlorodifluoromethane	+++++ 3.6998	+++++ 3.3692	4.4638 3.4086	3.8732	3.7752	Ave		3.7650				10.5		30.0			
Freon 22	+++++ 2.0067	+++++ 1.8225	2.5393 1.8140	2.1744	2.0703	Ave		2.0712				13.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.7863	4.2180 3.4827	4.6289 3.5279	3.9610	3.8545	Ave		3.9227				10.2		30.0			
Chloromethane	+++++ 1.1582	+++++ 1.0506	1.5624 1.0336	1.2839	1.2124	Ave		1.2168				16.0		30.0			
n-Butane	+++++ 2.2994	+++++ 2.0359	2.8872 2.0181	2.4905	2.3869	Ave		2.3530				13.7		30.0			
Vinyl chloride	2.2033 1.7620	2.0170 1.5840	2.0766 1.5594	1.8392	1.7845	Ave		1.8532				12.4		30.0			
1,3-Butadiene	1.6968 1.4229	1.5146 1.2678	1.6882 1.2530	1.4794	1.4697	Ave		1.4740				11.2		30.0			
Bromomethane	+++++ 1.4808	1.6824 1.3840	1.7867 1.4182	1.5236	1.4566	Ave		1.5332				9.6		30.0			
Chloroethane	+++++ 0.8846	+++++ 0.8165	1.0882 0.8214	0.9209	0.8878	Ave		0.9032				11.0		30.0			
Isopentane	+++++ 1.7699	2.1711 1.5904	2.1753 1.5638	1.9010	1.8191	Ave		1.8558				13.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.5722	1.5151 1.4896	1.7251 1.5532	1.5738	1.5052	Ave		1.5620				5.1		30.0			
Trichlorofluoromethane	+++++ 3.9199	4.4598 3.6829	4.5398 3.7854	4.0169	3.8060	Ave		4.0301				8.4		30.0			
n-Pentane	+++++ 2.8430	+++++ 2.5383	3.4545 2.4955	3.0694	2.9355	Ave		2.8894				12.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.7527	+++++ 0.6409	0.9692 0.5124	0.8739	0.7872	Ave		0.7560				21.6		30.0			
Ethyl ether	+++++ 1.2025	1.1806 1.1067	1.3450 1.1109	1.2349	1.2035	Ave		1.1977				6.8		30.0			
Acrolein	+++++ 0.4773	+++++ 0.4977	+++++ 0.4913	0.5525	0.5450	Ave		0.5128				6.6		30.0			
Freon TF	+++++ 3.2341	3.7475 3.0583	3.7917 3.2085	3.2916	3.1714	Ave		3.3576				8.7		30.0			
1,1-Dichloroethene	+++++ 1.5936	1.7377 1.4993	1.7752 1.5568	1.6157	1.5512	Ave		1.6185				6.3		30.0			
Acetone	+++++ 2.6172	+++++ 2.3197	+++++ 2.1975	2.9018	2.7689	Ave		2.5610				11.6		30.0			
Isopropyl alcohol	+++++ 2.9948	+++++ 2.6626	+++++ 2.5784	3.4747	2.8922	Ave		2.9205				12.1		30.0			
Carbon disulfide	+++++ 4.5731	+++++ 4.2524	5.3443 4.2326	4.7374	4.6312	Ave		4.6285				8.8		30.0			
3-Chloropropene	+++++ 2.0713	2.2980 1.8347	2.3883 1.6850	2.3346	2.1762	Ave		2.1126				12.6		30.0			
Acetonitrile	+++++ 1.2679	+++++ 1.1265	+++++ 1.0953	1.4515	1.3567	Ave		1.2596				12.0		30.0			
Methylene Chloride	+++++ 1.9610	+++++ 1.7366	2.7678 1.7093	2.2015	2.0373	Ave		2.0689				18.8		30.0			
tert-Butyl alcohol	+++++ 3.8037	+++++ 3.4859	+++++ 3.4387	4.0347	3.5760	Ave		3.6678				6.8		30.0			
Methyl tert-butyl ether	+++++ 5.0118	4.8854 4.6743	5.3498 4.6671	5.0242	4.9371	Ave		4.9357				4.7		30.0			
trans-1,2-Dichloroethene	+++++ 2.5269	2.6326 2.3102	2.9295 2.3290	2.6296	2.5141	Ave		2.5531				8.2		30.0			
Acrylonitrile	+++++ 1.2785	+++++ 1.1472	1.4377 1.1503	1.3394	1.2786	Ave		1.2720				8.8		30.0			
n-Hexane	+++++ 2.8413	3.0062 2.5817	3.1520 2.5740	3.0036	2.8963	Ave		2.8650				7.6		30.0			
1,1-Dichloroethane	4.2711 3.2862	3.7720 2.9996	4.0230 2.9960	3.5293	3.3316	Ave		3.5261				13.2		30.0			
Vinyl acetate	+++++ 4.4521	+++++ 4.0509	+++++ 4.0274	4.5706	4.4902	Ave		4.3183				6.0		30.0			
cis-1,2-Dichloroethene	+++++ 1.8716	1.8745 1.7658	2.0582 1.8460	1.8268	1.7998	Ave		1.8633				5.1		30.0			
Methyl Ethyl Ketone	+++++ 0.9819	+++++ 0.9134	1.1636 0.9521	0.9695	0.9585	Ave		0.9898				8.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1500	+++++ 0.1435	+++++ 0.1515	0.1428	0.1458	Ave		0.1467				2.6		30.0			
Tetrahydrofuran	+++++ 0.4430	+++++ 0.4003	+++++ 0.4151	0.4832	0.4525	Ave		0.4388				7.4		30.0			
Chloroform	+++++ 3.6098	3.9096 3.3324	4.1438 3.3816	3.7093	3.5653	Ave		3.6645				7.8		30.0			
Cyclohexane	+++++ 0.5149	0.4632 0.4918	0.5265 0.5495	0.4975	0.4891	Ave		0.5046				5.6		30.0			
1,1,1-Trichloroethane	+++++ 0.7219	0.7335 0.6959	0.7817 0.7820	0.7078	0.6860	Ave		0.7298				5.3		30.0			
Carbon tetrachloride	0.6654 0.7052	0.6684 0.6843	0.7178 0.7620	0.6830	0.6671	Ave		0.6942				4.8		30.0			
2,2,4-Trimethylpentane	+++++ 1.9538	1.8784 1.8022	2.0800 1.8764	2.0094	1.9307	Ave		1.9330				4.8		30.0			
Benzene	+++++ 1.1661	1.2550 1.0928	1.3442 1.1614	1.1807	1.1343	Ave		1.1906				7.0		30.0			
1,2-Dichloroethane	+++++ 0.4562	0.4692 0.4301	0.5157 0.4662	0.4686	0.4455	Ave		0.4645				5.8		30.0			
n-Heptane	+++++ 0.7112	0.7634 0.6512	0.8110 0.6887	0.7600	0.7164	Ave		0.7288				7.3		30.0			
n-Butanol	+++++ 0.2434	+++++ 0.2264	+++++ 0.2385	0.2486	0.2299	Ave		0.2374				3.9		30.0			
Trichloroethene	0.5175 0.4916	0.5259 0.4751	0.5351 0.5292	0.4727	0.4713	Ave		0.5023				5.5		30.0			
1,2-Dichloropropane	+++++ 0.4597	0.4775 0.4304	0.5157 0.4563	0.4769	0.4567	Ave		0.4676				5.7		30.0			
Methyl methacrylate	+++++ 0.4421	+++++ 0.4145	0.4261 0.4505	0.4190	0.4233	Ave		0.4293				3.3		30.0			
1,4-Dioxane	+++++ 0.2404	+++++ 0.2244	+++++ 0.2342	0.2489	0.2147	Ave		0.2325				5.8		30.0			
Dibromomethane	+++++ 0.4386	0.3928 0.4339	0.4472 0.5157	0.4180	0.3993	Ave		0.4351				9.4		30.0			
Bromodichloromethane	+++++ 0.8389	0.8099 0.7942	0.8834 0.8603	0.8244	0.8098	Ave		0.8316				3.8		30.0			
cis-1,3-Dichloropropene	+++++ 0.6372	0.5757 0.6070	0.6257 0.6569	0.6132	0.6102	Ave		0.6180				4.1		30.0			
methyl isobutyl ketone	+++++ 0.9489	+++++ 0.8675	1.0122 0.9033	0.9580	0.9559	Ave		0.9410				5.3		30.0			
n-Octane	+++++ 1.0343	0.9451 0.9540	1.0732 1.0191	1.0949	1.0360	Ave		1.0224				5.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.9126	0.9250 0.8855	0.9755 1.0000	0.9019	0.8467	Ave		0.9210				5.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.6275	0.5530 0.5980	0.5977 0.6533	0.5976	0.5999	Ave		0.6039				5.1		30.0			
1,1,2-Trichloroethane	+++++ 0.4642	0.4849 0.4430	0.5078 0.4850	0.4737	0.4392	Ave		0.4711				5.2		30.0			
Tetrachloroethene	0.7045 0.6704	0.6858 0.6750	0.7051 0.7861	0.6380	0.6224	Ave		0.6859				7.3		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.9447	+++++ 0.8773	1.1355 0.9306	0.8974	0.9283	Ave		0.9523				9.8		30.0			
Dibromochloromethane	+++++ 0.8751	0.7817 0.8627	0.8718 0.9507	0.7929	0.8102	Ave		0.8493				7.0		30.0			
1,2-Dibromoethane	+++++ 0.7913	0.7113 0.7690	0.7648 0.8623	0.7539	0.7278	Ave		0.7686				6.4		30.0			
Chlorobenzene	+++++ 1.1268	1.1208 1.0958	1.2328 1.2051	1.0972	1.0478	Ave		1.1323				5.7		30.0			
Ethylbenzene	+++++ 1.9657	1.9181 1.8821	2.0593 1.9925	1.9599	1.8554	Ave		1.9476				3.5		30.0			
n-Nonane	+++++ 1.0176	0.9178 0.9581	1.0834 1.0499	1.0634	0.9723	Ave		1.0089				6.1		30.0			
m,p-Xylene	+++++ 0.7821	0.6584 0.7643	0.7547 0.8542	0.7533	0.7189	Ave		0.7551				7.9		30.0			
Xylene, o-	+++++ 0.7583	0.6214 0.7391	0.7131 0.8269	0.7284	0.7048	Ave		0.7274				8.5		30.0			
Styrene	+++++ 1.1984	0.8400 1.1625	1.0660 1.2983	1.1405	1.1079	Ave		1.1162				12.7		30.0			
Bromoform	+++++ 0.8587	0.6225 0.8422	0.7397 0.9183	0.6465	0.7709	Ave		0.7713				14.3		30.0			
Cumene	+++++ 2.2020	1.8197 2.1019	2.1208 2.1955	2.2178	2.0769	Ave		2.1049				6.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 1.2174	1.1742 1.1599	1.3363 1.2506	1.2601	1.1554	Ave		1.2220				5.4		30.0			
n-Propylbenzene	+++++ 2.7570	2.3872 2.6156	2.7634 2.6506	2.8081	2.6351	Ave		2.6596				5.3		30.0			
1,2,3-Trichloropropane	+++++ 0.9170	+++++ 0.8724	0.9871 0.9852	0.9357	0.8651	Ave		0.9271				5.7		30.0			
n-Decane	+++++ 1.3308	+++++ 1.2512	1.3285 1.3673	1.4066	1.2953	Ave		1.3300				4.1		30.0			
4-Ethyltoluene	+++++ 2.2526	1.7885 2.1748	2.1526 2.3186	2.1890	2.1076	Ave		2.1405				7.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.9144	1.6422 1.8430	1.9124 2.0431	1.8973	1.7967	Ave		1.8642				6.7		30.0			
1,3,5-Trimethylbenzene	+++++ 1.8556	1.5371 1.7789	1.7771 1.9087	1.8432	1.7474	Ave		1.7783				6.7		30.0			
Alpha Methyl Styrene	+++++ 0.9238	0.5907 0.9049	0.7330 1.0295	0.8338	0.8471	Ave		0.8375				16.9		30.0			
tert-Butylbenzene	+++++ 1.7585	1.4001 1.6801	1.6629 1.8131	1.7371	1.6473	Ave		1.6713				8.0		30.0			
1,2,4-Trimethylbenzene	+++++ 1.8763	1.3960 1.7826	1.7653 1.9080	1.8743	1.7697	Ave		1.7675				9.8		30.0			
sec-Butylbenzene	+++++ 2.7698	2.2299 2.5964	2.6383 2.5959	2.8334	2.6526	Ave		2.6166				7.4		30.0			
4-Isopropyltoluene	+++++ 2.2681	1.6434 2.1572	1.9977 2.2597	2.2477	2.1389	Ave		2.1018				10.6		30.0			
1,3-Dichlorobenzene	+++++ 1.2208	0.8384 1.1968	1.0731 1.3678	1.1491	1.1290	Ave		1.1393				14.2		30.0			
1,4-Dichlorobenzene	+++++ 1.1765	0.7418 1.1575	0.9625 1.3479	1.0837	1.0688	Ave		1.0770				17.6		30.0			
Benzyl chloride	+++++ 1.4483	0.8351 1.4070	1.0924 1.5954	1.3985	1.2520	Ave		1.2898				19.8		30.0			
n-Undecane	+++++ 1.5269	+++++ 1.4385	+++++ 1.5223	1.5905	1.4447	Ave		1.5046				4.2		30.0			
n-Butylbenzene	+++++ 2.3415	1.3980 2.2349	1.9619 2.2838	2.3792	2.2237	Ave		2.1176				16.3		30.0			
1,2-Dichlorobenzene	+++++ 1.1454	0.7784 1.1197	1.0340 1.2771	1.0915	1.0498	Ave		1.0708				14.2		30.0			
n-Dodecane	+++++ 1.1147	+++++ 1.0008	+++++ 1.1601	1.2049	0.9930	Ave		1.0947				8.7		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6384	+++++ 0.6457	0.3200 0.8523	0.5936	0.5600	Ave		0.6017				28.5		30.0			
Hexachlorobutadiene	+++++ 0.6901	0.5483 0.6611	0.6560 0.8717	0.6874	0.6176	Ave		0.6760				14.7		30.0			
Naphthalene	+++++ 1.2998	+++++ 1.3736	0.6325 1.7514	1.3001	1.1356	Ave		1.2488				29.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5287	+++++ 0.5385	0.3375 0.7490	0.5133	0.4521	Ave		0.5199				25.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117699/3	25526-03.d
Level 2	IC 200-117699/4	25526-04.d
Level 3	IC 200-117699/5	25526-05.d
Level 4	IC 200-117699/6	25526-06.d
Level 5	ICIS 200-117699/7	25526-07.d
Level 6	IC 200-117699/8	25526-08.d
Level 7	IC 200-117699/9	25526-09.d
Level 8	IC 200-117699/10	25526-10.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 350184	+++++ 473351	+++++ 1070431	100239	198554	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1401029	+++++ 1925776	42299 4415996	382318	771164	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 759878	+++++ 1041715	24062 2350133	214635	422908	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1433777	16314 1990632	43864 4570477	390984	787373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 438599	+++++ 600512	14805 1339036	126735	247658	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 870716	+++++ 1163663	27359 2614528	245834	487590	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1740 667217	7801 905410	19678 2020284	181545	364518	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1340 538807	5858 724657	15997 1623334	146032	300219	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 560726	6507 791088	16931 1837301	150391	297539	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 334982	+++++ 466703	10312 1064166	90905	181355	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 670207	8397 909022	20613 2026029	187646	371596	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 595343	5860 851421	16347 2012169	155345	307469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1484375	17249 2105105	43019 4904140	396504	777464	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 1076558	+++++ 1450857	32735 3233007	302980	599635	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 380841	+++++ 732785	91951 1659745	172627	241296	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 455369	4566 632588	12745 1439211	121897	245837	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 180757	+++++ 284494	+++++ 636560	54538	111333	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1224685	14494 1748105	35930 4156772	324913	647827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 603446	6721 856969	16822 2016903	159482	316865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 991072	+++++ 1325881	+++++ 2846975	286435	565617	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 1134066	+++++ 1521899	+++++ 3340441	342982	590803	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1731736	+++++ 2430594	50643 5483537	467626	946027	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 784358	8888 1048690	22632 2182939	230443	444544	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 480117	+++++ 643919	+++++ 1419050	143275	277140	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 742577	+++++ 992587	26228 2214409	217307	416158	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1440369	+++++ 1992489	+++++ 4455028	398259	730480	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1897853	18895 2671750	50695 6046355	495935	1008517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 956886	10182 1320504	27760 3017359	259564	513572	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 484135	+++++ 655746	13624 1490269	132210	261185	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1075924	11627 1475682	29868 3334729	296487	591630	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3373 1244413	14589 1714504	38122 3881497	348377	680552	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1685900	+++++ 2315456	+++++ 5217692	451164	917228	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 708713	7250 1009283	19504 2391614	180325	367656	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 371841	+++++ 522080	11026 1233525	95697	195787	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 56783	+++++ 82007	+++++ 196265	14099	29775	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 822834	+++++ 1100592	+++++ 2432571	240635	464671	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1366962	15121 1904768	39267 4380968	366144	728287	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 956449	9103 1352346	25550 3219983	247755	502298	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1340906	14416 1913551	37934 4582516	352471	704520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2660 1309865	13136 1881778	34837 4465532	340100	685108	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3629049	36918 4955592	100945 10995865	1000580	1982805	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2165925	24665 3005050	65236 6806050	587912	1164845	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 847386	9221 1182533	25029 2731651	233345	457534	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1320967	15003 1790690	39360 4035746	378449	735681	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 452178	+++++ 622513	+++++ 1397845	123769	236094	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2069 913124	10336 1306383	25969 3100927	235392	483976	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 853868	9384 1183455	25026 2673689	237467	468982	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 821276	+++++ 1139836	20681 2640178	208665	434702	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 446478	+++++ 617177	+++++ 1372649	123949	220467	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 814652	7719 1193160	21705 3021988	208167	410095	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1558195	15918 2183715	42874 5041488	410523	831676	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1183664	11314 1669075	30365 3849492	305362	626639	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1762593	+++++ 2385523	49123 5293444	477043	981706	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1921229	18575 2623379	52083 5972171	545203	1063948	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1597639	16158 2270158	42194 5445072	411750	837632	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1165472	10869 1644416	29006 3828599	297589	616063	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 812575	8470 1135638	21964 2641046	216264	434493	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2456 1173625	11979 1730511	30498 4280070	291292	615755	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1653732	+++++ 2249055	49110 5067322	409721	918379	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1531947	13655 2211637	37706 5176615	362018	801518	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1385240	12425 1971371	33077 4694992	344174	719979	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1972583	19577 2809351	53322 6561726	500922	1036563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3441030	33505 4825160	89066 10848983	894769	1835501	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1781359	16031 2456194	46860 5716746	485477	961881	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2738087	23002 3918810	65286 9302285	687876	1422370	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1327397	10855 1894943	30844 4502511	332547	697255	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2097958	14673 2980212	46105 7069037	520688	1096082	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1503303	10873 2159204	31991 5000258	295155	762669	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3854693	31785 5388585	91728 11954443	1012534	2054662	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2131135	20511 2973548	57795 6809473	575281	1143069	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4826348	41698 6705573	119522 14432269	1282043	2606889	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1605326	+++++ 2236576	42692 5364115	427195	855869	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2329622	+++++ 3207816	57460 7445061	642185	1281427	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3943306	31240 5575560	93105 12624779	999372	2085021	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3351333	28686 4724937	82714 11124660	866202	1777412	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3248335	26849 4560658	76861 10392634	841524	1728674	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1617109	10318 2319756	31703 5605561	380692	837988	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3078385	24456 4307328	71922 9872155	793052	1629613	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39232-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3284627	24384 4570151	76352 10389025	855716	1750762	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4848810	38950 6656484	114112 14134547	1293599	2624164	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3970488	28706 5530303	86404 12303850	1026206	2115991	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2137179	14645 3068300	46415 7447783	524609	1116901	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2059593	12957 2967556	41630 7339348	494766	1057321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2535385	14587 3607088	47246 8686603	638479	1238563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2672949	+++++ 3687884	+++++ 8288876	726152	1429236	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4098925	24420 5729480	84856 12435408	1086238	2199868	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2005026	13596 2870647	44724 6953949	498305	1038538	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1951368	+++++ 2565655	+++++ 6316762	550101	982327	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1117586	+++++ 1655444	13841 4640694	271003	554006	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1208054	9578 1694760	28373 4746439	313822	611005	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2275427	+++++ 3521407	27356 9536200	593571	1123446	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 925571	+++++ 1380513	14598 4078239	234363	447248	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118373/4	25833_04.D
Level 2	IC 200-118373/5	25833_05.D
Level 3	IC 200-118373/6	25833_06.D
Level 4	IC 200-118373/7	25833_07.D
Level 5	ICIS 200-118373/8	25833_08.D
Level 6	IC 200-118373/9	25833_09.D
Level 7	IC 200-118373/10	25833_10.D
Level 8	IC 200-118373/11	25833_11.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9459	+++++ 0.8575	+++++ 0.8067	1.0684	0.8722	Ave		0.9101				11.2		30.0			
Dichlorodifluoromethane	+++++ 2.8830	+++++ 2.7265	3.4131 2.6373	2.9175	2.5134	Ave		2.8485				11.1		30.0			
Freon 22	+++++ 1.9142	+++++ 1.7822	2.4702 1.7027	2.0571	1.7310	Ave		1.9429				14.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.8300	2.9766 2.6601	3.2779 2.5407	2.8270	2.4756	Ave		2.7983				9.8		30.0			
Chloromethane	+++++ 1.1323	+++++ 1.0352	1.4764 0.9936	1.1954	1.0149	Ave		1.1413				15.9		30.0			
n-Butane	+++++ 1.9020	+++++ 1.7264	2.4760 1.6118	2.0668	1.7249	Ave		1.9180				16.5		30.0			
Vinyl chloride	1.5947 1.2497	1.2740 1.1620	1.4448 1.1183	1.2538	1.0981	Ave		1.2744				13.3		30.0			
1,3-Butadiene	1.1549 0.9291	1.0236 0.8653	1.1075 0.8201	0.9503	0.8286	Ave		0.9599				13.1		30.0			
Bromomethane	+++++ 0.9928	1.0524 0.9415	1.1312 0.9303	0.9913	0.8634	Ave		0.9861				8.8		30.0			
Chloroethane	+++++ 0.5813	+++++ 0.5450	0.6817 0.5361	0.5953	0.5086	Ave		0.5747				10.6		30.0			
Isopentane	+++++ 1.2638	1.6664 1.1540	1.6958 1.0979	1.4019	1.1618	Ave		1.3488				18.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.0200	1.0699 0.9704	1.1561 0.9434	0.9834	0.8680	Ave		1.0016				9.2		30.0			
Trichlorofluoromethane	+++++ 2.6923	2.9994 2.5742	3.0538 2.5057	2.6445	2.3252	Ave		2.6850				9.7		30.0			
n-Pentane	+++++ 1.9288	+++++ 1.7538	2.5917 1.6210	2.1189	1.7394	Ave		1.9589				18.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.6080	+++++ 0.5164	0.8138 0.3781	0.6786	0.5717	Ave		0.5944				24.8		30.0			
Ethyl ether	+++++ 0.8103	0.8535 0.7660	0.9411 0.7387	0.8054	0.6965	Ave		0.8017				10.0		30.0			
Freon TF	+++++ 2.0767	2.3132 1.9976	2.3713 1.9607	2.0184	1.7560	Ave		2.0706				10.2		30.0			
Acrolein	+++++ 0.3024	+++++ 0.3331	+++++ 0.2997	0.3466	0.3279	Ave		0.3219				6.3		30.0			
1,1-Dichloroethene	+++++ 1.0097	1.0688 0.9758	1.1322 0.9670	0.9697	0.8540	Ave		0.9967				8.8		30.0			
Acetone	+++++ 1.8375	+++++ 1.6840	+++++ 1.5859	1.9762	1.6620	Ave		1.7491				8.9		30.0			
Carbon disulfide	+++++ 3.0323	+++++ 2.8960	3.5691 2.8321	3.0184	2.5957	Ave		2.9906				10.9		30.0			
Isopropyl alcohol	+++++ 2.1656	+++++ 1.9665	+++++ 1.8545	2.4433	1.9622	Ave		2.0784				11.2		30.0			
3-Chloropropene	+++++ 1.5229	1.7906 1.3857	1.8877 1.2078	1.7160	1.3979	Ave		1.5584				15.9		30.0			
Acetonitrile	+++++ 0.9573	+++++ 0.8690	+++++ 0.8271	1.0295	0.8756	Ave		0.9117				8.9		30.0			
Methylene Chloride	+++++ 1.3974	+++++ 1.2989	1.8128 1.2406	1.4923	1.2466	Ave		1.4148				15.4		30.0			
tert-Butyl alcohol	+++++ 2.6879	+++++ 2.5127	+++++ 2.4368	2.6842	2.3324	Ave		2.5308				6.1		30.0			
Methyl tert-butyl ether	+++++ 3.3717	3.4104 3.2075	3.7585 3.1220	3.2636	2.8712	Ave		3.2864				8.3		30.0			
trans-1,2-Dichloroethene	+++++ 1.8035	1.9194 1.6987	2.1049 1.6142	1.8320	1.5716	Ave		1.7921				10.3		30.0			
Acrylonitrile	+++++ 0.9278	+++++ 0.8705	1.1075 0.8423	0.9385	0.8119	Ave		0.9164				11.5		30.0			
n-Hexane	+++++ 1.8899	2.2031 1.7865	2.3398 1.7002	1.9417	1.6648	Ave		1.9323				13.2		30.0			
1,1-Dichloroethane	2.7507 2.3127	2.4441 2.1923	2.7056 2.1300	2.3451	2.0042	Ave		2.3606				11.2		30.0			
Vinyl acetate	+++++ 3.4291	+++++ 3.1738	+++++ 3.0028	3.5958	3.0597	Ave		3.2522				7.8		30.0			
cis-1,2-Dichloroethene	+++++ 1.2576	1.2759 1.2293	1.4627 1.2286	1.2094	1.0631	Ave		1.2467				9.5		30.0			
Methyl Ethyl Ketone	+++++ 0.6655	+++++ 0.6350	0.8716 0.6340	0.6223	0.5584	Ave		0.6645				16.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0964	+++++ 0.0939	+++++ 0.0955	0.0926	0.0804	Ave		0.0918				7.1		30.0			
Tetrahydrofuran	+++++ 0.3144	+++++ 0.2858	+++++ 0.2858	0.3318	0.2794	Ave		0.2994				7.6		30.0			
Chloroform	+++++ 2.6422	2.7409 2.5656	2.9962 2.5747	2.5296	2.2235	Ave		2.6104				8.9		30.0			
Cyclohexane	+++++ 0.3277	0.3307 0.3150	0.3591 0.3305	0.3144	0.2733	Ave		0.3215				8.1		30.0			
1,1,1-Trichloroethane	+++++ 0.4733	0.4657 0.4555	0.5150 0.4824	0.4450	0.3912	Ave		0.4612				8.3		30.0			
Carbon tetrachloride	0.4318 0.4788	0.4193 0.4630	0.4657 0.4948	0.4518	0.3879	Ave		0.4491				7.7		30.0			
2,2,4-Trimethylpentane	+++++ 1.4249	1.4900 1.3453	1.6129 1.3861	1.3964	1.2069	Ave		1.4089				8.9		30.0			
Benzene	+++++ 0.8039	0.8308 0.7726	0.9135 0.8098	0.7700	0.6707	Ave		0.7959				9.2		30.0			
1,2-Dichloroethane	+++++ 0.3334	0.3416 0.3170	0.3825 0.3330	0.3280	0.2838	Ave		0.3313				8.9		30.0			
n-Heptane	+++++ 0.5525	0.6332 0.5113	0.6605 0.5195	0.5627	0.4794	Ave		0.5599				11.8		30.0			
n-Butanol	+++++ 0.1904	+++++ 0.1798	+++++ 0.1853	0.1803	0.1616	Ave		0.1795				6.1		30.0			
Trichloroethene	0.3588 0.3412	0.3397 0.3335	0.3716 0.3625	0.3183	0.2807	Ave		0.3383				8.6		30.0			
1,2-Dichloropropane	+++++ 0.3386	0.3315 0.3236	0.3736 0.3418	0.3257	0.2838	Ave		0.3312				8.1		30.0			
Methyl methacrylate	+++++ 0.3155	+++++ 0.3040	0.3179 0.3277	0.2823	0.2606	Ave		0.3013				8.4		30.0			
1,4-Dioxane	+++++ 0.1776	+++++ 0.1668	+++++ 0.1720	0.1692	0.1513	Ave		0.1674				5.9		30.0			
Dibromomethane	+++++ 0.2927	0.2763 0.2870	0.3105 0.3185	0.2865	0.2407	Ave		0.2875				8.8		30.0			
Bromodichloromethane	+++++ 0.5800	0.5081 0.5603	0.5927 0.5940	0.5304	0.4767	Ave		0.5489				8.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.4752	0.4459 0.4599	0.4984 0.4943	0.4476	0.3952	Ave		0.4595				7.7		30.0			
methyl isobutyl ketone	+++++ 0.7263	+++++ 0.6720	0.8411 0.6926	0.6968	0.6245	Ave		0.7089				10.3		30.0			
Toluene	+++++ 0.6226	0.6428 0.6298	0.6674 0.6668	0.6070	0.5140	Ave		0.6215				8.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.8019	0.8661 0.7403	0.9309 0.7442	0.8147	0.6966	Ave		0.7992				10.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.4851	0.5509 0.4690	0.5640 0.4997	0.4539	0.3999	Ave		0.4889				11.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3271	0.3161 0.3316	0.3517 0.3530	0.3163	0.2697	Ave		0.3237				8.7		30.0			
Tetrachloroethene	0.5516 0.4664	0.4569 0.4764	0.5005 0.5155	0.4458	0.3835	Ave		0.4746				10.6		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.7587	+++++ 0.7391	0.9723 0.7538	0.6770	0.6514	Ave		0.7587				14.9		30.0			
Dibromochloromethane	+++++ 0.6041	0.4597 0.6116	0.5481 0.6421	0.5069	0.4864	Ave		0.5513				12.7		30.0			
1,2-Dibromoethane	+++++ 0.5652	0.5206 0.5743	0.5721 0.6125	0.5347	0.4620	Ave		0.5488				8.8		30.0			
Chlorobenzene	+++++ 0.8280	0.7939 0.8411	0.8777 0.8957	0.7980	0.6839	Ave		0.8169				8.5		30.0			
Ethylbenzene	+++++ 1.4413	1.3936 1.4476	1.5177 1.5318	1.3824	1.1856	Ave		1.4143				8.2		30.0			
n-Nonane	+++++ 0.7918	0.7670 0.7856	0.8436 0.8062	0.7827	0.6678	Ave		0.7778				7.0		30.0			
m,p-Xylene	+++++ 0.5522	0.5076 0.5552	0.5615 0.5635	0.5224	0.4530	Ave		0.5308				7.6		30.0			
Xylene, o-	+++++ 0.5332	0.4946 0.5392	0.5556 0.5691	0.5089	0.4389	Ave		0.5199				8.4		30.0			
Styrene	+++++ 0.8560	0.6677 0.8698	0.7853 0.9273	0.7893	0.6955	Ave		0.7987				11.8		30.0			
Bromoform	+++++ 0.5742	0.3190 0.5707	0.4515 0.5428	0.3775	0.4586	Ave		0.4706				20.9		30.0			
Cumene	+++++ 1.5881	1.4205 1.6007	1.5981 1.6368	1.5759	1.3078	Ave		1.5326				7.9		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8920	0.8098 0.8856	0.9176 0.8691	0.8703	0.7397	Ave		0.8549				7.1		30.0			
n-Propylbenzene	+++++ 2.0524	1.8534 2.0298	2.0969 1.9971	1.9856	1.7042	Ave		1.9599				6.9		30.0			
1,2,3-Trichloropropane	+++++ 0.7152	+++++ 0.7117	0.7551 0.7080	0.6975	0.5934	Ave		0.6968				7.8		30.0			
n-Decane	+++++ 1.0053	+++++ 0.9496	1.0785 0.8149	1.0762	0.9230	Ave		0.9746				10.3		30.0			
4-Ethyltoluene	+++++ 1.6596	1.4098 1.5807	1.6513 1.3126	1.6054	1.3946	Ave		1.5163				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.4524	1.2973 1.4052	1.4144 1.1910	1.3970	1.2167	Ave		1.3392				7.8		30.0			
1,3,5-Trimethylbenzene	+++++ 1.3226	1.1751 1.2951	1.3447 1.3447	1.3045	1.1270	Ave		1.2734				6.8		30.0			
Alpha Methyl Styrene	+++++ 0.6399	0.4690 0.6263	0.5643 0.6642	0.5716	0.5426	Ave		0.5826				11.5		30.0			
tert-Butylbenzene	+++++ 1.2035	1.1002 1.1764	1.2568 1.2174	1.2192	1.0501	Ave		1.1748				6.3		30.0			
1,2,4-Trimethylbenzene	+++++ 1.2999	1.1783 1.2785	1.3514 1.3615	1.3333	1.1514	Ave		1.2792				6.5		30.0			
sec-Butylbenzene	+++++ 1.8620	1.7355 1.8289	2.0059 1.8934	1.9436	1.6727	Ave		1.8489				6.2		30.0			
4-Isopropyltoluene	+++++ 1.4963	1.4017 1.5138	1.5954 1.5443	1.6098	1.3968	Ave		1.5083				5.6		30.0			
1,3-Dichlorobenzene	+++++ 0.8502	0.7605 0.8313	0.8887 0.8476	0.8654	0.7492	Ave		0.8276				6.4		30.0			
1,4-Dichlorobenzene	+++++ 0.8288	0.7528 0.8232	0.8914 0.8980	0.8628	0.7378	Ave		0.8278				7.6		30.0			
Benzyl chloride	+++++ 1.0894	0.9560 1.1200	1.0757 1.2889	1.1957	0.9908	Ave		1.1024				10.4		30.0			
n-Butylbenzene	+++++ 1.4831	1.3738 1.5355	1.6212 1.5353	1.6353	1.3823	Ave		1.5095				6.9		30.0			
n-Undecane	+++++ 1.0630	+++++ 1.0678	+++++ 1.0065	1.0797	0.8871	Ave		1.0208				7.8		30.0			
1,2-Dichlorobenzene	+++++ 0.7625	0.7282 0.7736	0.8532 0.8589	0.8260	0.7058	Ave		0.7869				7.7		30.0			
n-Dodecane	+++++ 0.8608	+++++ 0.8792	+++++ 0.7410	0.9343	0.8164	Ave		0.8463				8.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6278	+++++ 0.6833	0.5850 0.7105	0.5676	0.5101	Ave		0.6141				12.2		30.0			
Hexachlorobutadiene	+++++ 0.5905	0.4772 0.5945	0.5602 0.5487	0.5324	0.4754	Ave		0.5398				9.0		30.0			
Naphthalene	+++++ 1.3590	+++++ 1.5363	1.2032 1.6896	1.3961	1.1875	Ave		1.3953				13.9		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5744	+++++ 0.6248	0.5007 0.6015	0.5815	0.4998	Ave		0.5638				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118373/4	25833_04.D
Level 2	IC 200-118373/5	25833_05.D
Level 3	IC 200-118373/6	25833_06.D
Level 4	IC 200-118373/7	25833_07.D
Level 5	ICIS 200-118373/8	25833_08.D
Level 6	IC 200-118373/9	25833_09.D
Level 7	IC 200-118373/10	25833_10.D
Level 8	IC 200-118373/11	25833_11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 409436	+++++ 528341	+++++ 1084524	132075	230010	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1247965	+++++ 1680004	39727 3545740	360659	662792	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 828600	+++++ 1098125	28752 2289249	254297	456457	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1225051	14142 1639083	38153 3415858	349472	652830	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 490165	+++++ 637878	17185 1335882	147772	267636	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 823311	+++++ 1063760	28819 2167002	255501	454867	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1541 540983	6053 715977	16817 1503519	154992	289557	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1116 402198	4863 533150	12891 1102552	117472	218501	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 429756	5000 580136	13166 1250765	122548	227687	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 251644	+++++ 335832	7935 720765	73594	134131	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 547060	7917 711074	19738 1476063	173297	306378	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 441543	5083 597956	13456 1268342	121565	228882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1165426	14250 1586133	35544 3368894	326906	613154	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 834915	+++++ 1080617	30166 2179461	261940	458670	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 351650	+++++ 636523	94841 1271008	167884	226240	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 350760	4055 472009	10954 993203	99565	183672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 898964	10990 1230888	27600 2636070	249509	463068	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 130906	+++++ 205220	+++++ 402954	42847	86466	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 437073	5078 601269	13178 1300155	119872	225190	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 795427	+++++ 1037630	+++++ 2132136	244292	438279	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1312618	+++++ 1784428	41542 3807623	373131	684486	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 937424	+++++ 1211718	+++++ 2493271	302036	517433	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 659243	8507 853805	21972 1623891	212129	368638	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 414370	+++++ 535433	+++++ 1112045	127270	230906	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 604903	+++++ 800321	21100 1667968	184476	328742	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1163529	+++++ 1548244	+++++ 3276217	331817	615060	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1459522	16203 1976383	43747 4197409	403440	757127	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 780702	9119 1046713	24500 2170267	226470	414437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 401643	+++++ 536375	12891 1132458	116021	214109	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 818079	10467 1100784	27234 2285870	240030	439022	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2658 1001115	11612 1350820	31492 2863767	289894	528520	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1484365	+++++ 1955593	+++++ 4037213	444513	806853	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 544402	6062 757477	17025 1651832	149503	280353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 288077	+++++ 391282	10145 852362	76927	147242	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 41717	+++++ 57834	+++++ 128414	11452	21199	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 750204	+++++ 984940	+++++ 2057466	225463	407906	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1143737	13022 1580829	34874 3461613	312713	586330	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 782089	8769 1085661	23066 2379636	213635	399017	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1129514	12350 1569965	33075 3473058	302372	571077	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2335 1142667	11119 1595715	29910 3562491	306946	566382	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3400263	39509 4636879	103590 9979903	948713	1762033	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1918424	22031 2662904	58669 5831102	523126	979111	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 795592	9059 1092547	24567 2397889	222855	414260	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1318380	16790 1762244	42421 3740223	382283	699906	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 454259	+++++ 619693	+++++ 1333844	122532	235893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1940 814302	9007 1149521	23863 2610094	216292	409801	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 807893	8791 1115218	23993 2460869	221295	414266	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 752768	+++++ 1047665	20414 2359709	191806	380407	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 423767	+++++ 574898	+++++ 1238608	114925	220870	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 698454	7326 989065	19943 2293204	194655	351467	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1384127	13473 1931199	38067 4276973	360366	696002	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1134061	11824 1585309	32008 3558960	304081	576973	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1733183	+++++ 2316136	54022 4986911	473436	911696	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1389802	15920 1934393	40485 4308270	376522	703666	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1913507	22966 2551704	59784 5358468	553525	1016929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1157609	14608 1616519	36226 3598250	308392	583846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 730126	7828 1018474	21337 2280571	196233	369275	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2672 1041099	11314 1463151	30364 3330350	276511	525025	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1693782	+++++ 2269972	58982 4869982	419962	891794	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1348608	11384 1878316	33248 4148288	314423	665893	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1261758	12893 1763744	34704 3957297	331712	632536	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1848362	19660 2583186	53241 5787010	494984	936316	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3217601	34513 4445888	92065 9896464	857519	1623125	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1767598	18994 2412605	51177 5208658	485505	914199	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2465555	25142 3410064	68122 7280780	648081	1240293	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1190352	12250 1655938	33706 3676525	315658	600849	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1910862	16536 2671205	47639 5990955	489592	952142	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1281762	7901 1752784	27389 3506866	234149	627800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3545298	35180 4916112	96944 10574982	977561	1790406	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1991311	20054 2719823	55664 5615285	539839	1012699	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4581825	45899 6234105	127200 12902837	1231713	2333117	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1596513	+++++ 2185790	45805 4574330	432653	812466	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2244221	+++++ 2916548	65422 5264975	667561	1263692	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3705002	34915 4854676	100172 8480222	995829	1909235	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3242371	32129 4315821	85803 7694565	866602	1665670	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2952552	29101 3977660	81573 8687812	809215	1542986	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1428633	11616 1923499	34231 4291539	354585	742913	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2686697	27246 3613084	76242 7865464	756262	1437614	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39423-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2901936	29180 3926526	81980 8796547	827042	1576352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4156724	42980 5616978	121683 12232648	1205655	2289995	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3340357	34713 4649212	96781 9977397	998602	1912352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1898049	18833 2553083	53913 5476084	536849	1025661	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1850331	18644 2528381	54073 5801528	535187	1010115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2431926	23675 3439799	65254 8327257	741736	1356520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 3310867	34023 4715831	98346 9918939	1014430	1892414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2373158	+++++ 3279464	+++++ 6502755	669786	1214541	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1702205	18034 2375928	51755 5548990	512402	966260	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1921741	+++++ 2700240	+++++ 4787636	579531	1117714	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1401522	+++++ 2098646	35489 4590416	352066	698419	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1318241	11819 1825774	33982 3544768	330280	650915	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 3033846	+++++ 4718376	72990 10916262	866011	1625697	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1282192	+++++ 1919042	30375 3886463	360740	684291	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118373/4	25833_04.D
Level 2	IC 200-118373/5	25833_05.D
Level 3	IC 200-118373/6	25833_06.D
Level 4	IC 200-118373/7	25833_07.D
Level 5	ICIS 200-118373/8	25833_08.D
Level 6	IC 200-118373/9	25833_09.D
Level 7	IC 200-118373/10	25833_10.D
Level 8	IC 200-118373/11	25833_11.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9459	+++++ 0.8575	+++++ 0.8067	1.0684	0.8722	Ave		0.9101				11.2		30.0			
Dichlorodifluoromethane	+++++ 2.8830	+++++ 2.7265	3.4131 2.6373	2.9175	2.5134	Ave		2.8485				11.1		30.0			
Freon 22	+++++ 1.9142	+++++ 1.7822	2.4702 1.7027	2.0571	1.7310	Ave		1.9429				14.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.8300	2.9766 2.6601	3.2779 2.5407	2.8270	2.4756	Ave		2.7983				9.8		30.0			
Chloromethane	+++++ 1.1323	+++++ 1.0352	1.4764 0.9936	1.1954	1.0149	Ave		1.1413				15.9		30.0			
n-Butane	+++++ 1.9020	+++++ 1.7264	2.4760 1.6118	2.0668	1.7249	Ave		1.9180				16.5		30.0			
Vinyl chloride	1.5947 1.2497	1.2740 1.1620	1.4448 1.1183	1.2538	1.0981	Ave		1.2744				13.3		30.0			
1,3-Butadiene	1.1549 0.9291	1.0236 0.8653	1.1075 0.8201	0.9503	0.8286	Ave		0.9599				13.1		30.0			
Bromomethane	+++++ 0.9928	1.0524 0.9415	1.1312 0.9303	0.9913	0.8634	Ave		0.9861				8.8		30.0			
Chloroethane	+++++ 0.5813	+++++ 0.5450	0.6817 0.5361	0.5953	0.5086	Ave		0.5747				10.6		30.0			
Isopentane	+++++ 1.2638	1.6664 1.1540	1.6958 1.0979	1.4019	1.1618	Ave		1.3488				18.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.0200	1.0699 0.9704	1.1561 0.9434	0.9834	0.8680	Ave		1.0016				9.2		30.0			
Trichlorofluoromethane	+++++ 2.6923	2.9994 2.5742	3.0538 2.5057	2.6445	2.3252	Ave		2.6850				9.7		30.0			
n-Pentane	+++++ 1.9288	+++++ 1.7538	2.5917 1.6210	2.1189	1.7394	Ave		1.9589				18.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.6080	+++++ 0.5164	0.8138 0.3781	0.6786	0.5717	Ave		0.5944				24.8		30.0			
Ethyl ether	+++++ 0.8103	0.8535 0.7660	0.9411 0.7387	0.8054	0.6965	Ave		0.8017				10.0		30.0			
Freon TF	+++++ 2.0767	2.3132 1.9976	2.3713 1.9607	2.0184	1.7560	Ave		2.0706				10.2		30.0			
Acrolein	+++++ 0.3024	+++++ 0.3331	+++++ 0.2997	0.3466	0.3279	Ave		0.3219				6.3		30.0			
1,1-Dichloroethene	+++++ 1.0097	1.0688 0.9758	1.1322 0.9670	0.9697	0.8540	Ave		0.9967				8.8		30.0			
Acetone	+++++ 1.8375	+++++ 1.6840	+++++ 1.5859	1.9762	1.6620	Ave		1.7491				8.9		30.0			
Carbon disulfide	+++++ 3.0323	+++++ 2.8960	3.5691 2.8321	3.0184	2.5957	Ave		2.9906				10.9		30.0			
Isopropyl alcohol	+++++ 2.1656	+++++ 1.9665	+++++ 1.8545	2.4433	1.9622	Ave		2.0784				11.2		30.0			
3-Chloropropene	+++++ 1.5229	1.7906 1.3857	1.8877 1.2078	1.7160	1.3979	Ave		1.5584				15.9		30.0			
Acetonitrile	+++++ 0.9573	+++++ 0.8690	+++++ 0.8271	1.0295	0.8756	Ave		0.9117				8.9		30.0			
Methylene Chloride	+++++ 1.3974	+++++ 1.2989	1.8128 1.2406	1.4923	1.2466	Ave		1.4148				15.4		30.0			
tert-Butyl alcohol	+++++ 2.6879	+++++ 2.5127	+++++ 2.4368	2.6842	2.3324	Ave		2.5308				6.1		30.0			
Methyl tert-butyl ether	+++++ 3.3717	3.4104 3.2075	3.7585 3.1220	3.2636	2.8712	Ave		3.2864				8.3		30.0			
trans-1,2-Dichloroethene	+++++ 1.8035	1.9194 1.6987	2.1049 1.6142	1.8320	1.5716	Ave		1.7921				10.3		30.0			
Acrylonitrile	+++++ 0.9278	+++++ 0.8705	1.1075 0.8423	0.9385	0.8119	Ave		0.9164				11.5		30.0			
n-Hexane	+++++ 1.8899	2.2031 1.7865	2.3398 1.7002	1.9417	1.6648	Ave		1.9323				13.2		30.0			
1,1-Dichloroethane	2.7507 2.3127	2.4441 2.1923	2.7056 2.1300	2.3451	2.0042	Ave		2.3606				11.2		30.0			
Vinyl acetate	+++++ 3.4291	+++++ 3.1738	+++++ 3.0028	3.5958	3.0597	Ave		3.2522				7.8		30.0			
cis-1,2-Dichloroethene	+++++ 1.2576	1.2759 1.2293	1.4627 1.2286	1.2094	1.0631	Ave		1.2467				9.5		30.0			
Methyl Ethyl Ketone	+++++ 0.6655	+++++ 0.6350	0.8716 0.6340	0.6223	0.5584	Ave		0.6645				16.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0964	+++++ 0.0939	+++++ 0.0955	0.0926	0.0804	Ave		0.0918				7.1		30.0			
Tetrahydrofuran	+++++ 0.3144	+++++ 0.2858	+++++ 0.2858	0.3318	0.2794	Ave		0.2994				7.6		30.0			
Chloroform	+++++ 2.6422	2.7409 2.5656	2.9962 2.5747	2.5296	2.2235	Ave		2.6104				8.9		30.0			
Cyclohexane	+++++ 0.3277	0.3307 0.3150	0.3591 0.3305	0.3144	0.2733	Ave		0.3215				8.1		30.0			
1,1,1-Trichloroethane	+++++ 0.4733	0.4657 0.4555	0.5150 0.4824	0.4450	0.3912	Ave		0.4612				8.3		30.0			
Carbon tetrachloride	0.4318 0.4788	0.4193 0.4630	0.4657 0.4948	0.4518	0.3879	Ave		0.4491				7.7		30.0			
2,2,4-Trimethylpentane	+++++ 1.4249	1.4900 1.3453	1.6129 1.3861	1.3964	1.2069	Ave		1.4089				8.9		30.0			
Benzene	+++++ 0.8039	0.8308 0.7726	0.9135 0.8098	0.7700	0.6707	Ave		0.7959				9.2		30.0			
1,2-Dichloroethane	+++++ 0.3334	0.3416 0.3170	0.3825 0.3330	0.3280	0.2838	Ave		0.3313				8.9		30.0			
n-Heptane	+++++ 0.5525	0.6332 0.5113	0.6605 0.5195	0.5627	0.4794	Ave		0.5599				11.8		30.0			
n-Butanol	+++++ 0.1904	+++++ 0.1798	+++++ 0.1853	0.1803	0.1616	Ave		0.1795				6.1		30.0			
Trichloroethene	0.3588 0.3412	0.3397 0.3335	0.3716 0.3625	0.3183	0.2807	Ave		0.3383				8.6		30.0			
1,2-Dichloropropane	+++++ 0.3386	0.3315 0.3236	0.3736 0.3418	0.3257	0.2838	Ave		0.3312				8.1		30.0			
Methyl methacrylate	+++++ 0.3155	+++++ 0.3040	0.3179 0.3277	0.2823	0.2606	Ave		0.3013				8.4		30.0			
1,4-Dioxane	+++++ 0.1776	+++++ 0.1668	+++++ 0.1720	0.1692	0.1513	Ave		0.1674				5.9		30.0			
Dibromomethane	+++++ 0.2927	0.2763 0.2870	0.3105 0.3185	0.2865	0.2407	Ave		0.2875				8.8		30.0			
Bromodichloromethane	+++++ 0.5800	0.5081 0.5603	0.5927 0.5940	0.5304	0.4767	Ave		0.5489				8.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.4752	0.4459 0.4599	0.4984 0.4943	0.4476	0.3952	Ave		0.4595				7.7		30.0			
methyl isobutyl ketone	+++++ 0.7263	+++++ 0.6720	0.8411 0.6926	0.6968	0.6245	Ave		0.7089				10.3		30.0			
Toluene	+++++ 0.6226	0.6428 0.6298	0.6674 0.6668	0.6070	0.5140	Ave		0.6215				8.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.8019	0.8661 0.7403	0.9309 0.7442	0.8147	0.6966	Ave		0.7992				10.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.4851	0.5509 0.4690	0.5640 0.4997	0.4539	0.3999	Ave		0.4889				11.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3271	0.3161 0.3316	0.3517 0.3530	0.3163	0.2697	Ave		0.3237				8.7		30.0			
Tetrachloroethene	0.5516 0.4664	0.4569 0.4764	0.5005 0.5155	0.4458	0.3835	Ave		0.4746				10.6		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.7587	+++++ 0.7391	0.9723 0.7538	0.6770	0.6514	Ave		0.7587				14.9		30.0			
Dibromochloromethane	+++++ 0.6041	0.4597 0.6116	0.5481 0.6421	0.5069	0.4864	Ave		0.5513				12.7		30.0			
1,2-Dibromoethane	+++++ 0.5652	0.5206 0.5743	0.5721 0.6125	0.5347	0.4620	Ave		0.5488				8.8		30.0			
Chlorobenzene	+++++ 0.8280	0.7939 0.8411	0.8777 0.8957	0.7980	0.6839	Ave		0.8169				8.5		30.0			
Ethylbenzene	+++++ 1.4413	1.3936 1.4476	1.5177 1.5318	1.3824	1.1856	Ave		1.4143				8.2		30.0			
n-Nonane	+++++ 0.7918	0.7670 0.7856	0.8436 0.8062	0.7827	0.6678	Ave		0.7778				7.0		30.0			
m,p-Xylene	+++++ 0.5522	0.5076 0.5552	0.5615 0.5635	0.5224	0.4530	Ave		0.5308				7.6		30.0			
Xylene, o-	+++++ 0.5332	0.4946 0.5392	0.5556 0.5691	0.5089	0.4389	Ave		0.5199				8.4		30.0			
Styrene	+++++ 0.8560	0.6677 0.8698	0.7853 0.9273	0.7893	0.6955	Ave		0.7987				11.8		30.0			
Bromoform	+++++ 0.5742	0.3190 0.5707	0.4515 0.5428	0.3775	0.4586	Ave		0.4706				20.9		30.0			
Cumene	+++++ 1.5881	1.4205 1.6007	1.5981 1.6368	1.5759	1.3078	Ave		1.5326				7.9		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8920	0.8098 0.8856	0.9176 0.8691	0.8703	0.7397	Ave		0.8549				7.1		30.0			
n-Propylbenzene	+++++ 2.0524	1.8534 2.0298	2.0969 1.9971	1.9856	1.7042	Ave		1.9599				6.9		30.0			
1,2,3-Trichloropropane	+++++ 0.7152	+++++ 0.7117	0.7551 0.7080	0.6975	0.5934	Ave		0.6968				7.8		30.0			
n-Decane	+++++ 1.0053	+++++ 0.9496	1.0785 0.8149	1.0762	0.9230	Ave		0.9746				10.3		30.0			
4-Ethyltoluene	+++++ 1.6596	1.4098 1.5807	1.6513 1.3126	1.6054	1.3946	Ave		1.5163				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.4524	1.2973 1.4052	1.4144 1.1910	1.3970	1.2167	Ave		1.3392				7.8		30.0			
1,3,5-Trimethylbenzene	+++++ 1.3226	1.1751 1.2951	1.3447 1.3447	1.3045	1.1270	Ave		1.2734				6.8		30.0			
Alpha Methyl Styrene	+++++ 0.6399	0.4690 0.6263	0.5643 0.6642	0.5716	0.5426	Ave		0.5826				11.5		30.0			
tert-Butylbenzene	+++++ 1.2035	1.1002 1.1764	1.2568 1.2174	1.2192	1.0501	Ave		1.1748				6.3		30.0			
1,2,4-Trimethylbenzene	+++++ 1.2999	1.1783 1.2785	1.3514 1.3615	1.3333	1.1514	Ave		1.2792				6.5		30.0			
sec-Butylbenzene	+++++ 1.8620	1.7355 1.8289	2.0059 1.8934	1.9436	1.6727	Ave		1.8489				6.2		30.0			
4-Isopropyltoluene	+++++ 1.4963	1.4017 1.5138	1.5954 1.5443	1.6098	1.3968	Ave		1.5083				5.6		30.0			
1,3-Dichlorobenzene	+++++ 0.8502	0.7605 0.8313	0.8887 0.8476	0.8654	0.7492	Ave		0.8276				6.4		30.0			
1,4-Dichlorobenzene	+++++ 0.8288	0.7528 0.8232	0.8914 0.8980	0.8628	0.7378	Ave		0.8278				7.6		30.0			
Benzyl chloride	+++++ 1.0894	0.9560 1.1200	1.0757 1.2889	1.1957	0.9908	Ave		1.1024				10.4		30.0			
n-Butylbenzene	+++++ 1.4831	1.3738 1.5355	1.6212 1.5353	1.6353	1.3823	Ave		1.5095				6.9		30.0			
n-Undecane	+++++ 1.0630	+++++ 1.0678	+++++ 1.0065	1.0797	0.8871	Ave		1.0208				7.8		30.0			
1,2-Dichlorobenzene	+++++ 0.7625	0.7282 0.7736	0.8532 0.8589	0.8260	0.7058	Ave		0.7869				7.7		30.0			
n-Dodecane	+++++ 0.8608	+++++ 0.8792	+++++ 0.7410	0.9343	0.8164	Ave		0.8463				8.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6278	+++++ 0.6833	0.5850 0.7105	0.5676	0.5101	Ave		0.6141				12.2		30.0			
Hexachlorobutadiene	+++++ 0.5905	0.4772 0.5945	0.5602 0.5487	0.5324	0.4754	Ave		0.5398				9.0		30.0			
Naphthalene	+++++ 1.3590	+++++ 1.5363	1.2032 1.6896	1.3961	1.1875	Ave		1.3953				13.9		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5744	+++++ 0.6248	0.5007 0.6015	0.5815	0.4998	Ave		0.5638				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118373/4	25833_04.D
Level 2	IC 200-118373/5	25833_05.D
Level 3	IC 200-118373/6	25833_06.D
Level 4	IC 200-118373/7	25833_07.D
Level 5	ICIS 200-118373/8	25833_08.D
Level 6	IC 200-118373/9	25833_09.D
Level 7	IC 200-118373/10	25833_10.D
Level 8	IC 200-118373/11	25833_11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 409436	+++++ 528341	+++++ 1084524	132075	230010	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1247965	+++++ 1680004	39727 3545740	360659	662792	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 828600	+++++ 1098125	28752 2289249	254297	456457	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1225051	14142 1639083	38153 3415858	349472	652830	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 490165	+++++ 637878	17185 1335882	147772	267636	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 823311	+++++ 1063760	28819 2167002	255501	454867	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1541 540983	6053 715977	16817 1503519	154992	289557	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1116 402198	4863 533150	12891 1102552	117472	218501	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 429756	5000 580136	13166 1250765	122548	227687	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 251644	+++++ 335832	7935 720765	73594	134131	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 547060	7917 711074	19738 1476063	173297	306378	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 441543	5083 597956	13456 1268342	121565	228882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1165426	14250 1586133	35544 3368894	326906	613154	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 834915	+++++ 1080617	30166 2179461	261940	458670	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 351650	+++++ 636523	94841 1271008	167884	226240	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 350760	4055 472009	10954 993203	99565	183672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 898964	10990 1230888	27600 2636070	249509	463068	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 130906	+++++ 205220	+++++ 402954	42847	86466	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 437073	5078 601269	13178 1300155	119872	225190	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 795427	+++++ 1037630	+++++ 2132136	244292	438279	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1312618	+++++ 1784428	41542 3807623	373131	684486	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 937424	+++++ 1211718	+++++ 2493271	302036	517433	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 659243	8507 853805	21972 1623891	212129	368638	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 414370	+++++ 535433	+++++ 1112045	127270	230906	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 604903	+++++ 800321	21100 1667968	184476	328742	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1163529	+++++ 1548244	+++++ 3276217	331817	615060	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1459522	16203 1976383	43747 4197409	403440	757127	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 780702	9119 1046713	24500 2170267	226470	414437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 401643	+++++ 536375	12891 1132458	116021	214109	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 818079	10467 1100784	27234 2285870	240030	439022	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2658 1001115	11612 1350820	31492 2863767	289894	528520	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1484365	+++++ 1955593	+++++ 4037213	444513	806853	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 544402	6062 757477	17025 1651832	149503	280353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 288077	+++++ 391282	10145 852362	76927	147242	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 41717	+++++ 57834	+++++ 128414	11452	21199	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 750204	+++++ 984940	+++++ 2057466	225463	407906	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1143737	13022 1580829	34874 3461613	312713	586330	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 782089	8769 1085661	23066 2379636	213635	399017	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1129514	12350 1569965	33075 3473058	302372	571077	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2335 1142667	11119 1595715	29910 3562491	306946	566382	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3400263	39509 4636879	103590 9979903	948713	1762033	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1918424	22031 2662904	58669 5831102	523126	979111	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 795592	9059 1092547	24567 2397889	222855	414260	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1318380	16790 1762244	42421 3740223	382283	699906	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 454259	+++++ 619693	+++++ 1333844	122532	235893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1940 814302	9007 1149521	23863 2610094	216292	409801	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 807893	8791 1115218	23993 2460869	221295	414266	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 752768	+++++ 1047665	20414 2359709	191806	380407	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 423767	+++++ 574898	+++++ 1238608	114925	220870	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 698454	7326 989065	19943 2293204	194655	351467	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1384127	13473 1931199	38067 4276973	360366	696002	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1134061	11824 1585309	32008 3558960	304081	576973	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1733183	+++++ 2316136	54022 4986911	473436	911696	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1389802	15920 1934393	40485 4308270	376522	703666	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1913507	22966 2551704	59784 5358468	553525	1016929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1157609	14608 1616519	36226 3598250	308392	583846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 730126	7828 1018474	21337 2280571	196233	369275	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2672 1041099	11314 1463151	30364 3330350	276511	525025	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1693782	+++++ 2269972	58982 4869982	419962	891794	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1348608	11384 1878316	33248 4148288	314423	665893	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1261758	12893 1763744	34704 3957297	331712	632536	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1848362	19660 2583186	53241 5787010	494984	936316	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3217601	34513 4445888	92065 9896464	857519	1623125	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1767598	18994 2412605	51177 5208658	485505	914199	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2465555	25142 3410064	68122 7280780	648081	1240293	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1190352	12250 1655938	33706 3676525	315658	600849	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1910862	16536 2671205	47639 5990955	489592	952142	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1281762	7901 1752784	27389 3506866	234149	627800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3545298	35180 4916112	96944 10574982	977561	1790406	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1991311	20054 2719823	55664 5615285	539839	1012699	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4581825	45899 6234105	127200 12902837	1231713	2333117	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1596513	+++++ 2185790	45805 4574330	432653	812466	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2244221	+++++ 2916548	65422 5264975	667561	1263692	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3705002	34915 4854676	100172 8480222	995829	1909235	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3242371	32129 4315821	85803 7694565	866602	1665670	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2952552	29101 3977660	81573 8687812	809215	1542986	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1428633	11616 1923499	34231 4291539	354585	742913	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2686697	27246 3613084	76242 7865464	756262	1437614	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39424-1 Analy Batch No.: 118373

SDG No.:

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2901936	29180 3926526	81980 8796547	827042	1576352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4156724	42980 5616978	121683 12232648	1205655	2289995	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3340357	34713 4649212	96781 9977397	998602	1912352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1898049	18833 2553083	53913 5476084	536849	1025661	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1850331	18644 2528381	54073 5801528	535187	1010115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2431926	23675 3439799	65254 8327257	741736	1356520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 3310867	34023 4715831	98346 9918939	1014430	1892414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2373158	+++++ 3279464	+++++ 6502755	669786	1214541	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1702205	18034 2375928	51755 5548990	512402	966260	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1921741	+++++ 2700240	+++++ 4787636	579531	1117714	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1401522	+++++ 2098646	35489 4590416	352066	698419	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1318241	11819 1825774	33982 3544768	330280	650915	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 3033846	+++++ 4718376	72990 10916262	866011	1625697	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1282192	+++++ 1919042	30375 3886463	360740	684291	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117345/3	25386_03.D
Level 2	IC 200-117345/18	25386_18.D
Level 3	IC 200-117345/17	25386_17.D
Level 4	IC 200-117345/6	25386_06.D
Level 5	ICIS 200-117345/7	25386_07.D
Level 6	IC 200-117345/8	25386_08.D
Level 7	IC 200-117345/9	25386_09.D
Level 8	IC 200-117345/10	25386_10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9886	+++++ 0.8416	+++++ 0.8035	1.1686	1.1172	Ave		0.9839				16.4		30.0			
Dichlorodifluoromethane	+++++ 2.2704	+++++ 2.0563	2.4154 2.1148	2.4962	2.4722	Ave		2.3042				8.1		30.0			
Freon 22	+++++ 1.6959	+++++ 1.4770	1.7727 1.4705	1.9293	1.9138	Ave		1.7099				11.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2026	2.2490 2.0218	2.4167 2.1124	2.2890	2.3363	Ave		2.2325				6.0		30.0			
Chloromethane	+++++ 1.0185	+++++ 0.8960	1.1503 0.8973	1.1411	1.1340	Ave		1.0395				11.6		30.0			
n-Butane	+++++ 1.8576	+++++ 1.5896	1.8312 1.5364	2.1396	2.1083	Ave		1.8438				13.7		30.0			
Vinyl chloride	1.4000 1.0131	1.0389 0.9172	1.1026 0.9440	1.0795	1.0944	Ave		1.0737				13.8		30.0			
1,3-Butadiene	0.9260 0.8273	0.7904 0.7387	0.8455 0.7363	0.8750	0.9059	Ave		0.8306				8.6		30.0			
Bromomethane	+++++ 0.7912	0.7776 0.7461	0.9028 0.7824	0.8024	0.7918	Ave		0.7992				6.1		30.0			
Chloroethane	+++++ 0.4599	+++++ 0.4299	0.4829 0.4403	0.4829	0.4774	Ave		0.4622				5.0		30.0			
Isopentane	+++++ 1.1803	1.3070 1.0071	1.1459 0.9760	1.3674	1.3286	Ave		1.1875				13.1		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.7466	0.7695 0.7273	0.8489 0.7809	0.7227	0.7370	Ave		0.7618				5.8		30.0			
Trichlorofluoromethane	+++++ 1.9715	1.9775 1.8478	2.0656 1.9478	2.0147	2.0003	Ave		1.9750				3.4		30.0			
n-Pentane	+++++ 1.8973	+++++ 1.6534	1.9382 1.6191	2.1234	2.0958	Ave		1.8879				11.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.5221	+++++ 0.4370	0.6031 0.3413	0.6105	0.5989	Ave		0.5188				21.1		30.0			
Ethyl ether	+++++ 0.6161	0.6045 0.5694	0.6578 0.5842	0.6471	0.6472	Ave		0.6180				5.5		30.0			
Acrolein	+++++ 0.2733	+++++ 0.2777	+++++ 0.2758	0.3189	0.3164	Ave		0.2924				7.9		30.0			
Freon TF	+++++ 1.4475	1.4528 1.3967	1.5595 1.4750	1.4557	1.4612	Ave		1.4641				3.3		30.0			
1,1-Dichloroethene	+++++ 0.7229	0.7098 0.6971	0.7917 0.7428	0.7160	0.7194	Ave		0.7285				4.3		30.0			
Acetone	+++++ 1.5878	+++++ 1.3601	+++++ 1.3186	1.8354	1.8185	Ave		1.5841				15.4		30.0			
Carbon disulfide	+++++ 2.2514	+++++ 2.1202	2.3965 2.2376	2.2392	2.2621	Ave		2.2512				3.9		30.0			
Isopropyl alcohol	+++++ 1.8596	+++++ 1.6163	+++++ 1.5761	2.1457	2.1508	Ave		1.8697				14.8		30.0			
3-Chloropropene	+++++ 1.4190	1.4432 1.2135	1.3576 1.1173	1.6424	1.5813	Ave		1.3963				13.4		30.0			
Acetonitrile	+++++ 0.8958	+++++ 0.7755	+++++ 0.7393	1.0547	1.0101	Ave		0.8951				15.5		30.0			
Methylene Chloride	+++++ 1.1506	+++++ 1.0176	1.2030 1.0100	1.2884	1.2620	Ave		1.1553				10.3		30.0			
tert-Butyl alcohol	+++++ 2.1096	+++++ 1.9067	+++++ 1.9296	2.2873	2.3008	Ave		2.1068				8.9		30.0			
Methyl tert-butyl ether	+++++ 2.4609	2.4837 2.2935	2.5518 2.3734	2.5621	2.5456	Ave		2.4673				4.1		30.0			
trans-1,2-Dichloroethene	+++++ 1.3470	1.4239 1.2296	1.4006 1.2601	1.4717	1.4240	Ave		1.3653				6.6		30.0			
Acrylonitrile	+++++ 0.7298	+++++ 0.6681	0.7381 0.6832	0.7848	0.7900	Ave		0.7323				6.9		30.0			
n-Hexane	+++++ 1.4425	1.5107 1.3121	1.5258 1.3355	1.5513	1.5260	Ave		1.4577				6.7		30.0			
1,1-Dichloroethane	2.1818 1.7255	1.7219 1.5865	1.7818 1.6433	1.8168	1.8053	Ave		1.7829				10.1		30.0			
Vinyl acetate	+++++ 3.0182	+++++ 2.6272	+++++ 2.5802	3.3144	3.3827	Ave		2.9846				12.5		30.0			
cis-1,2-Dichloroethene	+++++ 0.8755	0.8835 0.8334	0.9401 0.9055	0.8673	0.8855	Ave		0.8844				3.7		30.0			
Methyl Ethyl Ketone	+++++ 0.4678	+++++ 0.4383	0.6254 0.4646	0.4729	0.4896	Ave		0.4931				13.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0655	+++++ 0.0631	+++++ 0.0673	0.0655	0.0671	Ave		0.0657				2.6		30.0			
Tetrahydrofuran	+++++ 0.2978	+++++ 0.2555	+++++ 0.2499	0.3189	0.3212	Ave		0.2887				11.8		30.0			
Chloroform	+++++ 1.8492	1.8606 1.7346	1.9518 1.8661	1.9079	1.9103	Ave		1.8686				3.7		30.0			
Cyclohexane	+++++ 0.2308	0.2331 0.2165	0.2477 0.2365	0.2261	0.2327	Ave		0.2319				4.1		30.0			
1,1,1-Trichloroethane	+++++ 0.3463	0.3572 0.3231	0.3708 0.3493	0.3474	0.3523	Ave		0.3495				4.1		30.0			
Carbon tetrachloride	0.3519 0.3347	0.3141 0.3141	0.3409 0.3455	0.3323	0.3362	Ave		0.3337				4.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.1166	1.1115 1.0248	1.1746 1.0910	1.1179	1.1314	Ave		1.1097				4.1		30.0			
Benzene	+++++ 0.5828	0.6082 0.5453	0.6591 0.5989	0.5744	0.5803	Ave		0.5927				6.0		30.0			
1,2-Dichloroethane	+++++ 0.2745	0.2718 0.2442	0.2854 0.2559	0.2890	0.2879	Ave		0.2727				6.3		30.0			
n-Heptane	+++++ 0.5064	0.5401 0.4557	0.5318 0.4624	0.5198	0.5281	Ave		0.5063				6.7		30.0			
n-Butanol	+++++ 0.1554	+++++ 0.1443	+++++ 0.1549	0.1538	0.1659	Ave		0.1549				5.0		30.0			
Trichloroethene	+++++ 0.2312	0.2435 0.2224	0.2562 0.2496	0.2333	0.2361	Ave		0.2389				4.8		30.0			
1,2-Dichloropropane	+++++ 0.2556	0.2533 0.2417	0.2679 0.2707	0.2592	0.2648	Ave		0.2590				3.8		30.0			
Methyl methacrylate	+++++ 0.2357	+++++ 0.2228	0.2337 0.2532	0.2210	0.2394	Ave		0.2343				5.0		30.0			
1,4-Dioxane	+++++ 0.1221	+++++ 0.1139	+++++ 0.1261	0.1263	0.1338	Ave		0.1244				5.8		30.0			
Dibromomethane	+++++ 0.1925	0.1888 0.1871	0.1999 0.2202	0.1916	0.1968	Ave		0.1967				5.7		30.0			
Bromodichloromethane	+++++ 0.4338	0.3914 0.4100	0.4281 0.4640	0.4304	0.4502	Ave		0.4297				5.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.3503	0.3422 0.3334	0.3599 0.3548	0.3499	0.3594	Ave		0.3500				2.7		30.0			
methyl isobutyl ketone	+++++ 0.6782	+++++ 0.6127	0.7219 0.5114	0.6558	0.6927	Ave		0.6455				11.7		30.0			
Toluene	+++++ 0.4195	0.4438 0.4039	0.4999 0.4524	0.4204	0.4118	Ave		0.4360				7.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.7379	0.7357 0.6699	0.7251 0.5515	0.7520	0.7411	Ave		0.7019				10.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.3620	0.3685 0.3427	0.3944 0.3536	0.3571	0.3793	Ave		0.3654				4.7		30.0			
1,1,2-Trichloroethane	+++++ 0.2224	0.2249 0.2125	0.2550 0.2289	0.2220	0.2149	Ave		0.2258				6.2		30.0			
Tetrachloroethene	0.3629 0.2983	0.3161 0.2887	0.3449 0.3844	0.2976	0.3228	Ave		0.3270				10.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6748	+++++ 0.6137	0.9585 0.5152	0.6326	0.6017	Ave		0.6661				22.9		30.0			
Dibromochloromethane	+++++ 0.3728	0.3061 0.3598	0.3608 0.4288	0.3535	0.3773	Ave		0.3656				9.9		30.0			
1,2-Dibromoethane	+++++ 0.3628	0.3309 0.3519	0.3960 0.4052	0.3609	0.3587	Ave		0.3666				7.0		30.0			
Chlorobenzene	+++++ 0.5268	0.5440 0.5090	0.5897 0.5869	0.5214	0.5314	Ave		0.5442				5.9		30.0			
Ethylbenzene	+++++ 0.9805	0.9899 0.9509	1.0541 1.0854	0.9670	0.9381	Ave		0.9951				5.5		30.0			
n-Nonane	+++++ 0.6167	0.6081 0.5845	0.6483 0.6390	0.6137	0.5577	Ave		0.6097				5.1		30.0			
m,p-Xylene	+++++ 0.3680	0.3601 0.3594	0.3933 0.4190	0.3558	0.3599	Ave		0.3736				6.3		30.0			
Xylene, o-	+++++ 0.3601	0.3500 0.3488	0.3835 0.3944	0.3504	0.3574	Ave		0.3635				5.0		30.0			
Styrene	+++++ 0.5805	0.4704 0.5630	0.5555 0.6525	0.5314	0.5626	Ave		0.5594				9.8		30.0			
Bromoform	+++++ 0.3593	0.2391 0.3419	0.3014 0.3965	0.3007	0.3656	Ave		0.3292				16.0		30.0			
Cumene	+++++ 1.0661	1.0024 1.0304	1.0803 1.1319	1.0302	1.0355	Ave		1.0538				4.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.6209	0.6021 0.5946	0.6572 0.6305	0.6128	0.5800	Ave		0.6140				4.1		30.0			
n-Propylbenzene	+++++ 1.4212	1.3698 1.3508	1.4635 1.4484	1.3842	1.3405	Ave		1.3969				3.4		30.0			
1,2,3-Trichloropropane	+++++ 0.5072	+++++ 0.4861	0.5726 0.5087	0.5001	0.4631	Ave		0.5063				7.2		30.0			
4-Ethyltoluene	+++++ 1.1326	1.0254 1.0549	1.1217 1.1277	1.0606	1.0725	Ave		1.0851				3.9		30.0			
n-Decane	+++++ 0.8124	+++++ 0.7538	0.8455 0.7288	0.8503	0.7588	Ave		0.7916				6.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.0221	0.9367 0.9836	1.0253 0.9794	0.9546	0.9265	Ave		0.9754				4.0		30.0			
1,3,5-Trimethylbenzene	+++++ 0.8803	0.8475 0.8127	0.9405 1.0158	0.8762	0.8797	Ave		0.8932				7.4		30.0			
Alpha Methyl Styrene	+++++ 0.4181	0.3263 0.3872	0.3901 0.4957	0.4045	0.3931	Ave		0.4021				12.5		30.0			
tert-Butylbenzene	+++++ 0.7836	0.7831 0.7243	0.8353 0.9178	0.7943	0.7428	Ave		0.7973				8.0		30.0			
1,2,4-Trimethylbenzene	+++++ 0.8642	0.8526 0.8174	0.9589 1.0639	0.8981	0.8435	Ave		0.8998				9.5		30.0			
sec-Butylbenzene	+++++ 1.2468	1.2703 1.1957	1.3721 1.5036	1.3013	1.2245	Ave		1.3021				8.1		30.0			
4-Isopropyltoluene	+++++ 0.9751	1.0029 0.9982	1.0950 1.2978	1.0445	0.9504	Ave		1.0520				11.2		30.0			
1,3-Dichlorobenzene	+++++ 0.5506	0.5124 0.5193	0.5972 0.7067	0.5541	0.5335	Ave		0.5677				11.9		30.0			
1,4-Dichlorobenzene	+++++ 0.5335	0.5062 0.5143	0.6051 0.7147	0.5503	0.5280	Ave		0.5646				13.1		30.0			
Benzyl chloride	+++++ 0.7732	0.7284 0.7740	0.8281 1.0529	0.8421	0.7981	Ave		0.8281				12.8		30.0			
n-Butylbenzene	+++++ 1.0322	1.0829 1.0848	1.1973 1.3236	1.1158	0.9408	Ave		1.1110				11.0		30.0			
n-Undecane	+++++ 0.8650	+++++ 0.8590	+++++ 0.8908	0.7960	0.7377	Ave		0.8297				7.5		30.0			
1,2-Dichlorobenzene	+++++ 0.4858	0.5001 0.4832	0.5901 0.6751	0.5190	0.4894	Ave		0.5347				13.5		30.0			
n-Dodecane	+++++ 0.4681	+++++ 0.4737	+++++ 0.2622	0.4178	0.4138	Ave		0.4071				21.0		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3031	+++++ 0.3304	0.1859 0.2703	0.2054	0.2440	Ave		0.2565				21.8		30.0			
Hexachlorobutadiene	+++++ 0.3580	0.3252 0.3503	0.3552 0.2365	0.2878	0.3062	Ave		0.3170				14.0		30.0			
Naphthalene	+++++ 0.6231	+++++ 0.7150	0.3583 0.6321	0.4518	0.4988	Ave		0.5465				24.3		30.0			
1,2,3-Trichlorobenzene	+++++ 0.1582	+++++ 0.1853	0.0902 0.1325	0.1026	0.1300	Ave		0.1331				26.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117345/3	25386_03.D
Level 2	IC 200-117345/18	25386_18.D
Level 3	IC 200-117345/17	25386_17.D
Level 4	IC 200-117345/6	25386_06.D
Level 5	ICIS 200-117345/7	25386_07.D
Level 6	IC 200-117345/8	25386_08.D
Level 7	IC 200-117345/9	25386_09.D
Level 8	IC 200-117345/10	25386_10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 447222	+++++ 608011	+++++ 1384098	132749	278105	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1027070	+++++ 1485571	48195 3642911	283555	615420	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 767143	+++++ 1067039	35371 2533107	219158	476401	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 996362	14067 1460607	48220 3638913	260016	581584	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 460739	+++++ 647317	22952 1545639	129626	282300	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 840294	+++++ 1148371	36537 2646650	243049	524824	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1388 458282	6498 662650	22000 1626225	122627	272443	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	918 374248	4944 533660	16871 1268385	99393	225512	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 357891	4864 539007	18013 1347754	91150	197106	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 208049	+++++ 310556	9635 758379	54850	118844	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 533929	8175 727562	22865 1681338	155332	330732	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 337722	4813 525443	16938 1345243	82092	183474	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 891838	12369 1334940	41214 3355222	228857	497948	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 858270	+++++ 1194457	38673 2789074	241207	521705	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 315566	+++++ 631548	120492 1469927	138790	223732	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 278688	3781 411330	13126 1006424	73505	161112	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 123646	+++++ 200640	+++++ 475038	36220	78759	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 654807	9087 1009036	31117 2540759	165358	363741	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 327009	4440 503618	15797 1279470	81330	179082	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 718260	+++++ 982614	+++++ 2271354	208491	452678	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1018463	+++++ 1531699	47818 3854419	254365	563101	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 841229	+++++ 1167656	+++++ 2714929	243741	535412	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 641910	9027 876689	27089 1924638	186573	393640	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 405242	+++++ 560281	+++++ 1273480	119806	251452	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 520511	+++++ 735180	24003 1739760	146358	314162	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 954321	+++++ 1377441	+++++ 3323910	259825	572732	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1113222	15535 1656900	50916 4088377	291046	633675	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 609325	8906 888316	27947 2170702	167183	354471	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 330117	+++++ 482676	14728 1176923	89144	196652	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 652531	9449 947905	30445 2300573	176222	379859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2163 780551	10770 1146157	35552 2830795	206384	449403	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1365349	+++++ 1897989	+++++ 4444588	376504	842068	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 396037	5526 602082	18758 1559881	98523	220428	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 211632	+++++ 316658	12479 800406	53717	121870	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 29652	+++++ 45563	+++++ 115956	7445	16693	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 693564	+++++ 966434	+++++ 2246347	190134	418762	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 836492	11638 1253167	38944 3214617	216726	475524	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 537425	7636 819032	24900 2125806	134768	303388	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 806459	11701 1222395	37276 3139469	207104	459336	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1814 779548	10289 1188149	34273 3105700	198091	438354	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2600467	36412 3876851	118089 9805934	666433	1475000	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1357247	19925 2062993	66269 5382843	342419	756573	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 639246	8904 923752	28691 2300340	172295	375299	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1179425	17693 1723778	53470 4155561	309850	688443	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 362017	+++++ 545835	+++++ 1392436	91703	216330	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	+++++ 538355	7976 841268	25753 2243150	139070	307848	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 595269	8298 914179	26930 2433320	154506	345174	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 548815	+++++ 842733	23492 2275590	131774	312111	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 284309	+++++ 430974	+++++ 1132962	75284	174493	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 448269	6186 707890	20096 1979569	114194	256575	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1010321	12823 1551182	43038 4170670	256578	586991	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 815789	11210 1261306	36187 3189034	208571	468537	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1579397	+++++ 2317974	72580 4596176	390957	903061	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 958832	13506 1493165	44773 4090317	243850	587209	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1718607	24100 2534117	72904 4956545	448312	966140	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 843136	12072 1296539	39651 3178018	212870	494476	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 508282	6844 785573	22834 2069646	128770	306394	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1823 681964	9620 1067103	30892 3475644	172631	460339	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1542431	+++++ 2268849	85844 4657809	366924	858091	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 852242	9316 1329992	32311 3876644	205018	538039	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 829372	10070 1300785	35469 3663917	209334	511485	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1204149	16555 1881752	52818 5306924	302430	757856	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2241131	30123 3515369	94409 9813541	560871	1337815	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1409749	18507 2160641	58059 5777958	355982	795266	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1682551	21920 2657108	70451 7576082	412711	1026544	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 823189	10652 1289571	34346 3566411	203248	509729	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1326866	14316 2081248	49754 5900002	308242	802306	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 821248	7276 1263966	26995 3585169	174433	521354	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2436818	30504 3809046	96756 10233994	597571	1476679	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1419274	18323 2198015	58856 5700360	355444	827108	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3248668	41684 4993793	131077 13095500	802880	1911578	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1159330	+++++ 1797166	51285 4599025	290087	660406	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2588826	31206 3899784	100463 10195809	615184	1529467	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1856912	+++++ 2786688	75727 6589066	493185	1082123	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2336199	28505 3636150	91827 8854968	553717	1321232	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2012187	25790 3004256	84236 9184375	508211	1254491	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 955781	9930 1431256	34939 4481883	234630	560539	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1791075	23831 2677674	74814 8298183	460734	1059197	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39486-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1975372	25945 3021759	85878 9619063	520908	1202879	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2849957	38656 4420154	122892 13595235	754794	1746210	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2228839	30519 3690101	98071 11734073	605816	1355353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1258598	15592 1919633	53486 6389231	321397	760762	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1219381	15404 1901163	54196 6462283	319162	752908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1767376	22168 2861217	74165 9519838	488466	1138075	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2359398	32954 4010221	107228 11967152	647191	1341560	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1977179	+++++ 3175692	+++++ 8054062	461696	1051935	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1110351	15220 1786189	52853 6104031	301011	697910	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1069875	+++++ 1751110	+++++ 2370662	242337	590073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 692820	+++++ 1221557	16650 2444210	119114	347885	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 818361	9895 1295151	31816 2138700	166925	436686	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1424230	+++++ 2643182	32091 5715000	262072	711231	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 361532	+++++ 684878	8081 1197753	59526	185326	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117412/3	25406-03.D
Level 2	IC 200-117412/4	25406-04.D
Level 3	IC 200-117412/5	25406-05.D
Level 4	IC 200-117412/6	25406-06.D
Level 5	ICIS 200-117412/7	25406-07.D
Level 6	IC 200-117412/8	25406-08.D
Level 7	IC 200-117412/9	25406-09.D
Level 8	IC 200-117412/17	25406-17.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5029	+++++ 0.4838	+++++ 0.5145	0.5249	0.5124	Ave		0.5077				3.1		30.0			
Dichlorodifluoromethane	+++++ 2.2469	+++++ 2.1217	2.6462 2.1894	2.3547	2.3349	Ave		2.3156				7.9		30.0			
Freon 22	+++++ 1.1076	+++++ 1.0628	1.2863 1.1061	1.1467	1.1382	Ave		1.1413				6.7		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2077	2.3673 2.0948	2.5511 2.1823	2.2644	2.2661	Ave		2.2762				6.5		30.0			
Chloromethane	+++++ 0.6399	+++++ 0.6174	0.7584 0.6549	0.6390	0.6480	Ave		0.6596				7.6		30.0			
n-Butane	+++++ 1.0504	+++++ 1.0167	1.2277 1.0803	1.0617	1.0730	Ave		1.0850				6.8		30.0			
Vinyl chloride	0.9223 0.8621	0.9114 0.8247	0.9500 0.8803	0.8749	0.8805	Ave		0.8883				4.4		30.0			
1,3-Butadiene	0.8122 0.6151	0.6218 0.5916	0.7014 0.6334	0.6127	0.6215	Ave		0.6512				11.1		30.0			
Bromomethane	+++++ 1.1284	1.1744 1.0869	1.2628 1.1468	1.1190	1.1292	Ave		1.1496				4.9		30.0			
Chloroethane	+++++ 0.5773	+++++ 0.5662	0.6437 0.5939	0.5593	0.5678	Ave		0.5847				5.3		30.0			
Isopentane	+++++ 0.9777	0.9855 0.9608	1.0610 0.9984	0.9395	0.9575	Ave		0.9829				4.0		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.2792	1.2628 1.2401	1.4121 1.2884	1.2398	1.2735	Ave		1.2851				4.6		30.0			
Trichlorofluoromethane	+++++ 2.6656	2.8617 2.5374	3.0033 2.6114	2.6999	2.7349	Ave		2.7306				5.8		30.0			
n-Pentane	+++++ 1.5123	+++++ 1.4855	1.6459 1.5265	1.4439	1.4773	Ave		1.5153				4.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4268	+++++ 0.3912	0.4884 0.3249	0.4341	0.4354	Ave		0.4168				13.1		30.0			
Ethyl ether	+++++ 0.7137	0.6977 0.6997	0.7789 0.7076	0.6978	0.7007	Ave		0.7137				4.1		30.0			
Acrolein	+++++ 0.2926	+++++ 0.3245	+++++ 0.3170	0.3198	0.3214	Ave		0.3150				4.1		30.0			
Freon TF	+++++ 2.3523	2.5788 2.2706	2.6137 2.3092	2.3494	2.3595	Ave		2.4048				5.6		30.0			
1,1-Dichloroethene	+++++ 1.2048	1.1920 1.1667	1.3233 1.1971	1.1919	1.1993	Ave		1.2107				4.2		30.0			
Acetone	+++++ 1.2818	+++++ 1.2390	+++++ 1.2162	1.2840	1.2888	Ave		1.2620				2.6		30.0			
Isopropyl alcohol	+++++ 1.5582	+++++ 1.4978	+++++ 1.5012	1.6060	1.5911	Ave		1.5509				3.2		30.0			
Carbon disulfide	+++++ 3.0695	+++++ 2.9906	3.3454 3.0315	3.0347	3.0407	Ave		3.0854				4.2		30.0			
3-Chloropropene	+++++ 1.1076	1.0796 1.0713	1.1616 1.0322	1.0971	1.0875	Ave		1.0910				3.6		30.0			
Acetonitrile	+++++ 0.6727	0.8359 0.6239	0.8187 0.6630	0.6494	0.6708	Ave		0.7049				12.1		30.0			
Methylene Chloride	+++++ 1.0041	+++++ 0.9843	1.3350 0.9836	1.0168	1.0043	Ave		1.0547				13.1		30.0			
tert-Butyl alcohol	+++++ 2.3211	+++++ 2.2132	+++++ 2.2120	2.3460	2.3492	Ave		2.2883				3.1		30.0			
Methyl tert-butyl ether	+++++ 3.2278	3.1981 3.1209	3.4309 3.1425	3.2074	3.2172	Ave		3.2207				3.1		30.0			
trans-1,2-Dichloroethene	+++++ 1.4722	1.5042 1.4371	1.6423 1.4548	1.4857	1.4580	Ave		1.4935				4.6		30.0			
Acrylonitrile	+++++ 0.7424	+++++ 0.7334	0.7774 0.7443	0.7152	0.7273	Ave		0.7400				2.9		30.0			
n-Hexane	+++++ 1.6206	1.5919 1.5825	1.7986 1.5917	1.5957	1.5818	Ave		1.6233				4.8		30.0			
1,1-Dichloroethane	2.4480 1.9130	1.9627 1.8569	2.1886 1.8534	1.9267	1.9102	Ave		2.0074				10.3		30.0			
Vinyl acetate	+++++ 2.3327	+++++ 2.2755	+++++ 2.2477	2.2761	2.2938	Ave		2.2851				1.4		30.0			
Methyl Ethyl Ketone	+++++ 0.6132	+++++ 0.5959	0.7174 0.5892	0.6024	0.6110	Ave		0.6215				7.7		30.0			
cis-1,2-Dichloroethene	+++++ 1.3884	1.4406 1.3329	1.5135 1.3293	1.3891	1.3884	Ave		1.3975				4.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1114	+++++ 0.1082	+++++ 0.1089	0.1106	0.1091	Ave		0.1096				1.2		30.0			
Tetrahydrofuran	+++++ 0.2215	+++++ 0.2161	+++++ 0.2262	0.2222	0.2181	Ave		0.2208				1.8		30.0			
Chloroform	+++++ 2.3491	2.4043 2.2493	2.6221 2.2654	2.3806	2.3478	Ave		2.3741				5.2		30.0			
1,1,1-Trichloroethane	+++++ 0.4865	0.4994 0.4625	0.5501 0.4797	0.5016	0.4920	Ave		0.4960				5.5		30.0			
Cyclohexane	+++++ 0.3663	0.3757 0.3527	0.3952 0.3662	0.3657	0.3627	Ave		0.3692				3.6		30.0			
Carbon tetrachloride	0.5430 0.5097	0.5009 0.4836	0.5600 0.5028	0.5209	0.5145	Ave		0.5169				4.7		30.0			
2,2,4-Trimethylpentane	+++++ 1.1472	1.1216 1.1152	1.2262 1.1544	1.1326	1.1256	Ave		1.1461				3.3		30.0			
Benzene	+++++ 0.8084	0.8227 0.7838	0.8950 0.8199	0.8095	0.8035	Ave		0.8204				4.3		30.0			
1,2-Dichloroethane	+++++ 0.2663	0.2648 0.2544	0.2896 0.2628	0.2744	0.2719	Ave		0.2692				4.1		30.0			
n-Heptane	+++++ 0.3747	0.3940 0.3658	0.4116 0.3791	0.3742	0.3688	Ave		0.3812				4.3		30.0			
n-Butanol	+++++ 0.1593	+++++ 0.1533	+++++ 0.1610	0.1553	0.1603	Ave		0.1578				2.1		30.0			
Trichloroethene	0.4191 0.3628	0.3691 0.3486	0.3864 0.3665	0.3664	0.3625	Ave		0.3727				5.8		30.0			
1,2-Dichloropropane	+++++ 0.2789	0.2721 0.2712	0.3079 0.2801	0.2761	0.2763	Ave		0.2804				4.5		30.0			
Methyl methacrylate	+++++ 0.2848	+++++ 0.2762	0.2868 0.2901	0.2761	0.2814	Ave		0.2826				2.0		30.0			
1,4-Dioxane	+++++ 0.1841	+++++ 0.1726	+++++ 0.1801	0.1911	0.1948	Ave		0.1845				4.8		30.0			
Dibromomethane	+++++ 0.4091	0.4265 0.3923	0.4511 0.4170	0.4243	0.4171	Ave		0.4196				4.3		30.0			
Bromodichloromethane	+++++ 0.5469	0.5327 0.5248	0.5969 0.5435	0.5558	0.5489	Ave		0.5499				4.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.4424	0.4339 0.4288	0.4607 0.4461	0.4380	0.4361	Ave		0.4409				2.4		30.0			
methyl isobutyl ketone	+++++ 0.4938	+++++ 0.4801	0.5128 0.4931	0.4740	0.4804	Ave		0.4890				2.9		30.0			
n-Octane	+++++ 0.5303	0.5251 0.5108	0.5726 0.5088	0.5340	0.5256	Ave		0.5296				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.7014	0.7597 0.6718	0.8133 0.6750	0.6969	0.7017	Ave		0.7171				7.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4338	0.4068 0.4185	0.4440 0.4357	0.4323	0.4301	Ave		0.4288				2.9		30.0			
1,1,2-Trichloroethane	+++++ 0.3333	0.3314 0.3215	0.3640 0.3305	0.3300	0.3313	Ave		0.3346				4.0		30.0			
Tetrachloroethene	0.7748 0.6671	0.6825 0.6340	0.7491 0.6455	0.6636	0.6697	Ave		0.6858				7.3		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5338	+++++ 0.5167	0.6330 0.5275	0.4785	0.5218	Ave		0.5352				9.7		30.0			
Dibromochloromethane	+++++ 0.7372	0.6907 0.6948	0.7772 0.7022	0.7098	0.7356	Ave		0.7211				4.3		30.0			
1,2-Dibromoethane	+++++ 0.6572	0.6256 0.6304	0.7031 0.6432	0.6414	0.6552	Ave		0.6509				4.0		30.0			
Chlorobenzene	+++++ 1.0170	1.0185 0.9701	1.1098 0.9872	1.0006	1.0086	Ave		1.0160				4.4		30.0			
Ethylbenzene	+++++ 1.5280	1.5614 1.4552	1.7044 1.4354	1.5208	1.5347	Ave		1.5343				5.7		30.0			
n-Nonane	+++++ 0.6376	0.6318 0.6139	0.6893 0.5981	0.6302	0.6293	Ave		0.6329				4.5		30.0			
m,p-Xylene	+++++ 0.6372	0.6426 0.6031	0.7124 0.5865	0.6368	0.6425	Ave		0.6373				6.2		30.0			
Xylene, o-	+++++ 0.6354	0.6472 0.6058	0.6977 0.5955	0.6397	0.6374	Ave		0.6369				5.2		30.0			
Styrene	+++++ 1.0112	0.8943 0.9646	1.0398 0.9644	0.9814	1.0093	Ave		0.9807				4.8		30.0			
Bromoform	+++++ 0.7609	0.6655 0.7112	0.7663 0.6800	0.6807	0.7589	Ave		0.7176				6.1		30.0			
Cumene	+++++ 1.8316	1.8138 1.7405	2.0072 1.6867	1.8363	1.8351	Ave		1.8216				5.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8859	0.8716 0.8386	0.9511 0.8085	0.8863	0.8874	Ave		0.8756				5.1		30.0			
n-Propylbenzene	+++++ 2.0852	2.0783 1.9402	2.3055 1.8268	2.1146	2.1211	Ave		2.0674				7.3		30.0			
1,2,3-Trichloropropane	+++++ 0.6286	+++++ 0.5922	0.7018 0.5616	0.6318	0.6364	Ave		0.6254				7.6		30.0			
n-Decane	+++++ 0.7795	+++++ 0.7574	0.8963 0.7615	0.8090	0.7787	Ave		0.7971				6.5		30.0			
4-Ethyltoluene	+++++ 1.7838	1.8012 1.6699	1.9571 1.6687	1.8310	1.8429	Ave		1.7935				5.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.4106	1.3770 1.3425	1.5411 1.3189	1.4017	1.4243	Ave		1.4023				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 1.4081	1.5302 1.3319	1.6204 1.4278	1.5047	1.5005	Ave		1.4748				6.4		30.0			
Alpha Methyl Styrene	+++++ 0.7730	0.6929 0.7446	0.7962 0.7768	0.7834	0.8043	Ave		0.7673				4.9		30.0			
tert-Butylbenzene	+++++ 1.4145	1.5062 1.3388	1.6532 1.3781	1.5077	1.4716	Ave		1.4671				7.1		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4291	1.4499 1.3805	1.6441 1.4437	1.5234	1.4777	Ave		1.4784				5.8		30.0			
sec-Butylbenzene	+++++ 2.1449	2.2636 2.0606	2.5239 2.0860	2.2869	2.1936	Ave		2.2228				7.1		30.0			
4-Isopropyltoluene	+++++ 1.8227	1.8537 1.7727	2.1153 1.7975	1.9325	1.8073	Ave		1.8717				6.4		30.0			
1,3-Dichlorobenzene	+++++ 1.0575	1.0169 1.0224	1.1680 1.0737	1.1140	1.1034	Ave		1.0794				5.0		30.0			
1,4-Dichlorobenzene	+++++ 1.0413	0.9515 1.0166	1.1111 1.0719	1.0914	1.0730	Ave		1.0510				5.1		30.0			
Benzyl chloride	+++++ 1.1548	1.0304 1.1568	1.1773 1.2313	1.1977	1.1509	Ave		1.1570				5.4		30.0			
n-Undecane	+++++ 0.8894	+++++ 0.8596	+++++ 0.8181	0.8365	0.8682	Ave		0.8544				3.3		30.0			
n-Butylbenzene	+++++ 1.6029	1.4895 1.5598	1.7498 1.5588	1.6508	1.5362	Ave		1.5925				5.4		30.0			
1,2-Dichlorobenzene	+++++ 0.9962	0.9752 0.9801	1.1313 1.0224	1.0539	1.0045	Ave		1.0234				5.3		30.0			
n-Dodecane	+++++ 0.6529	+++++ 0.6434	+++++ 0.5800	0.6210	0.6363	Ave		0.6267				4.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6911	+++++ 0.7059	0.3640 0.7165	0.5797	0.6805	Ave		0.6230				21.8		30.0			
Hexachlorobutadiene	+++++ 0.7084	0.6928 0.6614	0.8016 0.6318	0.7082	0.7203	Ave		0.7035				7.6		30.0			
Naphthalene	+++++ 1.4785	+++++ 1.5670	0.7651 1.6107	1.2827	1.4454	Ave		1.3582				23.0		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5639	+++++ 0.5809	0.2992 0.5463	0.4785	0.5564	Ave		0.5042				21.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117412/3	25406-03.D
Level 2	IC 200-117412/4	25406-04.D
Level 3	IC 200-117412/5	25406-05.D
Level 4	IC 200-117412/6	25406-06.D
Level 5	ICIS 200-117412/7	25406-07.D
Level 6	IC 200-117412/8	25406-08.D
Level 7	IC 200-117412/9	25406-09.D
Level 8	IC 200-117412/17	25406-17.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 210990	+++++ 285855	+++++ 678761	65282	136327	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 942728	+++++ 1253673	33878 2888317	292865	621158	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 464728	+++++ 627968	16468 1459149	142627	302794	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 926287	12484 1237754	32660 2878946	281641	602863	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 268506	+++++ 364802	9709 864002	79478	172389	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 440737	+++++ 600735	15718 1425143	132056	285466	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	980 361713	4806 487274	12162 1161300	108821	234231	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	863 258072	3279 349538	8980 835544	76207	165342	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 473439	6193 642242	16167 1512926	139177	300407	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 242220	+++++ 334551	8241 783496	69570	151059	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 410235	5197 567729	13583 1317167	116858	254717	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 536716	6659 732723	18078 1699627	154202	338791	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1118418	15091 1499320	38450 3444979	335808	727563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 634545	+++++ 877745	21072 2013850	179588	393021	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 239269	+++++ 462371	62602 1071650	108054	173815	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 299467	3679 413419	9972 933452	86788	186420	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 122780	+++++ 191716	+++++ 418162	39772	85498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 986985	13599 1341623	33462 3046406	292210	627704	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 505485	6286 689396	16942 1579209	148245	319059	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 537832	+++++ 732087	+++++ 1604491	159703	342857	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 653795	+++++ 885035	+++++ 1980369	199755	423293	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1287870	+++++ 1767110	42830 3999233	377446	808929	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 464727	5693 633025	14871 1361741	136458	289308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 282244	4408 368655	10482 874669	80769	178445	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 421304	+++++ 581582	17092 1297540	126472	267173	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 973880	+++++ 1307736	+++++ 2918058	291792	624975	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1354314	16865 1844089	43924 4145664	398928	855881	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 617704	7932 849161	21026 1919206	184785	387871	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 311481	+++++ 433343	9953 981875	88952	193481	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 679984	8395 935038	23026 2099861	198470	420815	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2601 802639	10350 1097218	28019 2445011	239634	508178	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 978745	+++++ 1344518	+++++ 2965169	283097	610224	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 257284	+++++ 352080	9185 777234	74923	162541	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 582521	7597 787587	19377 1753614	172773	369363	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 46723	+++++ 63914	+++++ 143705	13753	29021	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 450729	+++++ 619561	+++++ 1392761	133147	281732	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 985605	12679 1329094	33569 2988542	296095	624600	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 989869	12894 1326158	34500 2953753	300579	635646	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 745386	9700 1011386	24786 2254709	219142	468618	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2774 1037111	12933 1386699	35120 3095960	312096	664681	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2334305	28962 3197982	76901 7107621	678649	1454187	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1644992	21244 2247515	56128 5048033	485046	1038012	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 541780	6838 729576	18163 1618260	164424	351308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 762452	10174 1048930	25815 2333823	224245	476398	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 324081	+++++ 439623	+++++ 991145	93080	207134	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2141 738212	9531 999583	24231 2256311	219577	468298	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 567466	7027 777621	19310 1724789	165424	356916	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 579511	+++++ 791974	17985 1786122	165457	363580	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 374678	+++++ 494914	+++++ 1108719	114498	251695	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 832505	11012 1124812	28294 2567728	254246	538843	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1112872	13754 1504858	37432 3346527	333029	709193	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 900291	11204 1229712	28895 2746619	262424	563364	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1004806	+++++ 1376741	32158 3035705	284026	620576	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1079095	13558 1464685	35913 3132573	319981	678976	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1277296	17283 1729121	44439 3775773	381354	814042	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 882808	10505 1200089	27847 2682431	259025	555707	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 606971	7538 827409	19891 1848586	180581	384293	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	3544 1214722	15527 1631781	40933 3611022	363113	776951	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 972045	+++++ 1329951	34587 2950528	261819	605307	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1342341	15713 1788240	42467 3928219	388389	853364	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1196670	14232 1622513	38420 3597765	350983	760098	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1852015	23170 2496779	60641 5522031	547505	1170108	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2782511	35521 3745237	93128 8029176	832162	1780457	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1161061	14372 1580020	37663 3345521	344818	730065	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2320534	29239 3104207	77846 6562001	696919	1490804	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1157045	14722 1559037	38123 3331127	350034	739444	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1841423	20344 2482613	56816 5394551	537012	1170859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1385539	15139 1830410	41872 3803648	372459	880380	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3335308	41262 4479589	109675 9434910	1004765	2128904	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1613143	19827 2158409	51966 4522485	484955	1029521	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3797080	47280 4993516	125974 10218912	1157084	2460718	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1144651	+++++ 1524148	38346 3141599	345723	738287	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1419463	+++++ 1949374	48973 4259872	442687	903393	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3248202	40976 4297720	106936 9334577	1001878	2137929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2568660	31325 3455068	84206 7377890	766985	1652384	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2564053	34811 3427877	88540 7986620	823358	1740818	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1407572	15762 1916421	43506 4345529	428670	933114	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2575773	34265 3445528	90329 7708676	824961	1707270	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39500-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2602400	32983 3552915	89833 8075820	833598	1714347	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3905882	51494 5303245	137905 11668571	1251324	2544869	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3319141	42169 4562286	115582 10055074	1057401	2096703	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1925637	23133 2631344	63821 6006040	609565	1280053	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1896170	21646 2616537	60709 5995773	597178	1244806	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2102793	23441 2977156	64326 6887681	655364	1335135	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1619643	+++++ 2212449	+++++ 4576023	457712	1007234	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2918761	33885 4014428	95610 8719587	903273	1782122	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1814021	22184 2522582	61815 5719127	576667	1165286	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1188830	+++++ 1655933	+++++ 3244209	339794	738177	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1258423	+++++ 1816811	19890 4008050	317188	789506	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1290009	15761 1702309	43802 3534406	387495	835618	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2692354	+++++ 4032881	41803 9010043	701877	1676835	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1026769	+++++ 1494985	16347 3055611	261808	645454	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117345/3	25386_03.D
Level 2	IC 200-117345/18	25386_18.D
Level 3	IC 200-117345/17	25386_17.D
Level 4	IC 200-117345/6	25386_06.D
Level 5	ICIS 200-117345/7	25386_07.D
Level 6	IC 200-117345/8	25386_08.D
Level 7	IC 200-117345/9	25386_09.D
Level 8	IC 200-117345/10	25386_10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9886	+++++ 0.8416	+++++ 0.8035	1.1686	1.1172	Ave		0.9839				16.4		30.0			
Dichlorodifluoromethane	+++++ 2.2704	+++++ 2.0563	2.4154 2.1148	2.4962	2.4722	Ave		2.3042				8.1		30.0			
Freon 22	+++++ 1.6959	+++++ 1.4770	1.7727 1.4705	1.9293	1.9138	Ave		1.7099				11.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2026	2.2490 2.0218	2.4167 2.1124	2.2890	2.3363	Ave		2.2325				6.0		30.0			
Chloromethane	+++++ 1.0185	+++++ 0.8960	1.1503 0.8973	1.1411	1.1340	Ave		1.0395				11.6		30.0			
n-Butane	+++++ 1.8576	+++++ 1.5896	1.8312 1.5364	2.1396	2.1083	Ave		1.8438				13.7		30.0			
Vinyl chloride	1.4000 1.0131	1.0389 0.9172	1.1026 0.9440	1.0795	1.0944	Ave		1.0737				13.8		30.0			
1,3-Butadiene	0.9260 0.8273	0.7904 0.7387	0.8455 0.7363	0.8750	0.9059	Ave		0.8306				8.6		30.0			
Bromomethane	+++++ 0.7912	0.7776 0.7461	0.9028 0.7824	0.8024	0.7918	Ave		0.7992				6.1		30.0			
Chloroethane	+++++ 0.4599	+++++ 0.4299	0.4829 0.4403	0.4829	0.4774	Ave		0.4622				5.0		30.0			
Isopentane	+++++ 1.1803	1.3070 1.0071	1.1459 0.9760	1.3674	1.3286	Ave		1.1875				13.1		30.0			
Bromoethene(Vinyl Bromide)	+++++ 0.7466	0.7695 0.7273	0.8489 0.7809	0.7227	0.7370	Ave		0.7618				5.8		30.0			
Trichlorofluoromethane	+++++ 1.9715	1.9775 1.8478	2.0656 1.9478	2.0147	2.0003	Ave		1.9750				3.4		30.0			
n-Pentane	+++++ 1.8973	+++++ 1.6534	1.9382 1.6191	2.1234	2.0958	Ave		1.8879				11.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.5221	+++++ 0.4370	0.6031 0.3413	0.6105	0.5989	Ave		0.5188				21.1		30.0			
Ethyl ether	+++++ 0.6161	0.6045 0.5694	0.6578 0.5842	0.6471	0.6472	Ave		0.6180				5.5		30.0			
Acrolein	+++++ 0.2733	+++++ 0.2777	+++++ 0.2758	0.3189	0.3164	Ave		0.2924				7.9		30.0			
Freon TF	+++++ 1.4475	1.4528 1.3967	1.5595 1.4750	1.4557	1.4612	Ave		1.4641				3.3		30.0			
1,1-Dichloroethene	+++++ 0.7229	0.7098 0.6971	0.7917 0.7428	0.7160	0.7194	Ave		0.7285				4.3		30.0			
Acetone	+++++ 1.5878	+++++ 1.3601	+++++ 1.3186	1.8354	1.8185	Ave		1.5841				15.4		30.0			
Carbon disulfide	+++++ 2.2514	+++++ 2.1202	2.3965 2.2376	2.2392	2.2621	Ave		2.2512				3.9		30.0			
Isopropyl alcohol	+++++ 1.8596	+++++ 1.6163	+++++ 1.5761	2.1457	2.1508	Ave		1.8697				14.8		30.0			
3-Chloropropene	+++++ 1.4190	1.4432 1.2135	1.3576 1.1173	1.6424	1.5813	Ave		1.3963				13.4		30.0			
Acetonitrile	+++++ 0.8958	+++++ 0.7755	+++++ 0.7393	1.0547	1.0101	Ave		0.8951				15.5		30.0			
Methylene Chloride	+++++ 1.1506	+++++ 1.0176	1.2030 1.0100	1.2884	1.2620	Ave		1.1553				10.3		30.0			
tert-Butyl alcohol	+++++ 2.1096	+++++ 1.9067	+++++ 1.9296	2.2873	2.3008	Ave		2.1068				8.9		30.0			
Methyl tert-butyl ether	+++++ 2.4609	2.4837 2.2935	2.5518 2.3734	2.5621	2.5456	Ave		2.4673				4.1		30.0			
trans-1,2-Dichloroethene	+++++ 1.3470	1.4239 1.2296	1.4006 1.2601	1.4717	1.4240	Ave		1.3653				6.6		30.0			
Acrylonitrile	+++++ 0.7298	+++++ 0.6681	0.7381 0.6832	0.7848	0.7900	Ave		0.7323				6.9		30.0			
n-Hexane	+++++ 1.4425	1.5107 1.3121	1.5258 1.3355	1.5513	1.5260	Ave		1.4577				6.7		30.0			
1,1-Dichloroethane	2.1818 1.7255	1.7219 1.5865	1.7818 1.6433	1.8168	1.8053	Ave		1.7829				10.1		30.0			
Vinyl acetate	+++++ 3.0182	+++++ 2.6272	+++++ 2.5802	3.3144	3.3827	Ave		2.9846				12.5		30.0			
cis-1,2-Dichloroethene	+++++ 0.8755	0.8835 0.8334	0.9401 0.9055	0.8673	0.8855	Ave		0.8844				3.7		30.0			
Methyl Ethyl Ketone	+++++ 0.4678	+++++ 0.4383	0.6254 0.4646	0.4729	0.4896	Ave		0.4931				13.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0655	+++++ 0.0631	+++++ 0.0673	0.0655	0.0671	Ave		0.0657				2.6		30.0			
Tetrahydrofuran	+++++ 0.2978	+++++ 0.2555	+++++ 0.2499	0.3189	0.3212	Ave		0.2887				11.8		30.0			
Chloroform	+++++ 1.8492	1.8606 1.7346	1.9518 1.8661	1.9079	1.9103	Ave		1.8686				3.7		30.0			
Cyclohexane	+++++ 0.2308	0.2331 0.2165	0.2477 0.2365	0.2261	0.2327	Ave		0.2319				4.1		30.0			
1,1,1-Trichloroethane	+++++ 0.3463	0.3572 0.3231	0.3708 0.3493	0.3474	0.3523	Ave		0.3495				4.1		30.0			
Carbon tetrachloride	0.3519 0.3347	0.3141 0.3141	0.3409 0.3455	0.3323	0.3362	Ave		0.3337				4.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.1166	1.1115 1.0248	1.1746 1.0910	1.1179	1.1314	Ave		1.1097				4.1		30.0			
Benzene	+++++ 0.5828	0.6082 0.5453	0.6591 0.5989	0.5744	0.5803	Ave		0.5927				6.0		30.0			
1,2-Dichloroethane	+++++ 0.2745	0.2718 0.2442	0.2854 0.2559	0.2890	0.2879	Ave		0.2727				6.3		30.0			
n-Heptane	+++++ 0.5064	0.5401 0.4557	0.5318 0.4624	0.5198	0.5281	Ave		0.5063				6.7		30.0			
n-Butanol	+++++ 0.1554	+++++ 0.1443	+++++ 0.1549	0.1538	0.1659	Ave		0.1549				5.0		30.0			
Trichloroethene	+++++ 0.2312	0.2435 0.2224	0.2562 0.2496	0.2333	0.2361	Ave		0.2389				4.8		30.0			
1,2-Dichloropropane	+++++ 0.2556	0.2533 0.2417	0.2679 0.2707	0.2592	0.2648	Ave		0.2590				3.8		30.0			
Methyl methacrylate	+++++ 0.2357	+++++ 0.2228	0.2337 0.2532	0.2210	0.2394	Ave		0.2343				5.0		30.0			
1,4-Dioxane	+++++ 0.1221	+++++ 0.1139	+++++ 0.1261	0.1263	0.1338	Ave		0.1244				5.8		30.0			
Dibromomethane	+++++ 0.1925	0.1888 0.1871	0.1999 0.2202	0.1916	0.1968	Ave		0.1967				5.7		30.0			
Bromodichloromethane	+++++ 0.4338	0.3914 0.4100	0.4281 0.4640	0.4304	0.4502	Ave		0.4297				5.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.3503	0.3422 0.3334	0.3599 0.3548	0.3499	0.3594	Ave		0.3500				2.7		30.0			
methyl isobutyl ketone	+++++ 0.6782	+++++ 0.6127	0.7219 0.5114	0.6558	0.6927	Ave		0.6455				11.7		30.0			
Toluene	+++++ 0.4195	0.4438 0.4039	0.4999 0.4524	0.4204	0.4118	Ave		0.4360				7.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.7379	0.7357 0.6699	0.7251 0.5515	0.7520	0.7411	Ave		0.7019				10.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.3620	0.3685 0.3427	0.3944 0.3536	0.3571	0.3793	Ave		0.3654				4.7		30.0			
1,1,2-Trichloroethane	+++++ 0.2224	0.2249 0.2125	0.2550 0.2289	0.2220	0.2149	Ave		0.2258				6.2		30.0			
Tetrachloroethene	0.3629 0.2983	0.3161 0.2887	0.3449 0.3844	0.2976	0.3228	Ave		0.3270				10.5		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.6748	+++++ 0.6137	0.9585 0.5152	0.6326	0.6017	Ave		0.6661				22.9		30.0			
Dibromochloromethane	+++++ 0.3728	0.3061 0.3598	0.3608 0.4288	0.3535	0.3773	Ave		0.3656				9.9		30.0			
1,2-Dibromoethane	+++++ 0.3628	0.3309 0.3519	0.3960 0.4052	0.3609	0.3587	Ave		0.3666				7.0		30.0			
Chlorobenzene	+++++ 0.5268	0.5440 0.5090	0.5897 0.5869	0.5214	0.5314	Ave		0.5442				5.9		30.0			
Ethylbenzene	+++++ 0.9805	0.9899 0.9509	1.0541 1.0854	0.9670	0.9381	Ave		0.9951				5.5		30.0			
n-Nonane	+++++ 0.6167	0.6081 0.5845	0.6483 0.6390	0.6137	0.5577	Ave		0.6097				5.1		30.0			
m,p-Xylene	+++++ 0.3680	0.3601 0.3594	0.3933 0.4190	0.3558	0.3599	Ave		0.3736				6.3		30.0			
Xylene, o-	+++++ 0.3601	0.3500 0.3488	0.3835 0.3944	0.3504	0.3574	Ave		0.3635				5.0		30.0			
Styrene	+++++ 0.5805	0.4704 0.5630	0.5555 0.6525	0.5314	0.5626	Ave		0.5594				9.8		30.0			
Bromoform	+++++ 0.3593	0.2391 0.3419	0.3014 0.3965	0.3007	0.3656	Ave		0.3292				16.0		30.0			
Cumene	+++++ 1.0661	1.0024 1.0304	1.0803 1.1319	1.0302	1.0355	Ave		1.0538				4.1		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.6209	0.6021 0.5946	0.6572 0.6305	0.6128	0.5800	Ave		0.6140				4.1		30.0			
n-Propylbenzene	+++++ 1.4212	1.3698 1.3508	1.4635 1.4484	1.3842	1.3405	Ave		1.3969				3.4		30.0			
1,2,3-Trichloropropane	+++++ 0.5072	+++++ 0.4861	0.5726 0.5087	0.5001	0.4631	Ave		0.5063				7.2		30.0			
4-Ethyltoluene	+++++ 1.1326	1.0254 1.0549	1.1217 1.1277	1.0606	1.0725	Ave		1.0851				3.9		30.0			
n-Decane	+++++ 0.8124	+++++ 0.7538	0.8455 0.7288	0.8503	0.7588	Ave		0.7916				6.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.0221	0.9367 0.9836	1.0253 0.9794	0.9546	0.9265	Ave		0.9754				4.0		30.0			
1,3,5-Trimethylbenzene	+++++ 0.8803	0.8475 0.8127	0.9405 1.0158	0.8762	0.8797	Ave		0.8932				7.4		30.0			
Alpha Methyl Styrene	+++++ 0.4181	0.3263 0.3872	0.3901 0.4957	0.4045	0.3931	Ave		0.4021				12.5		30.0			
tert-Butylbenzene	+++++ 0.7836	0.7831 0.7243	0.8353 0.9178	0.7943	0.7428	Ave		0.7973				8.0		30.0			
1,2,4-Trimethylbenzene	+++++ 0.8642	0.8526 0.8174	0.9589 1.0639	0.8981	0.8435	Ave		0.8998				9.5		30.0			
sec-Butylbenzene	+++++ 1.2468	1.2703 1.1957	1.3721 1.5036	1.3013	1.2245	Ave		1.3021				8.1		30.0			
4-Isopropyltoluene	+++++ 0.9751	1.0029 0.9982	1.0950 1.2978	1.0445	0.9504	Ave		1.0520				11.2		30.0			
1,3-Dichlorobenzene	+++++ 0.5506	0.5124 0.5193	0.5972 0.7067	0.5541	0.5335	Ave		0.5677				11.9		30.0			
1,4-Dichlorobenzene	+++++ 0.5335	0.5062 0.5143	0.6051 0.7147	0.5503	0.5280	Ave		0.5646				13.1		30.0			
Benzyl chloride	+++++ 0.7732	0.7284 0.7740	0.8281 1.0529	0.8421	0.7981	Ave		0.8281				12.8		30.0			
n-Butylbenzene	+++++ 1.0322	1.0829 1.0848	1.1973 1.3236	1.1158	0.9408	Ave		1.1110				11.0		30.0			
n-Undecane	+++++ 0.8650	+++++ 0.8590	+++++ 0.8908	0.7960	0.7377	Ave		0.8297				7.5		30.0			
1,2-Dichlorobenzene	+++++ 0.4858	0.5001 0.4832	0.5901 0.6751	0.5190	0.4894	Ave		0.5347				13.5		30.0			
n-Dodecane	+++++ 0.4681	+++++ 0.4737	+++++ 0.2622	0.4178	0.4138	Ave		0.4071				21.0		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3031	+++++ 0.3304	0.1859 0.2703	0.2054	0.2440	Ave		0.2565				21.8		30.0			
Hexachlorobutadiene	+++++ 0.3580	0.3252 0.3503	0.3552 0.2365	0.2878	0.3062	Ave		0.3170				14.0		30.0			
Naphthalene	+++++ 0.6231	+++++ 0.7150	0.3583 0.6321	0.4518	0.4988	Ave		0.5465				24.3		30.0			
1,2,3-Trichlorobenzene	+++++ 0.1582	+++++ 0.1853	0.0902 0.1325	0.1026	0.1300	Ave		0.1331				26.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117345/3	25386_03.D
Level 2	IC 200-117345/18	25386_18.D
Level 3	IC 200-117345/17	25386_17.D
Level 4	IC 200-117345/6	25386_06.D
Level 5	ICIS 200-117345/7	25386_07.D
Level 6	IC 200-117345/8	25386_08.D
Level 7	IC 200-117345/9	25386_09.D
Level 8	IC 200-117345/10	25386_10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 447222	+++++ 608011	+++++ 1384098	132749	278105	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1027070	+++++ 1485571	48195 3642911	283555	615420	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 767143	+++++ 1067039	35371 2533107	219158	476401	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 996362	14067 1460607	48220 3638913	260016	581584	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 460739	+++++ 647317	22952 1545639	129626	282300	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 840294	+++++ 1148371	36537 2646650	243049	524824	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1388 458282	6498 662650	22000 1626225	122627	272443	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	918 374248	4944 533660	16871 1268385	99393	225512	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 357891	4864 539007	18013 1347754	91150	197106	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 208049	+++++ 310556	9635 758379	54850	118844	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 533929	8175 727562	22865 1681338	155332	330732	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 337722	4813 525443	16938 1345243	82092	183474	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 891838	12369 1334940	41214 3355222	228857	497948	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 858270	+++++ 1194457	38673 2789074	241207	521705	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 315566	+++++ 631548	120492 1469927	138790	223732	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 278688	3781 411330	13126 1006424	73505	161112	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 123646	+++++ 200640	+++++ 475038	36220	78759	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 654807	9087 1009036	31117 2540759	165358	363741	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 327009	4440 503618	15797 1279470	81330	179082	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 718260	+++++ 982614	+++++ 2271354	208491	452678	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1018463	+++++ 1531699	47818 3854419	254365	563101	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 841229	+++++ 1167656	+++++ 2714929	243741	535412	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 641910	9027 876689	27089 1924638	186573	393640	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 405242	+++++ 560281	+++++ 1273480	119806	251452	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 520511	+++++ 735180	24003 1739760	146358	314162	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 954321	+++++ 1377441	+++++ 3323910	259825	572732	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1113222	15535 1656900	50916 4088377	291046	633675	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 609325	8906 888316	27947 2170702	167183	354471	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 330117	+++++ 482676	14728 1176923	89144	196652	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 652531	9449 947905	30445 2300573	176222	379859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2163 780551	10770 1146157	35552 2830795	206384	449403	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1365349	+++++ 1897989	+++++ 4444588	376504	842068	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 396037	5526 602082	18758 1559881	98523	220428	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 211632	+++++ 316658	12479 800406	53717	121870	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 29652	+++++ 45563	+++++ 115956	7445	16693	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 693564	+++++ 966434	+++++ 2246347	190134	418762	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 836492	11638 1253167	38944 3214617	216726	475524	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 537425	7636 819032	24900 2125806	134768	303388	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 806459	11701 1222395	37276 3139469	207104	459336	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	1814 779548	10289 1188149	34273 3105700	198091	438354	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2600467	36412 3876851	118089 9805934	666433	1475000	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1357247	19925 2062993	66269 5382843	342419	756573	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 639246	8904 923752	28691 2300340	172295	375299	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1179425	17693 1723778	53470 4155561	309850	688443	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 362017	+++++ 545835	+++++ 1392436	91703	216330	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	+++++ 538355	7976 841268	25753 2243150	139070	307848	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 595269	8298 914179	26930 2433320	154506	345174	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 548815	+++++ 842733	23492 2275590	131774	312111	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 284309	+++++ 430974	+++++ 1132962	75284	174493	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 448269	6186 707890	20096 1979569	114194	256575	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1010321	12823 1551182	43038 4170670	256578	586991	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 815789	11210 1261306	36187 3189034	208571	468537	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1579397	+++++ 2317974	72580 4596176	390957	903061	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 958832	13506 1493165	44773 4090317	243850	587209	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1718607	24100 2534117	72904 4956545	448312	966140	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 843136	12072 1296539	39651 3178018	212870	494476	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 508282	6844 785573	22834 2069646	128770	306394	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	1823 681964	9620 1067103	30892 3475644	172631	460339	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1542431	+++++ 2268849	85844 4657809	366924	858091	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 852242	9316 1329992	32311 3876644	205018	538039	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 829372	10070 1300785	35469 3663917	209334	511485	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1204149	16555 1881752	52818 5306924	302430	757856	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2241131	30123 3515369	94409 9813541	560871	1337815	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1409749	18507 2160641	58059 5777958	355982	795266	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 1682551	21920 2657108	70451 7576082	412711	1026544	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 823189	10652 1289571	34346 3566411	203248	509729	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1326866	14316 2081248	49754 5900002	308242	802306	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 821248	7276 1263966	26995 3585169	174433	521354	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 2436818	30504 3809046	96756 10233994	597571	1476679	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1419274	18323 2198015	58856 5700360	355444	827108	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3248668	41684 4993793	131077 13095500	802880	1911578	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1159330	+++++ 1797166	51285 4599025	290087	660406	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 2588826	31206 3899784	100463 10195809	615184	1529467	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1856912	+++++ 2786688	75727 6589066	493185	1082123	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2336199	28505 3636150	91827 8854968	553717	1321232	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2012187	25790 3004256	84236 9184375	508211	1254491	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 955781	9930 1431256	34939 4481883	234630	560539	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 1791075	23831 2677674	74814 8298183	460734	1059197	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39531-1 Analy Batch No.: 117345

SDG No.:

Instrument ID: CHC.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/07/2017 14:43 Calibration End Date: 06/08/2017 10:01 Calibration ID: 37350

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 1975372	25945 3021759	85878 9619063	520908	1202879	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 2849957	38656 4420154	122892 13595235	754794	1746210	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 2228839	30519 3690101	98071 11734073	605816	1355353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1258598	15592 1919633	53486 6389231	321397	760762	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1219381	15404 1901163	54196 6462283	319162	752908	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 1767376	22168 2861217	74165 9519838	488466	1138075	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2359398	32954 4010221	107228 11967152	647191	1341560	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1977179	+++++ 3175692	+++++ 8054062	461696	1051935	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1110351	15220 1786189	52853 6104031	301011	697910	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1069875	+++++ 1751110	+++++ 2370662	242337	590073	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 692820	+++++ 1221557	16650 2444210	119114	347885	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 818361	9895 1295151	31816 2138700	166925	436686	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 1424230	+++++ 2643182	32091 5715000	262072	711231	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 361532	+++++ 684878	8081 1197753	59526	185326	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: ICV 200-118437/14 Calibration Date: 07/12/2017 02:42

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-25865-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6842	0.6146		8.98	10.0	-10.2	30.0
Dichlorodifluoromethane	Ave	3.707	3.377		9.11	10.0	-8.9	30.0
Freon 22	Ave	1.906	1.709		8.96	10.0	-10.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.148	3.191		10.1	10.0	1.4	30.0
Chloromethane	Ave	0.9499	0.8202		8.63	10.0	-13.7	30.0
n-Butane	Ave	1.347	1.237		9.18	10.0	-8.2	30.0
Vinyl chloride	Ave	1.137	0.9780		8.60	10.0	-14.0	30.0
1,3-Butadiene	Ave	0.7296	0.6228		8.53	10.0	-14.6	30.0
Bromomethane	Ave	1.212	1.100		9.08	10.0	-9.2	30.0
Chloroethane	Ave	0.4345	0.3951		9.09	10.0	-9.1	30.0
Isopentane	Ave	0.8306	0.8836		10.6	10.0	6.4	30.0
Bromoethene(Vinyl Bromide)	Ave	1.156	1.061		9.17	10.0	-8.2	30.0
Trichlorofluoromethane	Ave	3.335	2.904		8.71	10.0	-12.9	30.0
n-Pentane	Ave	1.224	1.332		10.9	10.0	8.9	30.0
Ethanol	Ave	0.2878	0.2562		13.4	15.0	-11.0	30.0
Ethyl ether	Ave	0.4865	0.5191		10.7	10.0	6.7	30.0
Freon TF	Ave	2.255	2.069		9.17	10.0	-8.3	30.0
Acrolein	Ave	0.1485	0.2076		14.0	10.0	39.8*	30.0
1,1-Dichloroethene	Ave	1.001	0.8816		8.81	10.0	-11.9	30.0
Acetone	Ave	1.194	1.174		9.83	10.0	-1.7	30.0
Carbon disulfide	Ave	2.717	2.930		10.8	10.0	7.8	30.0
Isopropyl alcohol	Ave	1.124	0.9751		8.67	10.0	-13.2	30.0
3-Chloropropene	Ave	0.9439	0.8648		9.16	10.0	-8.4	30.0
Acetonitrile	Ave	0.4260	0.4705		11.0	10.0	10.4	30.0
Methylene Chloride	Ave	1.082	0.9943		9.19	10.0	-8.1	30.0
tert-Butyl alcohol	Ave	1.641	1.524		9.28	10.0	-7.1	30.0
Methyl tert-butyl ether	Ave	2.489	2.436		9.79	10.0	-2.1	30.0
trans-1,2-Dichloroethene	Ave	1.447	1.424		9.84	10.0	-1.6	30.0
Acrylonitrile	Ave	0.4583	0.4815		10.5	10.0	5.1	30.0
n-Hexane	Ave	1.176	1.249		10.6	10.0	6.2	30.0
1,1-Dichloroethane	Ave	1.975	1.823		9.23	10.0	-7.7	30.0
Vinyl acetate	Ave	1.792	1.844		10.3	10.0	2.9	30.0
cis-1,2-Dichloroethene	Ave	1.189	1.127		9.47	10.0	-5.3	30.0
Methyl Ethyl Ketone	Ave	0.4029	0.3848		9.55	10.0	-4.5	30.0
Ethyl acetate	Ave	0.0535	0.0583		10.9	10.0	8.8	30.0
Tetrahydrofuran	Ave	0.1660	0.1690		10.2	10.0	1.8	30.0
Chloroform	Ave	3.238	2.707		8.36	10.0	-16.4	30.0
Cyclohexane	Ave	0.2730	0.2665		9.76	10.0	-2.4	30.0
1,1,1-Trichloroethane	Ave	0.6189	0.5685		9.18	10.0	-8.1	30.0
Carbon tetrachloride	Ave	0.6258	0.6160		9.84	10.0	-1.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: ICV 200-118437/14 Calibration Date: 07/12/2017 02:42

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-25865-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.033	1.005		9.73	10.0	-2.6	30.0
Benzene	Ave	0.7191	0.6555		9.11	10.0	-8.8	30.0
1,2-Dichloroethane	Ave	0.4366	0.3970		9.09	10.0	-9.1	30.0
n-Heptane	Ave	0.4046	0.3803		9.40	10.0	-6.0	30.0
n-Butanol	Ave	0.1037	0.1185		11.4	10.0	14.3	30.0
Trichloroethene	Ave	0.4272	0.3796		8.88	10.0	-11.1	30.0
1,2-Dichloropropane	Ave	0.2862	0.2808		9.81	10.0	-1.9	30.0
Methyl methacrylate	Ave	0.2065	0.2201		10.7	10.0	6.6	30.0
1,4-Dioxane	Ave	0.1219	0.1226		10.1	10.0	0.5	30.0
Dibromomethane	Ave	0.3119	0.2964		9.50	10.0	-5.0	30.0
Bromodichloromethane	Ave	0.6749	0.6538		9.69	10.0	-3.1	30.0
cis-1,3-Dichloropropene	Ave	0.4359	0.4481		10.3	10.0	2.8	30.0
methyl isobutyl ketone	Ave	0.4887	0.4856		9.94	10.0	-0.6	30.0
Toluene	Ave	0.5593	0.5539		9.90	10.0	-1.0	30.0
n-Octane	Ave	0.5915	0.5686		9.61	10.0	-3.9	30.0
trans-1,3-Dichloropropene	Ave	0.4736	0.4778		10.1	10.0	0.9	30.0
1,1,2-Trichloroethane	Ave	0.3203	0.3210		10.0	10.0	0.2	30.0
Tetrachloroethene	Ave	0.5141	0.4662		9.07	10.0	-9.3	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5031	0.5061		10.1	10.0	0.6	30.0
Dibromochloromethane	Ave	0.6687	0.6536		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.5756	0.5667		9.84	10.0	-1.5	30.0
Chlorobenzene	Ave	0.7652	0.7383		9.65	10.0	-3.5	30.0
Ethylbenzene	Ave	1.182	1.166		9.86	10.0	-1.3	30.0
n-Nonane	Ave	0.5576	0.5524		9.90	10.0	-0.9	30.0
m,p-Xylene	Ave	0.4570	0.4522		19.8	20.0	-1.1	30.0
Xylene, o-	Ave	0.4646	0.4556		9.80	10.0	-2.0	30.0
Styrene	Ave	0.6391	0.6644		10.4	10.0	4.0	30.0
Bromoform	Ave	0.5003	0.5586		11.2	10.0	11.7	30.0
Cumene	Ave	1.280	1.245		9.72	10.0	-2.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7514	0.7515		10.0	10.0	0.0	30.0
n-Propylbenzene	Ave	1.543	1.533		9.93	10.0	-0.7	30.0
1,2,3-Trichloropropane	Ave	0.5991	0.5729		9.56	10.0	-4.4	30.0
n-Decane	Ave	0.6446	0.6377		9.89	10.0	-1.1	30.0
4-Ethyltoluene	Ave	1.188	1.272		10.7	10.0	7.1	30.0
2-Chlorotoluene	Ave	1.108	1.118		10.1	10.0	1.0	30.0
1,3,5-Trimethylbenzene	Ave	1.039	1.027		9.88	10.0	-1.2	30.0
Alpha Methyl Styrene	Ave	0.4784	0.5094		10.6	10.0	6.5	30.0
tert-Butylbenzene	Ave	0.9517	0.9318		9.79	10.0	-2.1	30.0
1,2,4-Trimethylbenzene	Ave	1.020	1.025		10.0	10.0	0.5	30.0
sec-Butylbenzene	Ave	1.470	1.457		9.91	10.0	-0.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: ICV 200-118437/14 Calibration Date: 07/12/2017 02:42

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-25865-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.158	1.198		10.3	10.0	3.5	30.0
1,3-Dichlorobenzene	Ave	0.7000	0.7161		10.2	10.0	2.3	30.0
1,4-Dichlorobenzene	Ave	0.6859	0.6964		10.2	10.0	1.5	30.0
Benzyl chloride	Ave	0.8720	0.9091		10.4	10.0	4.3	30.0
n-Butylbenzene	Ave	1.112	1.162		10.5	10.0	4.5	30.0
n-Undecane	Ave	0.6451	0.6688		10.4	10.0	3.7	30.0
1,2-Dichlorobenzene	Ave	0.6567	0.6515		9.92	10.0	-0.8	30.0
n-Dodecane	Ave	0.4496	0.4993		11.1	10.0	11.1	30.0
1,2,4-Trichlorobenzene	Ave	0.3859	0.3567		9.24	10.0	-7.6	30.0
Hexachlorobutadiene	Ave	0.3603	0.3321		9.22	10.0	-7.8	30.0
Naphthalene	Ave	0.8299	0.7205		8.68	10.0	-13.2	30.0
1,2,3-Trichlorobenzene	Ave	0.3285	0.2855		8.69	10.0	-13.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-119318/2 Calibration Date: 08/03/2017 10:59

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-26195-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6842	0.7508		11.0	10.0	9.7	30.0
Dichlorodifluoromethane	Ave	3.707	3.613		9.75	10.0	-2.5	30.0
Freon 22	Ave	1.906	1.941		10.2	10.0	1.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.148	2.932		9.31	10.0	-6.9	30.0
Chloromethane	Ave	0.9499	0.9341		9.83	10.0	-1.7	30.0
n-Butane	Ave	1.347	1.365		10.1	10.0	1.3	30.0
Vinyl chloride	Ave	1.137	1.061		9.33	10.0	-6.7	30.0
1,3-Butadiene	Ave	0.7296	0.7007		9.60	10.0	-4.0	30.0
Bromomethane	Ave	1.212	1.128		9.31	10.0	-6.9	30.0
Chloroethane	Ave	0.4345	0.4358		10.0	10.0	0.3	30.0
Isopentane	Ave	0.8306	0.8559		10.3	10.0	3.1	30.0
Bromoethene(Vinyl Bromide)	Ave	1.156	1.069		9.24	10.0	-7.6	30.0
Trichlorofluoromethane	Ave	3.335	3.177		9.53	10.0	-4.7	30.0
n-Pentane	Ave	1.224	1.250		10.2	10.0	2.1	30.0
Ethanol	Ave	0.2878	0.3025		15.8	15.0	5.1	30.0
Ethyl ether	Ave	0.4865	0.4879		10.0	10.0	0.3	30.0
Freon TF	Ave	2.255	2.052		9.10	10.0	-9.0	30.0
Acrolein	Ave	0.1485	0.1962		13.2	10.0	32.1*	30.0
1,1-Dichloroethene	Ave	1.001	0.8856		8.85	10.0	-11.5	30.0
Acetone	Ave	1.194	1.212		10.2	10.0	1.5	30.0
Carbon disulfide	Ave	2.717	2.563		9.43	10.0	-5.7	30.0
Isopropyl alcohol	Ave	1.124	1.172		10.4	10.0	4.3	30.0
3-Chloropropene	Ave	0.9439	0.9887		10.5	10.0	4.7	30.0
Acetonitrile	Ave	0.4260	0.4360		10.2	10.0	2.3	30.0
Methylene Chloride	Ave	1.082	1.062		9.81	10.0	-1.8	30.0
tert-Butyl alcohol	Ave	1.641	1.701		10.4	10.0	3.7	30.0
Methyl tert-butyl ether	Ave	2.489	2.393		9.61	10.0	-3.8	30.0
trans-1,2-Dichloroethene	Ave	1.447	1.399		9.67	10.0	-3.3	30.0
Acrylonitrile	Ave	0.4583	0.4560		9.95	10.0	-0.5	30.0
n-Hexane	Ave	1.176	1.160		9.86	10.0	-1.4	30.0
1,1-Dichloroethane	Ave	1.975	1.855		9.39	10.0	-6.1	30.0
Vinyl acetate	Ave	1.792	1.817		10.1	10.0	1.4	30.0
cis-1,2-Dichloroethene	Ave	1.189	1.095		9.21	10.0	-7.9	30.0
Methyl Ethyl Ketone	Ave	0.4029	0.3665		9.09	10.0	-9.1	30.0
Ethyl acetate	Ave	0.0535	0.0513		9.57	10.0	-4.3	30.0
Tetrahydrofuran	Ave	0.1660	0.1572		9.47	10.0	-5.3	30.0
Chloroform	Ave	3.238	2.665		8.23	10.0	-17.7	30.0
Cyclohexane	Ave	0.2730	0.2363		8.65	10.0	-13.4	30.0
1,1,1-Trichloroethane	Ave	0.6189	0.5376		8.69	10.0	-13.1	30.0
Carbon tetrachloride	Ave	0.6258	0.5874		9.39	10.0	-6.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-119318/2 Calibration Date: 08/03/2017 10:59

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-26195-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.033	0.9009		8.72	10.0	-12.8	30.0
Benzene	Ave	0.7191	0.6161		8.57	10.0	-14.3	30.0
1,2-Dichloroethane	Ave	0.4366	0.3894		8.92	10.0	-10.8	30.0
n-Heptane	Ave	0.4046	0.3446		8.51	10.0	-14.8	30.0
n-Butanol	Ave	0.1037	0.0972		9.38	10.0	-6.2	30.0
Trichloroethene	Ave	0.4272	0.3587		8.39	10.0	-16.0	30.0
1,2-Dichloropropane	Ave	0.2862	0.2451		8.56	10.0	-14.3	30.0
Methyl methacrylate	Ave	0.2065	0.1814		8.78	10.0	-12.2	30.0
Dibromomethane	Ave	0.3119	0.2570		8.24	10.0	-17.6	30.0
1,4-Dioxane	Ave	0.1219	0.1086		8.91	10.0	-10.9	30.0
Bromodichloromethane	Ave	0.6749	0.6215		9.21	10.0	-7.9	30.0
cis-1,3-Dichloropropene	Ave	0.4359	0.3827		8.78	10.0	-12.2	30.0
methyl isobutyl ketone	Ave	0.4887	0.4056		8.30	10.0	-17.0	30.0
Toluene	Ave	0.5593	0.4695		8.39	10.0	-16.1	30.0
n-Octane	Ave	0.5915	0.4601		7.78	10.0	-22.2	30.0
trans-1,3-Dichloropropene	Ave	0.4736	0.3986		8.41	10.0	-15.8	30.0
1,1,2-Trichloroethane	Ave	0.3203	0.2680		8.37	10.0	-16.3	30.0
Tetrachloroethene	Ave	0.5141	0.4186		8.14	10.0	-18.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5031	0.4257		8.46	10.0	-15.4	30.0
Dibromochloromethane	Ave	0.6687	0.6455		9.65	10.0	-3.5	30.0
1,2-Dibromoethane	Ave	0.5756	0.5052		8.78	10.0	-12.2	30.0
Chlorobenzene	Ave	0.7652	0.6726		8.79	10.0	-12.1	30.0
Ethylbenzene	Ave	1.182	1.053		8.91	10.0	-10.9	30.0
n-Nonane	Ave	0.5576	0.4589		8.23	10.0	-17.7	30.0
m,p-Xylene	Ave	0.4570	0.4049		17.7	20.0	-11.4	30.0
Xylene, o-	Ave	0.4646	0.4120		8.87	10.0	-11.3	30.0
Styrene	Ave	0.6391	0.5981		9.36	10.0	-6.4	30.0
Bromoform	Ave	0.5003	0.5360		10.7	10.0	7.1	30.0
Cumene	Ave	1.280	1.172		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7514	0.6435		8.56	10.0	-14.4	30.0
n-Propylbenzene	Ave	1.543	1.424		9.22	10.0	-7.7	30.0
1,2,3-Trichloropropane	Ave	0.5991	0.5131		8.56	10.0	-14.3	30.0
n-Decane	Ave	0.6446	0.5553		8.61	10.0	-13.9	30.0
2-Chlorotoluene	Ave	1.108	1.034		9.33	10.0	-6.7	30.0
4-Ethyltoluene	Ave	1.188	1.138		9.58	10.0	-4.2	30.0
1,3,5-Trimethylbenzene	Ave	1.039	0.9546		9.18	10.0	-8.2	30.0
Alpha Methyl Styrene	Ave	0.4784	0.4572		9.55	10.0	-4.4	30.0
tert-Butylbenzene	Ave	0.9517	0.8700		9.14	10.0	-8.6	30.0
1,2,4-Trimethylbenzene	Ave	1.020	0.9541		9.35	10.0	-6.4	30.0
sec-Butylbenzene	Ave	1.470	1.352		9.19	10.0	-8.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-119318/2 Calibration Date: 08/03/2017 10:59

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-26195-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.158	1.107		9.56	10.0	-4.4	30.0
1,3-Dichlorobenzene	Ave	0.7000	0.6332		9.04	10.0	-9.6	30.0
1,4-Dichlorobenzene	Ave	0.6859	0.6261		9.13	10.0	-8.7	30.0
Benzyl chloride	Ave	0.8720	0.8940		10.2	10.0	2.5	30.0
n-Butylbenzene	Ave	1.112	1.063		9.56	10.0	-4.4	30.0
n-Undecane	Ave	0.6451	0.5209		8.07	10.0	-19.3	30.0
1,2-Dichlorobenzene	Ave	0.6567	0.5828		8.87	10.0	-11.3	30.0
n-Dodecane	Ave	0.4496	0.3916		8.71	10.0	-12.9	30.0
1,2,4-Trichlorobenzene	Ave	0.3859	0.3119		8.08	10.0	-19.2	30.0
Hexachlorobutadiene	Ave	0.3603	0.2711		7.52	10.0	-24.8	30.0
Naphthalene	Ave	0.8299	0.7372		8.88	10.0	-11.2	30.0
1,2,3-Trichlorobenzene	Ave	0.3285	0.2708		8.24	10.0	-17.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	0.7663		8.39	10.0	-16.1	30.0
Dichlorodifluoromethane	Ave	3.765	3.365		8.93	10.0	-10.6	30.0
Freon 22	Ave	2.071	1.790		8.64	10.0	-13.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	3.879		9.89	10.0	-1.1	30.0
Chloromethane	Ave	1.217	1.002		8.23	10.0	-17.6	30.0
n-Butane	Ave	2.353	1.973		8.38	10.0	-16.2	30.0
Vinyl chloride	Ave	1.853	1.545		8.34	10.0	-16.6	30.0
1,3-Butadiene	Ave	1.474	1.190		8.07	10.0	-19.2	30.0
Bromomethane	Ave	1.533	1.409		9.19	10.0	-8.1	30.0
Chloroethane	Ave	0.9032	0.8032		8.89	10.0	-11.1	30.0
Isopentane	Ave	1.856	1.743		9.39	10.0	-6.1	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.496		9.58	10.0	-4.2	30.0
Trichlorofluoromethane	Ave	4.030	3.749		9.30	10.0	-7.0	30.0
n-Pentane	Ave	2.889	2.830		9.79	10.0	-2.0	30.0
Ethanol	Ave	0.7560	0.6839		13.6	15.0	-9.5	30.0
Ethyl ether	Ave	1.198	1.229		10.3	10.0	2.6	30.0
Acrolein	Ave	0.5128	0.6311		12.3	10.0	23.1	30.0
Freon TF	Ave	3.358	3.158		9.40	10.0	-6.0	30.0
1,1-Dichloroethene	Ave	1.618	1.532		9.47	10.0	-5.3	30.0
Acetone	Ave	2.561	2.369		9.25	10.0	-7.5	30.0
Isopropyl alcohol	Ave	2.921	2.536		8.68	10.0	-13.2	30.0
Carbon disulfide	Ave	4.629	5.043		10.9	10.0	9.0	30.0
3-Chloropropene	Ave	2.113	1.869		8.85	10.0	-11.5	30.0
Acetonitrile	Ave	1.260	1.268		10.1	10.0	0.7	30.0
Methylene Chloride	Ave	2.069	1.799		8.70	10.0	-13.0	30.0
tert-Butyl alcohol	Ave	3.668	3.391		9.24	10.0	-7.5	30.0
Methyl tert-butyl ether	Ave	4.936	4.759		9.64	10.0	-3.6	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.498		9.78	10.0	-2.1	30.0
Acrylonitrile	Ave	1.272	1.236		9.71	10.0	-2.9	30.0
n-Hexane	Ave	2.865	2.927		10.2	10.0	2.2	30.0
1,1-Dichloroethane	Ave	3.526	3.162		8.96	10.0	-10.3	30.0
Vinyl acetate	Ave	4.318	4.210		9.75	10.0	-2.5	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.752		9.40	10.0	-6.0	30.0
Methyl Ethyl Ketone	Ave	0.9898	0.9074		9.17	10.0	-8.3	30.0
Ethyl acetate	Ave	0.1467	0.1503		10.2	10.0	2.5	30.0
Tetrahydrofuran	Ave	0.4388	0.4047		9.22	10.0	-7.8	30.0
Chloroform	Ave	3.665	3.478		9.49	10.0	-5.1	30.0
Cyclohexane	Ave	0.5046	0.4956		9.82	10.0	-1.8	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.6918		9.48	10.0	-5.2	30.0
Carbon tetrachloride	Ave	0.6942	0.6906		9.95	10.0	-0.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	1.826		9.44	10.0	-5.6	30.0
Benzene	Ave	1.191	1.112		9.34	10.0	-6.6	30.0
1,2-Dichloroethane	Ave	0.4645	0.4346		9.35	10.0	-6.4	30.0
n-Heptane	Ave	0.7288	0.6423		8.81	10.0	-11.9	30.0
n-Butanol	Ave	0.2374	0.2372		9.99	10.0	-0.0	30.0
Trichloroethene	Ave	0.5023	0.4737		9.43	10.0	-5.7	30.0
1,2-Dichloropropane	Ave	0.4676	0.4191		8.96	10.0	-10.4	30.0
Methyl methacrylate	Ave	0.4293	0.4135		9.63	10.0	-3.7	30.0
1,4-Dioxane	Ave	0.2325	0.2173		9.34	10.0	-6.6	30.0
Dibromomethane	Ave	0.4351	0.4123		9.47	10.0	-5.2	30.0
Bromodichloromethane	Ave	0.8316	0.7806		9.38	10.0	-6.1	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.5961		9.64	10.0	-3.5	30.0
methyl isobutyl ketone	Ave	0.9410	0.8147		8.66	10.0	-13.4	30.0
n-Octane	Ave	1.022	0.9226		9.02	10.0	-9.8	30.0
Toluene	Ave	0.9210	0.8810		9.56	10.0	-4.4	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.5782		9.57	10.0	-4.2	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.4492		9.53	10.0	-4.7	30.0
Tetrachloroethene	Ave	0.6859	0.6719		9.79	10.0	-2.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	0.8123		8.53	10.0	-14.7	30.0
Dibromochloromethane	Ave	0.8493	0.8223		9.68	10.0	-3.2	30.0
1,2-Dibromoethane	Ave	0.7686	0.7520		9.78	10.0	-2.2	30.0
Chlorobenzene	Ave	1.132	1.069		9.44	10.0	-5.6	30.0
Ethylbenzene	Ave	1.948	1.877		9.63	10.0	-3.6	30.0
n-Nonane	Ave	1.009	0.9479		9.39	10.0	-6.0	30.0
m,p-Xylene	Ave	0.7551	0.7324		19.4	20.0	-3.0	30.0
Xylene, o-	Ave	0.7274	0.7045		9.68	10.0	-3.2	30.0
Styrene	Ave	1.116	1.089		9.75	10.0	-2.5	30.0
Bromoform	Ave	0.7713	0.7900		10.2	10.0	2.4	30.0
Cumene	Ave	2.105	2.064		9.80	10.0	-2.0	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.153		9.43	10.0	-5.7	30.0
n-Propylbenzene	Ave	2.660	2.541		9.55	10.0	-4.5	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.8332		8.99	10.0	-10.1	30.0
n-Decane	Ave	1.330	1.198		9.01	10.0	-9.9	30.0
4-Ethyltoluene	Ave	2.141	2.102		9.82	10.0	-1.8	30.0
2-Chlorotoluene	Ave	1.864	1.755		9.41	10.0	-5.9	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.707		9.60	10.0	-4.0	30.0
Alpha Methyl Styrene	Ave	0.8375	0.8156		9.74	10.0	-2.6	30.0
tert-Butylbenzene	Ave	1.671	1.605		9.60	10.0	-4.0	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.704		9.64	10.0	-3.6	30.0
sec-Butylbenzene	Ave	2.617	2.529		9.66	10.0	-3.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.050		9.75	10.0	-2.5	30.0
1,3-Dichlorobenzene	Ave	1.139	1.064		9.34	10.0	-6.6	30.0
1,4-Dichlorobenzene	Ave	1.077	0.9940		9.23	10.0	-7.7	30.0
Benzyl chloride	Ave	1.290	1.199		9.29	10.0	-7.0	30.0
n-Undecane	Ave	1.505	1.355		9.01	10.0	-9.9	30.0
n-Butylbenzene	Ave	2.118	2.063		9.74	10.0	-2.6	30.0
1,2-Dichlorobenzene	Ave	1.071	1.010		9.43	10.0	-5.7	30.0
n-Dodecane	Ave	1.095	0.9872		9.02	10.0	-9.8	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.5113		8.50	10.0	-15.0	30.0
Hexachlorobutadiene	Ave	0.6760	0.6194		9.16	10.0	-8.4	30.0
Naphthalene	Ave	1.249	0.9481		7.59	10.0	-24.1	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.4199		8.08	10.0	-19.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-118406/3 Calibration Date: 07/11/2017 11:31

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25849-03.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	0.9587		10.5	10.0	5.0	30.0
Dichlorodifluoromethane	Ave	3.765	3.633		9.65	10.0	-3.5	30.0
Freon 22	Ave	2.071	2.070		9.99	10.0	-0.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	3.780		9.63	10.0	-3.6	30.0
Chloromethane	Ave	1.217	1.213		9.96	10.0	-0.4	30.0
n-Butane	Ave	2.353	2.431		10.3	10.0	3.3	30.0
Vinyl chloride	Ave	1.853	1.799		9.71	10.0	-2.9	30.0
1,3-Butadiene	Ave	1.474	1.499		10.2	10.0	1.7	30.0
Bromomethane	Ave	1.533	1.466		9.56	10.0	-4.4	30.0
Chloroethane	Ave	0.9032	0.9053		10.0	10.0	0.2	30.0
Isopentane	Ave	1.856	1.945		10.5	10.0	4.8	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.497		9.58	10.0	-4.2	30.0
Trichlorofluoromethane	Ave	4.030	3.807		9.44	10.0	-5.5	30.0
n-Pentane	Ave	2.889	3.179		11.0	10.0	10.0	30.0
Ethanol	Ave	0.7560	0.9714		19.3	15.0	28.5	30.0
Ethyl ether	Ave	1.198	1.266		10.6	10.0	5.7	30.0
Acrolein	Ave	0.5128	0.4602		8.97	10.0	-10.2	30.0
Freon TF	Ave	3.358	3.159		9.41	10.0	-5.9	30.0
1,1-Dichloroethene	Ave	1.618	1.553		9.59	10.0	-4.0	30.0
Acetone	Ave	2.561	3.646		14.2	10.0	42.4*	30.0
Carbon disulfide	Ave	4.629	4.773		10.3	10.0	3.1	30.0
Isopropyl alcohol	Ave	2.921	3.609		12.4	10.0	23.6	30.0
3-Chloropropene	Ave	2.113	2.419		11.4	10.0	14.5	30.0
Acetonitrile	Ave	1.260	1.542		12.2	10.0	22.4	30.0
Methylene Chloride	Ave	2.069	2.267		11.0	10.0	9.6	30.0
tert-Butyl alcohol	Ave	3.668	4.282		11.7	10.0	16.7	30.0
Methyl tert-butyl ether	Ave	4.936	5.244		10.6	10.0	6.2	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.718		10.6	10.0	6.4	30.0
Acrylonitrile	Ave	1.272	1.420		11.2	10.0	11.6	30.0
n-Hexane	Ave	2.865	3.191		11.1	10.0	11.4	30.0
1,1-Dichloroethane	Ave	3.526	3.579		10.1	10.0	1.5	30.0
Vinyl acetate	Ave	4.318	5.140		11.9	10.0	19.0	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.854		9.95	10.0	-0.5	30.0
Methyl Ethyl Ketone	Ave	0.9898	1.062		10.7	10.0	7.3	30.0
Ethyl acetate	Ave	0.1467	0.1467		10.0	10.0	-0.0	30.0
Tetrahydrofuran	Ave	0.4388	0.5021		11.4	10.0	14.4	30.0
Chloroform	Ave	3.665	3.714		10.1	10.0	1.3	30.0
Cyclohexane	Ave	0.5046	0.4999		9.90	10.0	-0.9	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.6961		9.54	10.0	-4.6	30.0
Carbon tetrachloride	Ave	0.6942	0.6367		9.17	10.0	-8.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-118406/3 Calibration Date: 07/11/2017 11:31

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25849-03.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	2.090		10.8	10.0	8.1	30.0
Benzene	Ave	1.191	1.168		9.81	10.0	-1.9	30.0
1,2-Dichloroethane	Ave	0.4645	0.4747		10.2	10.0	2.2	30.0
n-Heptane	Ave	0.7288	0.8053		11.0	10.0	10.5	30.0
n-Butanol	Ave	0.2374	0.2706		11.4	10.0	14.0	30.0
Trichloroethene	Ave	0.5023	0.4711		9.38	10.0	-6.2	30.0
1,2-Dichloropropane	Ave	0.4676	0.4852		10.4	10.0	3.8	30.0
Methyl methacrylate	Ave	0.4293	0.4444		10.3	10.0	3.5	30.0
1,4-Dioxane	Ave	0.2325	0.2442		10.5	10.0	5.0	30.0
Dibromomethane	Ave	0.4351	0.3882		8.92	10.0	-10.8	30.0
Bromodichloromethane	Ave	0.8316	0.8198		9.86	10.0	-1.4	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.6417		10.4	10.0	3.8	30.0
methyl isobutyl ketone	Ave	0.9410	1.060		11.3	10.0	12.6	30.0
n-Octane	Ave	1.022	1.165		11.4	10.0	13.9	30.0
Toluene	Ave	0.9210	0.8904		9.66	10.0	-3.3	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.6198		10.3	10.0	2.6	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.4787		10.2	10.0	1.6	30.0
Tetrachloroethene	Ave	0.6859	0.6270		9.14	10.0	-8.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	1.100		11.6	10.0	15.6	30.0
Dibromochloromethane	Ave	0.8493	0.7915		9.32	10.0	-6.8	30.0
1,2-Dibromoethane	Ave	0.7686	0.7639		9.94	10.0	-0.6	30.0
Chlorobenzene	Ave	1.132	1.080		9.54	10.0	-4.6	30.0
Ethylbenzene	Ave	1.948	1.971		10.1	10.0	1.2	30.0
n-Nonane	Ave	1.009	1.113		11.0	10.0	10.3	30.0
m,p-Xylene	Ave	0.7551	0.7431		19.7	20.0	-1.6	30.0
Xylene, o-	Ave	0.7274	0.7215		9.92	10.0	-0.8	30.0
Styrene	Ave	1.116	1.127		10.1	10.0	1.0	30.0
Bromoform	Ave	0.7713	0.6503		8.43	10.0	-15.7	30.0
Cumene	Ave	2.105	2.123		10.1	10.0	0.8	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.217		9.96	10.0	-0.4	30.0
n-Propylbenzene	Ave	2.660	2.750		10.3	10.0	3.4	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.9152		9.87	10.0	-1.3	30.0
n-Decane	Ave	1.330	1.392		10.5	10.0	4.7	30.0
4-Ethyltoluene	Ave	2.141	2.131		9.96	10.0	-0.4	30.0
2-Chlorotoluene	Ave	1.864	1.847		9.90	10.0	-0.9	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.755		9.87	10.0	-1.3	30.0
Alpha Methyl Styrene	Ave	0.8375	0.8089		9.66	10.0	-3.4	30.0
tert-Butylbenzene	Ave	1.671	1.616		9.67	10.0	-3.3	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.758		9.95	10.0	-0.5	30.0
sec-Butylbenzene	Ave	2.617	2.645		10.1	10.0	1.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-118406/3 Calibration Date: 07/11/2017 11:31

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25849-03.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.085		9.92	10.0	-0.8	30.0
1,3-Dichlorobenzene	Ave	1.139	1.064		9.34	10.0	-6.6	30.0
1,4-Dichlorobenzene	Ave	1.077	1.024		9.50	10.0	-5.0	30.0
Benzyl chloride	Ave	1.290	1.303		10.1	10.0	1.0	30.0
n-Undecane	Ave	1.505	1.330		8.83	10.0	-11.6	30.0
n-Butylbenzene	Ave	2.118	2.252		10.6	10.0	6.3	30.0
1,2-Dichlorobenzene	Ave	1.071	0.999		9.32	10.0	-6.7	30.0
n-Dodecane	Ave	1.095	0.4847		5.00	10.0	-55.7*	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.5127		8.52	10.0	-14.8	30.0
Hexachlorobutadiene	Ave	0.6760	0.5553		8.21	10.0	-17.9	30.0
Naphthalene	Ave	1.249	1.060		8.49	10.0	-15.1	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.3980		7.65	10.0	-23.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-118667/2 Calibration Date: 07/18/2017 14:59

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25955-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	1.224		13.4	10.0	34.1*	30.0
Dichlorodifluoromethane	Ave	3.765	4.098		10.9	10.0	8.8	30.0
Freon 22	Ave	2.071	2.541		12.3	10.0	22.7	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	4.325		11.0	10.0	10.2	30.0
Chloromethane	Ave	1.217	1.530		12.6	10.0	25.7	30.0
n-Butane	Ave	2.353	3.049		13.0	10.0	29.6	30.0
Vinyl chloride	Ave	1.853	2.128		11.5	10.0	14.8	30.0
1,3-Butadiene	Ave	1.474	1.725		11.7	10.0	17.0	30.0
Bromomethane	Ave	1.533	1.570		10.2	10.0	2.4	30.0
Chloroethane	Ave	0.9032	1.019		11.3	10.0	12.9	30.0
Isopentane	Ave	1.856	2.257		12.2	10.0	21.6	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.578		10.1	10.0	1.1	30.0
Trichlorofluoromethane	Ave	4.030	4.040		10.0	10.0	0.3	30.0
n-Pentane	Ave	2.889	3.623		12.5	10.0	25.4	30.0
Ethanol	Ave	0.7560	0.8419		16.7	15.0	11.4	30.0
Ethyl ether	Ave	1.198	1.380		11.5	10.0	15.2	30.0
Acrolein	Ave	0.5128	0.4913		9.58	10.0	-4.2	30.0
Freon TF	Ave	3.358	3.348		9.97	10.0	-0.3	30.0
1,1-Dichloroethene	Ave	1.618	1.613		9.96	10.0	-0.4	30.0
Acetone	Ave	2.561	3.337		13.0	10.0	30.3*	30.0
Carbon disulfide	Ave	4.629	5.124		11.1	10.0	10.7	30.0
Isopropyl alcohol	Ave	2.921	3.798		13.0	10.0	30.1*	30.0
3-Chloropropene	Ave	2.113	2.630		12.4	10.0	24.5	30.0
Acetonitrile	Ave	1.260	1.755		13.9	10.0	39.3*	30.0
Methylene Chloride	Ave	2.069	2.546		12.3	10.0	23.0	30.0
tert-Butyl alcohol	Ave	3.668	4.434		12.1	10.0	20.9	30.0
Methyl tert-butyl ether	Ave	4.936	5.512		11.2	10.0	11.7	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.908		11.4	10.0	13.9	30.0
Acrylonitrile	Ave	1.272	1.590		12.5	10.0	25.0	30.0
n-Hexane	Ave	2.865	3.441		12.0	10.0	20.1	30.0
1,1-Dichloroethane	Ave	3.526	3.931		11.1	10.0	11.5	30.0
Vinyl acetate	Ave	4.318	5.779		13.4	10.0	33.8*	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.907		10.2	10.0	2.4	30.0
Methyl Ethyl Ketone	Ave	0.9898	1.083		10.9	10.0	9.4	30.0
Ethyl acetate	Ave	0.1467	0.1553		10.6	10.0	5.8	30.0
Tetrahydrofuran	Ave	0.4388	0.5840		13.3	10.0	33.1*	30.0
Chloroform	Ave	3.665	3.964		10.8	10.0	8.2	30.0
Cyclohexane	Ave	0.5046	0.5302		10.5	10.0	5.1	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.7441		10.2	10.0	2.0	30.0
Carbon tetrachloride	Ave	0.6942	0.7008		10.1	10.0	1.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-118667/2 Calibration Date: 07/18/2017 14:59

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25955-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	2.304		11.9	10.0	19.2	30.0
Benzene	Ave	1.191	1.254		10.5	10.0	5.3	30.0
1,2-Dichloroethane	Ave	0.4645	0.5127		11.0	10.0	10.4	30.0
n-Heptane	Ave	0.7288	0.9170		12.6	10.0	25.8	30.0
n-Butanol	Ave	0.2374	0.2852		12.0	10.0	20.1	30.0
Trichloroethene	Ave	0.5023	0.5015		9.98	10.0	-0.2	30.0
1,2-Dichloropropane	Ave	0.4676	0.5379		11.5	10.0	15.0	30.0
Methyl methacrylate	Ave	0.4293	0.4807		11.2	10.0	12.0	30.0
1,4-Dioxane	Ave	0.2325	0.2453		10.5	10.0	5.5	30.0
Dibromomethane	Ave	0.4351	0.4087		9.39	10.0	-6.1	30.0
Bromodichloromethane	Ave	0.8316	0.8974		10.8	10.0	7.9	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.6821		11.0	10.0	10.4	30.0
methyl isobutyl ketone	Ave	0.9410	1.229		13.1	10.0	30.6*	30.0
n-Octane	Ave	1.022	1.366		13.4	10.0	33.6*	30.0
Toluene	Ave	0.9210	0.9558		10.4	10.0	3.8	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.6682		11.1	10.0	10.7	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.5058		10.7	10.0	7.4	30.0
Tetrachloroethene	Ave	0.6859	0.6471		9.43	10.0	-5.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	1.243		13.0	10.0	30.5*	30.0
Dibromochloromethane	Ave	0.8493	0.8550		10.1	10.0	0.7	30.0
1,2-Dibromoethane	Ave	0.7686	0.7944		10.3	10.0	3.4	30.0
Chlorobenzene	Ave	1.132	1.123		9.92	10.0	-0.8	30.0
Ethylbenzene	Ave	1.948	2.071		10.6	10.0	6.4	30.0
n-Nonane	Ave	1.009	1.220		12.1	10.0	20.9	30.0
m,p-Xylene	Ave	0.7551	0.7922		21.0	20.0	4.9	30.0
Xylene, o-	Ave	0.7274	0.7612		10.5	10.0	4.6	30.0
Styrene	Ave	1.116	1.188		10.6	10.0	6.4	30.0
Bromoform	Ave	0.7713	0.7617		9.87	10.0	-1.2	30.0
Cumene	Ave	2.105	2.267		10.8	10.0	7.7	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.324		10.8	10.0	8.3	30.0
n-Propylbenzene	Ave	2.660	2.979		11.2	10.0	12.0	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.995		10.7	10.0	7.4	30.0
n-Decane	Ave	1.330	1.595		12.0	10.0	19.9	30.0
4-Ethyltoluene	Ave	2.141	2.320		10.8	10.0	8.4	30.0
2-Chlorotoluene	Ave	1.864	2.012		10.8	10.0	7.9	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.911		10.7	10.0	7.5	30.0
Alpha Methyl Styrene	Ave	0.8375	0.8958		10.7	10.0	7.0	30.0
tert-Butylbenzene	Ave	1.671	1.792		10.7	10.0	7.2	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.954		11.1	10.0	10.6	30.0
sec-Butylbenzene	Ave	2.617	2.958		11.3	10.0	13.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Lab Sample ID: CCVIS 200-118667/2 Calibration Date: 07/18/2017 14:59

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25955-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.328		11.1	10.0	10.8	30.0
1,3-Dichlorobenzene	Ave	1.139	1.165		10.2	10.0	2.2	30.0
1,4-Dichlorobenzene	Ave	1.077	1.103		10.2	10.0	2.4	30.0
Benzyl chloride	Ave	1.290	1.477		11.4	10.0	14.5	30.0
n-Undecane	Ave	1.505	1.863		12.4	10.0	23.8	30.0
n-Butylbenzene	Ave	2.118	2.609		12.3	10.0	23.2	30.0
1,2-Dichlorobenzene	Ave	1.071	1.112		10.4	10.0	3.8	30.0
n-Dodecane	Ave	1.095	1.169		10.7	10.0	6.8	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.5071		8.43	10.0	-15.7	30.0
Hexachlorobutadiene	Ave	0.6760	0.6301		9.32	10.0	-6.8	30.0
Naphthalene	Ave	1.249	1.022		8.18	10.0	-18.2	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.3850		7.41	10.0	-25.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: ICV 200-118437/14 Calibration Date: 07/12/2017 02:42

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-25865-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6842	0.6146		8.98	10.0	-10.2	30.0
Dichlorodifluoromethane	Ave	3.707	3.377		9.11	10.0	-8.9	30.0
Freon 22	Ave	1.906	1.709		8.96	10.0	-10.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.148	3.191		10.1	10.0	1.4	30.0
Chloromethane	Ave	0.9499	0.8202		8.63	10.0	-13.7	30.0
n-Butane	Ave	1.347	1.237		9.18	10.0	-8.2	30.0
Vinyl chloride	Ave	1.137	0.9780		8.60	10.0	-14.0	30.0
1,3-Butadiene	Ave	0.7296	0.6228		8.53	10.0	-14.6	30.0
Bromomethane	Ave	1.212	1.100		9.08	10.0	-9.2	30.0
Chloroethane	Ave	0.4345	0.3951		9.09	10.0	-9.1	30.0
Isopentane	Ave	0.8306	0.8836		10.6	10.0	6.4	30.0
Bromoethene(Vinyl Bromide)	Ave	1.156	1.061		9.17	10.0	-8.2	30.0
Trichlorofluoromethane	Ave	3.335	2.904		8.71	10.0	-12.9	30.0
n-Pentane	Ave	1.224	1.332		10.9	10.0	8.9	30.0
Ethanol	Ave	0.2878	0.2562		13.4	15.0	-11.0	30.0
Ethyl ether	Ave	0.4865	0.5191		10.7	10.0	6.7	30.0
Freon TF	Ave	2.255	2.069		9.17	10.0	-8.3	30.0
Acrolein	Ave	0.1485	0.2076		14.0	10.0	39.8*	30.0
1,1-Dichloroethene	Ave	1.001	0.8816		8.81	10.0	-11.9	30.0
Acetone	Ave	1.194	1.174		9.83	10.0	-1.7	30.0
Carbon disulfide	Ave	2.717	2.930		10.8	10.0	7.8	30.0
Isopropyl alcohol	Ave	1.124	0.9751		8.67	10.0	-13.2	30.0
3-Chloropropene	Ave	0.9439	0.8648		9.16	10.0	-8.4	30.0
Acetonitrile	Ave	0.4260	0.4705		11.0	10.0	10.4	30.0
Methylene Chloride	Ave	1.082	0.9943		9.19	10.0	-8.1	30.0
tert-Butyl alcohol	Ave	1.641	1.524		9.28	10.0	-7.1	30.0
Methyl tert-butyl ether	Ave	2.489	2.436		9.79	10.0	-2.1	30.0
trans-1,2-Dichloroethene	Ave	1.447	1.424		9.84	10.0	-1.6	30.0
Acrylonitrile	Ave	0.4583	0.4815		10.5	10.0	5.1	30.0
n-Hexane	Ave	1.176	1.249		10.6	10.0	6.2	30.0
1,1-Dichloroethane	Ave	1.975	1.823		9.23	10.0	-7.7	30.0
Vinyl acetate	Ave	1.792	1.844		10.3	10.0	2.9	30.0
cis-1,2-Dichloroethene	Ave	1.189	1.127		9.47	10.0	-5.3	30.0
Methyl Ethyl Ketone	Ave	0.4029	0.3848		9.55	10.0	-4.5	30.0
Ethyl acetate	Ave	0.0535	0.0583		10.9	10.0	8.8	30.0
Tetrahydrofuran	Ave	0.1660	0.1690		10.2	10.0	1.8	30.0
Chloroform	Ave	3.238	2.707		8.36	10.0	-16.4	30.0
Cyclohexane	Ave	0.2730	0.2665		9.76	10.0	-2.4	30.0
1,1,1-Trichloroethane	Ave	0.6189	0.5685		9.18	10.0	-8.1	30.0
Carbon tetrachloride	Ave	0.6258	0.6160		9.84	10.0	-1.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: ICV 200-118437/14 Calibration Date: 07/12/2017 02:42

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-25865-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.033	1.005		9.73	10.0	-2.6	30.0
Benzene	Ave	0.7191	0.6555		9.11	10.0	-8.8	30.0
1,2-Dichloroethane	Ave	0.4366	0.3970		9.09	10.0	-9.1	30.0
n-Heptane	Ave	0.4046	0.3803		9.40	10.0	-6.0	30.0
n-Butanol	Ave	0.1037	0.1185		11.4	10.0	14.3	30.0
Trichloroethene	Ave	0.4272	0.3796		8.88	10.0	-11.1	30.0
1,2-Dichloropropane	Ave	0.2862	0.2808		9.81	10.0	-1.9	30.0
Methyl methacrylate	Ave	0.2065	0.2201		10.7	10.0	6.6	30.0
1,4-Dioxane	Ave	0.1219	0.1226		10.1	10.0	0.5	30.0
Dibromomethane	Ave	0.3119	0.2964		9.50	10.0	-5.0	30.0
Bromodichloromethane	Ave	0.6749	0.6538		9.69	10.0	-3.1	30.0
cis-1,3-Dichloropropene	Ave	0.4359	0.4481		10.3	10.0	2.8	30.0
methyl isobutyl ketone	Ave	0.4887	0.4856		9.94	10.0	-0.6	30.0
Toluene	Ave	0.5593	0.5539		9.90	10.0	-1.0	30.0
n-Octane	Ave	0.5915	0.5686		9.61	10.0	-3.9	30.0
trans-1,3-Dichloropropene	Ave	0.4736	0.4778		10.1	10.0	0.9	30.0
1,1,2-Trichloroethane	Ave	0.3203	0.3210		10.0	10.0	0.2	30.0
Tetrachloroethene	Ave	0.5141	0.4662		9.07	10.0	-9.3	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5031	0.5061		10.1	10.0	0.6	30.0
Dibromochloromethane	Ave	0.6687	0.6536		9.77	10.0	-2.3	30.0
1,2-Dibromoethane	Ave	0.5756	0.5667		9.84	10.0	-1.5	30.0
Chlorobenzene	Ave	0.7652	0.7383		9.65	10.0	-3.5	30.0
Ethylbenzene	Ave	1.182	1.166		9.86	10.0	-1.3	30.0
n-Nonane	Ave	0.5576	0.5524		9.90	10.0	-0.9	30.0
m,p-Xylene	Ave	0.4570	0.4522		19.8	20.0	-1.1	30.0
Xylene, o-	Ave	0.4646	0.4556		9.80	10.0	-2.0	30.0
Styrene	Ave	0.6391	0.6644		10.4	10.0	4.0	30.0
Bromoform	Ave	0.5003	0.5586		11.2	10.0	11.7	30.0
Cumene	Ave	1.280	1.245		9.72	10.0	-2.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7514	0.7515		10.0	10.0	0.0	30.0
n-Propylbenzene	Ave	1.543	1.533		9.93	10.0	-0.7	30.0
1,2,3-Trichloropropane	Ave	0.5991	0.5729		9.56	10.0	-4.4	30.0
n-Decane	Ave	0.6446	0.6377		9.89	10.0	-1.1	30.0
4-Ethyltoluene	Ave	1.188	1.272		10.7	10.0	7.1	30.0
2-Chlorotoluene	Ave	1.108	1.118		10.1	10.0	1.0	30.0
1,3,5-Trimethylbenzene	Ave	1.039	1.027		9.88	10.0	-1.2	30.0
Alpha Methyl Styrene	Ave	0.4784	0.5094		10.6	10.0	6.5	30.0
tert-Butylbenzene	Ave	0.9517	0.9318		9.79	10.0	-2.1	30.0
1,2,4-Trimethylbenzene	Ave	1.020	1.025		10.0	10.0	0.5	30.0
sec-Butylbenzene	Ave	1.470	1.457		9.91	10.0	-0.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: ICV 200-118437/14 Calibration Date: 07/12/2017 02:42

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-25865-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.158	1.198		10.3	10.0	3.5	30.0
1,3-Dichlorobenzene	Ave	0.7000	0.7161		10.2	10.0	2.3	30.0
1,4-Dichlorobenzene	Ave	0.6859	0.6964		10.2	10.0	1.5	30.0
Benzyl chloride	Ave	0.8720	0.9091		10.4	10.0	4.3	30.0
n-Butylbenzene	Ave	1.112	1.162		10.5	10.0	4.5	30.0
n-Undecane	Ave	0.6451	0.6688		10.4	10.0	3.7	30.0
1,2-Dichlorobenzene	Ave	0.6567	0.6515		9.92	10.0	-0.8	30.0
n-Dodecane	Ave	0.4496	0.4993		11.1	10.0	11.1	30.0
1,2,4-Trichlorobenzene	Ave	0.3859	0.3567		9.24	10.0	-7.6	30.0
Hexachlorobutadiene	Ave	0.3603	0.3321		9.22	10.0	-7.8	30.0
Naphthalene	Ave	0.8299	0.7205		8.68	10.0	-13.2	30.0
1,2,3-Trichlorobenzene	Ave	0.3285	0.2855		8.69	10.0	-13.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: CCVIS 200-119318/2 Calibration Date: 08/03/2017 10:59

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-26195-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.6842	0.7508		11.0	10.0	9.7	30.0
Dichlorodifluoromethane	Ave	3.707	3.613		9.75	10.0	-2.5	30.0
Freon 22	Ave	1.906	1.941		10.2	10.0	1.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.148	2.932		9.31	10.0	-6.9	30.0
Chloromethane	Ave	0.9499	0.9341		9.83	10.0	-1.7	30.0
n-Butane	Ave	1.347	1.365		10.1	10.0	1.3	30.0
Vinyl chloride	Ave	1.137	1.061		9.33	10.0	-6.7	30.0
1,3-Butadiene	Ave	0.7296	0.7007		9.60	10.0	-4.0	30.0
Bromomethane	Ave	1.212	1.128		9.31	10.0	-6.9	30.0
Chloroethane	Ave	0.4345	0.4358		10.0	10.0	0.3	30.0
Isopentane	Ave	0.8306	0.8559		10.3	10.0	3.1	30.0
Bromoethene(Vinyl Bromide)	Ave	1.156	1.069		9.24	10.0	-7.6	30.0
Trichlorofluoromethane	Ave	3.335	3.177		9.53	10.0	-4.7	30.0
n-Pentane	Ave	1.224	1.250		10.2	10.0	2.1	30.0
Ethanol	Ave	0.2878	0.3025		15.8	15.0	5.1	30.0
Ethyl ether	Ave	0.4865	0.4879		10.0	10.0	0.3	30.0
Freon TF	Ave	2.255	2.052		9.10	10.0	-9.0	30.0
Acrolein	Ave	0.1485	0.1962		13.2	10.0	32.1*	30.0
1,1-Dichloroethene	Ave	1.001	0.8856		8.85	10.0	-11.5	30.0
Acetone	Ave	1.194	1.212		10.2	10.0	1.5	30.0
Carbon disulfide	Ave	2.717	2.563		9.43	10.0	-5.7	30.0
Isopropyl alcohol	Ave	1.124	1.172		10.4	10.0	4.3	30.0
3-Chloropropene	Ave	0.9439	0.9887		10.5	10.0	4.7	30.0
Acetonitrile	Ave	0.4260	0.4360		10.2	10.0	2.3	30.0
Methylene Chloride	Ave	1.082	1.062		9.81	10.0	-1.8	30.0
tert-Butyl alcohol	Ave	1.641	1.701		10.4	10.0	3.7	30.0
Methyl tert-butyl ether	Ave	2.489	2.393		9.61	10.0	-3.8	30.0
trans-1,2-Dichloroethene	Ave	1.447	1.399		9.67	10.0	-3.3	30.0
Acrylonitrile	Ave	0.4583	0.4560		9.95	10.0	-0.5	30.0
n-Hexane	Ave	1.176	1.160		9.86	10.0	-1.4	30.0
1,1-Dichloroethane	Ave	1.975	1.855		9.39	10.0	-6.1	30.0
Vinyl acetate	Ave	1.792	1.817		10.1	10.0	1.4	30.0
cis-1,2-Dichloroethene	Ave	1.189	1.095		9.21	10.0	-7.9	30.0
Methyl Ethyl Ketone	Ave	0.4029	0.3665		9.09	10.0	-9.1	30.0
Ethyl acetate	Ave	0.0535	0.0513		9.57	10.0	-4.3	30.0
Tetrahydrofuran	Ave	0.1660	0.1572		9.47	10.0	-5.3	30.0
Chloroform	Ave	3.238	2.665		8.23	10.0	-17.7	30.0
Cyclohexane	Ave	0.2730	0.2363		8.65	10.0	-13.4	30.0
1,1,1-Trichloroethane	Ave	0.6189	0.5376		8.69	10.0	-13.1	30.0
Carbon tetrachloride	Ave	0.6258	0.5874		9.39	10.0	-6.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: CCVIS 200-119318/2 Calibration Date: 08/03/2017 10:59

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-26195-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.033	0.9009		8.72	10.0	-12.8	30.0
Benzene	Ave	0.7191	0.6161		8.57	10.0	-14.3	30.0
1,2-Dichloroethane	Ave	0.4366	0.3894		8.92	10.0	-10.8	30.0
n-Heptane	Ave	0.4046	0.3446		8.51	10.0	-14.8	30.0
n-Butanol	Ave	0.1037	0.0972		9.38	10.0	-6.2	30.0
Trichloroethene	Ave	0.4272	0.3587		8.39	10.0	-16.0	30.0
1,2-Dichloropropane	Ave	0.2862	0.2451		8.56	10.0	-14.3	30.0
Methyl methacrylate	Ave	0.2065	0.1814		8.78	10.0	-12.2	30.0
Dibromomethane	Ave	0.3119	0.2570		8.24	10.0	-17.6	30.0
1,4-Dioxane	Ave	0.1219	0.1086		8.91	10.0	-10.9	30.0
Bromodichloromethane	Ave	0.6749	0.6215		9.21	10.0	-7.9	30.0
cis-1,3-Dichloropropene	Ave	0.4359	0.3827		8.78	10.0	-12.2	30.0
methyl isobutyl ketone	Ave	0.4887	0.4056		8.30	10.0	-17.0	30.0
Toluene	Ave	0.5593	0.4695		8.39	10.0	-16.1	30.0
n-Octane	Ave	0.5915	0.4601		7.78	10.0	-22.2	30.0
trans-1,3-Dichloropropene	Ave	0.4736	0.3986		8.41	10.0	-15.8	30.0
1,1,2-Trichloroethane	Ave	0.3203	0.2680		8.37	10.0	-16.3	30.0
Tetrachloroethene	Ave	0.5141	0.4186		8.14	10.0	-18.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5031	0.4257		8.46	10.0	-15.4	30.0
Dibromochloromethane	Ave	0.6687	0.6455		9.65	10.0	-3.5	30.0
1,2-Dibromoethane	Ave	0.5756	0.5052		8.78	10.0	-12.2	30.0
Chlorobenzene	Ave	0.7652	0.6726		8.79	10.0	-12.1	30.0
Ethylbenzene	Ave	1.182	1.053		8.91	10.0	-10.9	30.0
n-Nonane	Ave	0.5576	0.4589		8.23	10.0	-17.7	30.0
m,p-Xylene	Ave	0.4570	0.4049		17.7	20.0	-11.4	30.0
Xylene, o-	Ave	0.4646	0.4120		8.87	10.0	-11.3	30.0
Styrene	Ave	0.6391	0.5981		9.36	10.0	-6.4	30.0
Bromoform	Ave	0.5003	0.5360		10.7	10.0	7.1	30.0
Cumene	Ave	1.280	1.172		9.15	10.0	-8.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7514	0.6435		8.56	10.0	-14.4	30.0
n-Propylbenzene	Ave	1.543	1.424		9.22	10.0	-7.7	30.0
1,2,3-Trichloropropane	Ave	0.5991	0.5131		8.56	10.0	-14.3	30.0
n-Decane	Ave	0.6446	0.5553		8.61	10.0	-13.9	30.0
2-Chlorotoluene	Ave	1.108	1.034		9.33	10.0	-6.7	30.0
4-Ethyltoluene	Ave	1.188	1.138		9.58	10.0	-4.2	30.0
1,3,5-Trimethylbenzene	Ave	1.039	0.9546		9.18	10.0	-8.2	30.0
Alpha Methyl Styrene	Ave	0.4784	0.4572		9.55	10.0	-4.4	30.0
tert-Butylbenzene	Ave	0.9517	0.8700		9.14	10.0	-8.6	30.0
1,2,4-Trimethylbenzene	Ave	1.020	0.9541		9.35	10.0	-6.4	30.0
sec-Butylbenzene	Ave	1.470	1.352		9.19	10.0	-8.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: CCVIS 200-119318/2 Calibration Date: 08/03/2017 10:59

Instrument ID: CHG.i Calib Start Date: 07/11/2017 17:26

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/11/2017 23:20

Lab File ID: 200-26195-002.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.158	1.107		9.56	10.0	-4.4	30.0
1,3-Dichlorobenzene	Ave	0.7000	0.6332		9.04	10.0	-9.6	30.0
1,4-Dichlorobenzene	Ave	0.6859	0.6261		9.13	10.0	-8.7	30.0
Benzyl chloride	Ave	0.8720	0.8940		10.2	10.0	2.5	30.0
n-Butylbenzene	Ave	1.112	1.063		9.56	10.0	-4.4	30.0
n-Undecane	Ave	0.6451	0.5209		8.07	10.0	-19.3	30.0
1,2-Dichlorobenzene	Ave	0.6567	0.5828		8.87	10.0	-11.3	30.0
n-Dodecane	Ave	0.4496	0.3916		8.71	10.0	-12.9	30.0
1,2,4-Trichlorobenzene	Ave	0.3859	0.3119		8.08	10.0	-19.2	30.0
Hexachlorobutadiene	Ave	0.3603	0.2711		7.52	10.0	-24.8	30.0
Naphthalene	Ave	0.8299	0.7372		8.88	10.0	-11.2	30.0
1,2,3-Trichlorobenzene	Ave	0.3285	0.2708		8.24	10.0	-17.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	0.7663		8.39	10.0	-16.1	30.0
Dichlorodifluoromethane	Ave	3.765	3.365		8.93	10.0	-10.6	30.0
Freon 22	Ave	2.071	1.790		8.64	10.0	-13.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	3.879		9.89	10.0	-1.1	30.0
Chloromethane	Ave	1.217	1.002		8.23	10.0	-17.6	30.0
n-Butane	Ave	2.353	1.973		8.38	10.0	-16.2	30.0
Vinyl chloride	Ave	1.853	1.545		8.34	10.0	-16.6	30.0
1,3-Butadiene	Ave	1.474	1.190		8.07	10.0	-19.2	30.0
Bromomethane	Ave	1.533	1.409		9.19	10.0	-8.1	30.0
Chloroethane	Ave	0.9032	0.8032		8.89	10.0	-11.1	30.0
Isopentane	Ave	1.856	1.743		9.39	10.0	-6.1	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.496		9.58	10.0	-4.2	30.0
Trichlorofluoromethane	Ave	4.030	3.749		9.30	10.0	-7.0	30.0
n-Pentane	Ave	2.889	2.830		9.79	10.0	-2.0	30.0
Ethanol	Ave	0.7560	0.6839		13.6	15.0	-9.5	30.0
Ethyl ether	Ave	1.198	1.229		10.3	10.0	2.6	30.0
Acrolein	Ave	0.5128	0.6311		12.3	10.0	23.1	30.0
Freon TF	Ave	3.358	3.158		9.40	10.0	-6.0	30.0
1,1-Dichloroethene	Ave	1.618	1.532		9.47	10.0	-5.3	30.0
Acetone	Ave	2.561	2.369		9.25	10.0	-7.5	30.0
Isopropyl alcohol	Ave	2.921	2.536		8.68	10.0	-13.2	30.0
Carbon disulfide	Ave	4.629	5.043		10.9	10.0	9.0	30.0
3-Chloropropene	Ave	2.113	1.869		8.85	10.0	-11.5	30.0
Acetonitrile	Ave	1.260	1.268		10.1	10.0	0.7	30.0
Methylene Chloride	Ave	2.069	1.799		8.70	10.0	-13.0	30.0
tert-Butyl alcohol	Ave	3.668	3.391		9.24	10.0	-7.5	30.0
Methyl tert-butyl ether	Ave	4.936	4.759		9.64	10.0	-3.6	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.498		9.78	10.0	-2.1	30.0
Acrylonitrile	Ave	1.272	1.236		9.71	10.0	-2.9	30.0
n-Hexane	Ave	2.865	2.927		10.2	10.0	2.2	30.0
1,1-Dichloroethane	Ave	3.526	3.162		8.96	10.0	-10.3	30.0
Vinyl acetate	Ave	4.318	4.210		9.75	10.0	-2.5	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.752		9.40	10.0	-6.0	30.0
Methyl Ethyl Ketone	Ave	0.9898	0.9074		9.17	10.0	-8.3	30.0
Ethyl acetate	Ave	0.1467	0.1503		10.2	10.0	2.5	30.0
Tetrahydrofuran	Ave	0.4388	0.4047		9.22	10.0	-7.8	30.0
Chloroform	Ave	3.665	3.478		9.49	10.0	-5.1	30.0
Cyclohexane	Ave	0.5046	0.4956		9.82	10.0	-1.8	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.6918		9.48	10.0	-5.2	30.0
Carbon tetrachloride	Ave	0.6942	0.6906		9.95	10.0	-0.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	1.826		9.44	10.0	-5.6	30.0
Benzene	Ave	1.191	1.112		9.34	10.0	-6.6	30.0
1,2-Dichloroethane	Ave	0.4645	0.4346		9.35	10.0	-6.4	30.0
n-Heptane	Ave	0.7288	0.6423		8.81	10.0	-11.9	30.0
n-Butanol	Ave	0.2374	0.2372		9.99	10.0	-0.0	30.0
Trichloroethene	Ave	0.5023	0.4737		9.43	10.0	-5.7	30.0
1,2-Dichloropropane	Ave	0.4676	0.4191		8.96	10.0	-10.4	30.0
Methyl methacrylate	Ave	0.4293	0.4135		9.63	10.0	-3.7	30.0
1,4-Dioxane	Ave	0.2325	0.2173		9.34	10.0	-6.6	30.0
Dibromomethane	Ave	0.4351	0.4123		9.47	10.0	-5.2	30.0
Bromodichloromethane	Ave	0.8316	0.7806		9.38	10.0	-6.1	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.5961		9.64	10.0	-3.5	30.0
methyl isobutyl ketone	Ave	0.9410	0.8147		8.66	10.0	-13.4	30.0
n-Octane	Ave	1.022	0.9226		9.02	10.0	-9.8	30.0
Toluene	Ave	0.9210	0.8810		9.56	10.0	-4.4	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.5782		9.57	10.0	-4.2	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.4492		9.53	10.0	-4.7	30.0
Tetrachloroethene	Ave	0.6859	0.6719		9.79	10.0	-2.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	0.8123		8.53	10.0	-14.7	30.0
Dibromochloromethane	Ave	0.8493	0.8223		9.68	10.0	-3.2	30.0
1,2-Dibromoethane	Ave	0.7686	0.7520		9.78	10.0	-2.2	30.0
Chlorobenzene	Ave	1.132	1.069		9.44	10.0	-5.6	30.0
Ethylbenzene	Ave	1.948	1.877		9.63	10.0	-3.6	30.0
n-Nonane	Ave	1.009	0.9479		9.39	10.0	-6.0	30.0
m,p-Xylene	Ave	0.7551	0.7324		19.4	20.0	-3.0	30.0
Xylene, o-	Ave	0.7274	0.7045		9.68	10.0	-3.2	30.0
Styrene	Ave	1.116	1.089		9.75	10.0	-2.5	30.0
Bromoform	Ave	0.7713	0.7900		10.2	10.0	2.4	30.0
Cumene	Ave	2.105	2.064		9.80	10.0	-2.0	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.153		9.43	10.0	-5.7	30.0
n-Propylbenzene	Ave	2.660	2.541		9.55	10.0	-4.5	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.8332		8.99	10.0	-10.1	30.0
n-Decane	Ave	1.330	1.198		9.01	10.0	-9.9	30.0
4-Ethyltoluene	Ave	2.141	2.102		9.82	10.0	-1.8	30.0
2-Chlorotoluene	Ave	1.864	1.755		9.41	10.0	-5.9	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.707		9.60	10.0	-4.0	30.0
Alpha Methyl Styrene	Ave	0.8375	0.8156		9.74	10.0	-2.6	30.0
tert-Butylbenzene	Ave	1.671	1.605		9.60	10.0	-4.0	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.704		9.64	10.0	-3.6	30.0
sec-Butylbenzene	Ave	2.617	2.529		9.66	10.0	-3.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.050		9.75	10.0	-2.5	30.0
1,3-Dichlorobenzene	Ave	1.139	1.064		9.34	10.0	-6.6	30.0
1,4-Dichlorobenzene	Ave	1.077	0.9940		9.23	10.0	-7.7	30.0
Benzyl chloride	Ave	1.290	1.199		9.29	10.0	-7.0	30.0
n-Undecane	Ave	1.505	1.355		9.01	10.0	-9.9	30.0
n-Butylbenzene	Ave	2.118	2.063		9.74	10.0	-2.6	30.0
1,2-Dichlorobenzene	Ave	1.071	1.010		9.43	10.0	-5.7	30.0
n-Dodecane	Ave	1.095	0.9872		9.02	10.0	-9.8	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.5113		8.50	10.0	-15.0	30.0
Hexachlorobutadiene	Ave	0.6760	0.6194		9.16	10.0	-8.4	30.0
Naphthalene	Ave	1.249	0.9481		7.59	10.0	-24.1	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.4199		8.08	10.0	-19.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: CCVIS 200-118667/2 Calibration Date: 07/18/2017 14:59

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25955-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	1.224		13.4	10.0	34.1*	30.0
Dichlorodifluoromethane	Ave	3.765	4.098		10.9	10.0	8.8	30.0
Freon 22	Ave	2.071	2.541		12.3	10.0	22.7	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	4.325		11.0	10.0	10.2	30.0
Chloromethane	Ave	1.217	1.530		12.6	10.0	25.7	30.0
n-Butane	Ave	2.353	3.049		13.0	10.0	29.6	30.0
Vinyl chloride	Ave	1.853	2.128		11.5	10.0	14.8	30.0
1,3-Butadiene	Ave	1.474	1.725		11.7	10.0	17.0	30.0
Bromomethane	Ave	1.533	1.570		10.2	10.0	2.4	30.0
Chloroethane	Ave	0.9032	1.019		11.3	10.0	12.9	30.0
Isopentane	Ave	1.856	2.257		12.2	10.0	21.6	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.578		10.1	10.0	1.1	30.0
Trichlorofluoromethane	Ave	4.030	4.040		10.0	10.0	0.3	30.0
n-Pentane	Ave	2.889	3.623		12.5	10.0	25.4	30.0
Ethanol	Ave	0.7560	0.8419		16.7	15.0	11.4	30.0
Ethyl ether	Ave	1.198	1.380		11.5	10.0	15.2	30.0
Acrolein	Ave	0.5128	0.4913		9.58	10.0	-4.2	30.0
Freon TF	Ave	3.358	3.348		9.97	10.0	-0.3	30.0
1,1-Dichloroethene	Ave	1.618	1.613		9.96	10.0	-0.4	30.0
Acetone	Ave	2.561	3.337		13.0	10.0	30.3*	30.0
Carbon disulfide	Ave	4.629	5.124		11.1	10.0	10.7	30.0
Isopropyl alcohol	Ave	2.921	3.798		13.0	10.0	30.1*	30.0
3-Chloropropene	Ave	2.113	2.630		12.4	10.0	24.5	30.0
Acetonitrile	Ave	1.260	1.755		13.9	10.0	39.3*	30.0
Methylene Chloride	Ave	2.069	2.546		12.3	10.0	23.0	30.0
tert-Butyl alcohol	Ave	3.668	4.434		12.1	10.0	20.9	30.0
Methyl tert-butyl ether	Ave	4.936	5.512		11.2	10.0	11.7	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.908		11.4	10.0	13.9	30.0
Acrylonitrile	Ave	1.272	1.590		12.5	10.0	25.0	30.0
n-Hexane	Ave	2.865	3.441		12.0	10.0	20.1	30.0
1,1-Dichloroethane	Ave	3.526	3.931		11.1	10.0	11.5	30.0
Vinyl acetate	Ave	4.318	5.779		13.4	10.0	33.8*	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.907		10.2	10.0	2.4	30.0
Methyl Ethyl Ketone	Ave	0.9898	1.083		10.9	10.0	9.4	30.0
Ethyl acetate	Ave	0.1467	0.1553		10.6	10.0	5.8	30.0
Tetrahydrofuran	Ave	0.4388	0.5840		13.3	10.0	33.1*	30.0
Chloroform	Ave	3.665	3.964		10.8	10.0	8.2	30.0
Cyclohexane	Ave	0.5046	0.5302		10.5	10.0	5.1	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.7441		10.2	10.0	2.0	30.0
Carbon tetrachloride	Ave	0.6942	0.7008		10.1	10.0	1.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: CCVIS 200-118667/2 Calibration Date: 07/18/2017 14:59

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25955-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	2.304		11.9	10.0	19.2	30.0
Benzene	Ave	1.191	1.254		10.5	10.0	5.3	30.0
1,2-Dichloroethane	Ave	0.4645	0.5127		11.0	10.0	10.4	30.0
n-Heptane	Ave	0.7288	0.9170		12.6	10.0	25.8	30.0
n-Butanol	Ave	0.2374	0.2852		12.0	10.0	20.1	30.0
Trichloroethene	Ave	0.5023	0.5015		9.98	10.0	-0.2	30.0
1,2-Dichloropropane	Ave	0.4676	0.5379		11.5	10.0	15.0	30.0
Methyl methacrylate	Ave	0.4293	0.4807		11.2	10.0	12.0	30.0
1,4-Dioxane	Ave	0.2325	0.2453		10.5	10.0	5.5	30.0
Dibromomethane	Ave	0.4351	0.4087		9.39	10.0	-6.1	30.0
Bromodichloromethane	Ave	0.8316	0.8974		10.8	10.0	7.9	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.6821		11.0	10.0	10.4	30.0
methyl isobutyl ketone	Ave	0.9410	1.229		13.1	10.0	30.6*	30.0
n-Octane	Ave	1.022	1.366		13.4	10.0	33.6*	30.0
Toluene	Ave	0.9210	0.9558		10.4	10.0	3.8	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.6682		11.1	10.0	10.7	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.5058		10.7	10.0	7.4	30.0
Tetrachloroethene	Ave	0.6859	0.6471		9.43	10.0	-5.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	1.243		13.0	10.0	30.5*	30.0
Dibromochloromethane	Ave	0.8493	0.8550		10.1	10.0	0.7	30.0
1,2-Dibromoethane	Ave	0.7686	0.7944		10.3	10.0	3.4	30.0
Chlorobenzene	Ave	1.132	1.123		9.92	10.0	-0.8	30.0
Ethylbenzene	Ave	1.948	2.071		10.6	10.0	6.4	30.0
n-Nonane	Ave	1.009	1.220		12.1	10.0	20.9	30.0
m,p-Xylene	Ave	0.7551	0.7922		21.0	20.0	4.9	30.0
Xylene, o-	Ave	0.7274	0.7612		10.5	10.0	4.6	30.0
Styrene	Ave	1.116	1.188		10.6	10.0	6.4	30.0
Bromoform	Ave	0.7713	0.7617		9.87	10.0	-1.2	30.0
Cumene	Ave	2.105	2.267		10.8	10.0	7.7	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.324		10.8	10.0	8.3	30.0
n-Propylbenzene	Ave	2.660	2.979		11.2	10.0	12.0	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.995		10.7	10.0	7.4	30.0
n-Decane	Ave	1.330	1.595		12.0	10.0	19.9	30.0
4-Ethyltoluene	Ave	2.141	2.320		10.8	10.0	8.4	30.0
2-Chlorotoluene	Ave	1.864	2.012		10.8	10.0	7.9	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.911		10.7	10.0	7.5	30.0
Alpha Methyl Styrene	Ave	0.8375	0.8958		10.7	10.0	7.0	30.0
tert-Butylbenzene	Ave	1.671	1.792		10.7	10.0	7.2	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.954		11.1	10.0	10.6	30.0
sec-Butylbenzene	Ave	2.617	2.958		11.3	10.0	13.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Lab Sample ID: CCVIS 200-118667/2 Calibration Date: 07/18/2017 14:59

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25955-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.328		11.1	10.0	10.8	30.0
1,3-Dichlorobenzene	Ave	1.139	1.165		10.2	10.0	2.2	30.0
1,4-Dichlorobenzene	Ave	1.077	1.103		10.2	10.0	2.4	30.0
Benzyl chloride	Ave	1.290	1.477		11.4	10.0	14.5	30.0
n-Undecane	Ave	1.505	1.863		12.4	10.0	23.8	30.0
n-Butylbenzene	Ave	2.118	2.609		12.3	10.0	23.2	30.0
1,2-Dichlorobenzene	Ave	1.071	1.112		10.4	10.0	3.8	30.0
n-Dodecane	Ave	1.095	1.169		10.7	10.0	6.8	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.5071		8.43	10.0	-15.7	30.0
Hexachlorobutadiene	Ave	0.6760	0.6301		9.32	10.0	-6.8	30.0
Naphthalene	Ave	1.249	1.022		8.18	10.0	-18.2	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.3850		7.41	10.0	-25.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Lab Sample ID: CCVIS 200-118979/2 Calibration Date: 07/26/2017 10:48

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26065_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9101	1.031		11.3	10.0	13.2	30.0
Dichlorodifluoromethane	Ave	2.848	2.896		10.2	10.0	1.7	30.0
Freon 22	Ave	1.943	1.970		10.1	10.0	1.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.798	2.717		9.71	10.0	-2.9	30.0
Chloromethane	Ave	1.141	1.116		9.78	10.0	-2.2	30.0
n-Butane	Ave	1.918	1.859		9.69	10.0	-3.1	30.0
Vinyl chloride	Ave	1.274	1.173		9.21	10.0	-7.9	30.0
1,3-Butadiene	Ave	0.9599	0.8893		9.26	10.0	-7.4	30.0
Bromomethane	Ave	0.9861	0.9003		9.13	10.0	-8.7	30.0
Chloroethane	Ave	0.5747	0.5246		9.13	10.0	-8.7	30.0
Isopentane	Ave	1.349	1.171		8.68	10.0	-13.2	30.0
Bromoethene(Vinyl Bromide)	Ave	1.002	0.9033		9.02	10.0	-9.8	30.0
Trichlorofluoromethane	Ave	2.685	2.527		9.41	10.0	-5.9	30.0
n-Pentane	Ave	1.959	1.756		8.96	10.0	-10.3	30.0
Ethanol	Ave	0.5944	0.6134		15.5	15.0	3.2	30.0
Ethyl ether	Ave	0.8017	0.7280		9.08	10.0	-9.2	30.0
Freon TF	Ave	2.071	1.891		9.13	10.0	-8.7	30.0
Acrolein	Ave	0.3219	0.3920		12.2	10.0	21.8	30.0
1,1-Dichloroethene	Ave	0.997	0.9077		9.10	10.0	-8.9	30.0
Acetone	Ave	1.749	1.724		9.85	10.0	-1.5	30.0
Carbon disulfide	Ave	2.991	2.783		9.30	10.0	-6.9	30.0
Isopropyl alcohol	Ave	2.078	1.972		9.49	10.0	-5.1	30.0
3-Chloropropene	Ave	1.558	1.567		10.1	10.0	0.6	30.0
Acetonitrile	Ave	0.9117	0.8835		9.69	10.0	-3.1	30.0
Methylene Chloride	Ave	1.415	1.323		9.35	10.0	-6.5	30.0
tert-Butyl alcohol	Ave	2.531	2.465		9.74	10.0	-2.6	30.0
Methyl tert-butyl ether	Ave	3.286	3.134		9.54	10.0	-4.6	30.0
trans-1,2-Dichloroethene	Ave	1.792	1.696		9.46	10.0	-5.4	30.0
Acrylonitrile	Ave	0.9164	0.8614		9.40	10.0	-6.0	30.0
n-Hexane	Ave	1.932	1.766		9.14	10.0	-8.6	30.0
1,1-Dichloroethane	Ave	2.361	2.168		9.18	10.0	-8.2	30.0
Vinyl acetate	Ave	3.252	3.289		10.1	10.0	1.1	30.0
cis-1,2-Dichloroethene	Ave	1.247	1.177		9.44	10.0	-5.6	30.0
Methyl Ethyl Ketone	Ave	0.6645	0.6061		9.12	10.0	-8.8	30.0
Ethyl acetate	Ave	0.0918	0.0903		9.84	10.0	-1.6	30.0
Tetrahydrofuran	Ave	0.2994	0.3074		10.3	10.0	2.7	30.0
Chloroform	Ave	2.610	2.494		9.55	10.0	-4.4	30.0
Cyclohexane	Ave	0.3215	0.2988		9.29	10.0	-7.1	30.0
1,1,1-Trichloroethane	Ave	0.4612	0.4390		9.52	10.0	-4.8	30.0
Carbon tetrachloride	Ave	0.4491	0.4410		9.82	10.0	-1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Lab Sample ID: CCVIS 200-118979/2 Calibration Date: 07/26/2017 10:48

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26065_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.409	1.353		9.60	10.0	-4.0	30.0
Benzene	Ave	0.7959	0.7444		9.35	10.0	-6.5	30.0
1,2-Dichloroethane	Ave	0.3313	0.3206		9.67	10.0	-3.2	30.0
n-Heptane	Ave	0.5599	0.5595		9.99	10.0	-0.0	30.0
n-Butanol	Ave	0.1795	0.1712		9.54	10.0	-4.6	30.0
Trichloroethene	Ave	0.3383	0.3054		9.03	10.0	-9.7	30.0
1,2-Dichloropropane	Ave	0.3312	0.3240		9.78	10.0	-2.2	30.0
Methyl methacrylate	Ave	0.3013	0.2901		9.63	10.0	-3.7	30.0
1,4-Dioxane	Ave	0.1674	0.1496		8.94	10.0	-10.6	30.0
Dibromomethane	Ave	0.2875	0.2525		8.78	10.0	-12.2	30.0
Bromodichloromethane	Ave	0.5489	0.5338		9.72	10.0	-2.8	30.0
cis-1,3-Dichloropropene	Ave	0.4595	0.4414		9.60	10.0	-3.9	30.0
methyl isobutyl ketone	Ave	0.7089	0.7549		10.6	10.0	6.5	30.0
Toluene	Ave	0.6215	0.5906		9.50	10.0	-5.0	30.0
n-Octane	Ave	0.7992	0.8384		10.5	10.0	4.9	30.0
trans-1,3-Dichloropropene	Ave	0.4889	0.4534		9.27	10.0	-7.3	30.0
1,1,2-Trichloroethane	Ave	0.3237	0.3144		9.71	10.0	-2.9	30.0
Tetrachloroethene	Ave	0.4746	0.4224		8.90	10.0	-11.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7587	0.8233		10.8	10.0	8.5	30.0
Dibromochloromethane	Ave	0.5513	0.5557		10.1	10.0	0.8	30.0
1,2-Dibromoethane	Ave	0.5488	0.5213		9.50	10.0	-5.0	30.0
Chlorobenzene	Ave	0.8169	0.7706		9.43	10.0	-5.7	30.0
Ethylbenzene	Ave	1.414	1.362		9.63	10.0	-3.7	30.0
n-Nonane	Ave	0.7778	0.7979		10.3	10.0	2.6	30.0
m,p-Xylene	Ave	0.5308	0.5089		19.2	20.0	-4.1	30.0
Xylene, o-	Ave	0.5199	0.4914		9.45	10.0	-5.5	30.0
Styrene	Ave	0.7987	0.7876		9.86	10.0	-1.4	30.0
Bromoform	Ave	0.4706	0.5487		11.7	10.0	16.6	30.0
Cumene	Ave	1.533	1.471		9.59	10.0	-4.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8549	0.8446		9.88	10.0	-1.2	30.0
n-Propylbenzene	Ave	1.960	1.934		9.87	10.0	-1.3	30.0
1,2,3-Trichloropropane	Ave	0.6968	0.6853		9.83	10.0	-1.6	30.0
n-Decane	Ave	0.9746	1.091		11.2	10.0	11.9	30.0
2-Chlorotoluene	Ave	1.339	1.358		10.1	10.0	1.4	30.0
4-Ethyltoluene	Ave	1.516	1.539		10.2	10.0	1.5	30.0
1,3,5-Trimethylbenzene	Ave	1.273	1.259		9.88	10.0	-1.1	30.0
Alpha Methyl Styrene	Ave	0.5826	0.6001		10.3	10.0	3.0	30.0
tert-Butylbenzene	Ave	1.175	1.150		9.79	10.0	-2.1	30.0
1,2,4-Trimethylbenzene	Ave	1.279	1.286		10.0	10.0	0.5	30.0
sec-Butylbenzene	Ave	1.849	1.860		10.1	10.0	0.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Lab Sample ID: CCVIS 200-118979/2 Calibration Date: 07/26/2017 10:48

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26065_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.508	1.519		10.1	10.0	0.7	30.0
1,3-Dichlorobenzene	Ave	0.8276	0.8243		9.96	10.0	-0.4	30.0
1,4-Dichlorobenzene	Ave	0.8278	0.8214		9.92	10.0	-0.8	30.0
Benzyl chloride	Ave	1.102	1.262		11.4	10.0	14.5	30.0
n-Butylbenzene	Ave	1.509	1.594		10.6	10.0	5.6	30.0
n-Undecane	Ave	1.021	1.079		10.6	10.0	5.7	30.0
1,2-Dichlorobenzene	Ave	0.7869	0.7697		9.78	10.0	-2.2	30.0
n-Dodecane	Ave	0.8463	0.8876		10.5	10.0	4.9	30.0
1,2,4-Trichlorobenzene	Ave	0.6141	0.5354		8.72	10.0	-12.8	30.0
Hexachlorobutadiene	Ave	0.5398	0.4856		8.99	10.0	-10.0	30.0
Naphthalene	Ave	1.395	1.269		9.17	10.0	-9.0	30.0
1,2,3-Trichlorobenzene	Ave	0.5638	0.5085		9.74	10.0	-9.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab Sample ID: ICV 200-118373/15 Calibration Date: 07/11/2017 00:30

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 25833_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9101	0.9288		10.2	10.0	2.0	30.0
Dichlorodifluoromethane	Ave	2.848	2.810		9.86	10.0	-1.4	30.0
Freon 22	Ave	1.943	1.903		9.79	10.0	-2.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.798	3.083		11.0	10.0	10.2	30.0
Chloromethane	Ave	1.141	1.100		9.64	10.0	-3.6	30.0
n-Butane	Ave	1.918	1.896		9.88	10.0	-1.1	30.0
Vinyl chloride	Ave	1.274	1.198		9.39	10.0	-6.0	30.0
1,3-Butadiene	Ave	0.9599	0.8961		9.33	10.0	-6.7	30.0
Bromomethane	Ave	0.9861	0.9742		9.88	10.0	-1.2	30.0
Chloroethane	Ave	0.5747	0.5737		9.98	10.0	-0.2	30.0
Isopentane	Ave	1.349	1.439		10.7	10.0	6.7	30.0
Bromoethene(Vinyl Bromide)	Ave	1.002	0.9820		9.80	10.0	-2.0	30.0
Trichlorofluoromethane	Ave	2.685	2.622		9.76	10.0	-2.3	30.0
n-Pentane	Ave	1.959	2.175		11.1	10.0	11.0	30.0
Ethanol	Ave	0.5944	0.6044		15.3	15.0	1.7	30.0
Ethyl ether	Ave	0.8017	0.8839		11.0	10.0	10.3	30.0
Freon TF	Ave	2.071	2.038		9.84	10.0	-1.6	30.0
Acrolein	Ave	0.3219	0.4468		13.9	10.0	38.8*	30.0
1,1-Dichloroethene	Ave	0.997	0.9761		9.79	10.0	-2.1	30.0
Acetone	Ave	1.749	1.852		10.6	10.0	5.9	30.0
Carbon disulfide	Ave	2.991	3.431		11.5	10.0	14.7	30.0
Isopropyl alcohol	Ave	2.078	2.018		9.71	10.0	-2.9	30.0
3-Chloropropene	Ave	1.558	1.559		10.0	10.0	0.0	30.0
Acetonitrile	Ave	0.9117	1.051		11.5	10.0	15.3	30.0
Methylene Chloride	Ave	1.415	1.413		9.99	10.0	-0.1	30.0
tert-Butyl alcohol	Ave	2.531	2.476		9.78	10.0	-2.2	30.0
Methyl tert-butyl ether	Ave	3.286	3.299		10.0	10.0	0.4	30.0
trans-1,2-Dichloroethene	Ave	1.792	1.908		10.6	10.0	6.4	30.0
Acrylonitrile	Ave	0.9164	0.9704		10.6	10.0	5.9	30.0
n-Hexane	Ave	1.932	2.079		10.8	10.0	7.6	30.0
1,1-Dichloroethane	Ave	2.361	2.332		9.88	10.0	-1.2	30.0
Vinyl acetate	Ave	3.252	3.609		11.1	10.0	11.0	30.0
cis-1,2-Dichloroethene	Ave	1.247	1.207		9.68	10.0	-3.2	30.0
Methyl Ethyl Ketone	Ave	0.6645	0.6432		9.68	10.0	-3.2	30.0
Ethyl acetate	Ave	0.0918	0.1022		11.1	10.0	11.4	30.0
Tetrahydrofuran	Ave	0.2994	0.3155		10.5	10.0	5.4	30.0
Chloroform	Ave	2.610	2.614		10.0	10.0	0.1	30.0
Cyclohexane	Ave	0.3215	0.3219		10.0	10.0	0.1	30.0
1,1,1-Trichloroethane	Ave	0.4612	0.4595		9.96	10.0	-0.4	30.0
Carbon tetrachloride	Ave	0.4491	0.4629		10.3	10.0	3.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab Sample ID: ICV 200-118373/15 Calibration Date: 07/11/2017 00:30

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 25833_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.409	1.399		9.92	10.0	-0.7	30.0
Benzene	Ave	0.7959	0.7823		9.83	10.0	-1.7	30.0
1,2-Dichloroethane	Ave	0.3313	0.3262		9.84	10.0	-1.5	30.0
n-Heptane	Ave	0.5599	0.5458		9.75	10.0	-2.5	30.0
n-Butanol	Ave	0.1795	0.1884		10.5	10.0	5.0	30.0
Trichloroethene	Ave	0.3383	0.3281		9.70	10.0	-3.0	30.0
1,2-Dichloropropane	Ave	0.3312	0.3221		9.72	10.0	-2.7	30.0
Methyl methacrylate	Ave	0.3013	0.3035		10.1	10.0	0.7	30.0
1,4-Dioxane	Ave	0.1674	0.1580		9.44	10.0	-5.6	30.0
Dibromomethane	Ave	0.2875	0.2726		9.48	10.0	-5.2	30.0
Bromodichloromethane	Ave	0.5489	0.5463		9.95	10.0	-0.5	30.0
cis-1,3-Dichloropropene	Ave	0.4595	0.4537		9.87	10.0	-1.3	30.0
methyl isobutyl ketone	Ave	0.7089	0.6795		9.58	10.0	-4.1	30.0
Toluene	Ave	0.6215	0.6255		10.1	10.0	0.6	30.0
n-Octane	Ave	0.7992	0.7879		9.86	10.0	-1.4	30.0
trans-1,3-Dichloropropene	Ave	0.4889	0.4545		9.29	10.0	-7.0	30.0
1,1,2-Trichloroethane	Ave	0.3237	0.3312		10.2	10.0	2.3	30.0
Tetrachloroethene	Ave	0.4746	0.4596		9.68	10.0	-3.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7587	0.7078		9.33	10.0	-6.7	30.0
Dibromochloromethane	Ave	0.5513	0.5703		10.3	10.0	3.5	30.0
1,2-Dibromoethane	Ave	0.5488	0.5501		10.0	10.0	0.2	30.0
Chlorobenzene	Ave	0.8169	0.8110		9.93	10.0	-0.7	30.0
Ethylbenzene	Ave	1.414	1.417		10.0	10.0	0.2	30.0
n-Nonane	Ave	0.7778	0.7949		10.2	10.0	2.2	30.0
m,p-Xylene	Ave	0.5308	0.5356		20.2	20.0	0.9	30.0
Xylene, o-	Ave	0.5199	0.5130		9.87	10.0	-1.3	30.0
Styrene	Ave	0.7987	0.8002		10.0	10.0	0.2	30.0
Bromoform	Ave	0.4706	0.5525		11.7	10.0	17.4	30.0
Cumene	Ave	1.533	1.548		10.1	10.0	1.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8549	0.8938		10.5	10.0	4.5	30.0
n-Propylbenzene	Ave	1.960	1.982		10.1	10.0	1.1	30.0
1,2,3-Trichloropropane	Ave	0.6968	0.6934		9.95	10.0	-0.5	30.0
n-Decane	Ave	0.9746	1.068		11.0	10.0	9.6	30.0
4-Ethyltoluene	Ave	1.516	1.657		10.9	10.0	9.3	30.0
2-Chlorotoluene	Ave	1.339	1.415		10.6	10.0	5.7	30.0
1,3,5-Trimethylbenzene	Ave	1.273	1.319		10.4	10.0	3.5	30.0
Alpha Methyl Styrene	Ave	0.5826	0.6039		10.4	10.0	3.7	30.0
tert-Butylbenzene	Ave	1.175	1.218		10.4	10.0	3.7	30.0
1,2,4-Trimethylbenzene	Ave	1.279	1.332		10.4	10.0	4.1	30.0
sec-Butylbenzene	Ave	1.849	1.932		10.4	10.0	4.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab Sample ID: ICV 200-118373/15 Calibration Date: 07/11/2017 00:30

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 25833_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.508	1.596		10.6	10.0	5.8	30.0
1,3-Dichlorobenzene	Ave	0.8276	0.8372		10.1	10.0	1.2	30.0
1,4-Dichlorobenzene	Ave	0.8278	0.8012		9.68	10.0	-3.2	30.0
Benzyl chloride	Ave	1.102	1.122		10.2	10.0	1.8	30.0
n-Butylbenzene	Ave	1.509	1.528		10.1	10.0	1.2	30.0
n-Undecane	Ave	1.021	1.011		9.91	10.0	-0.9	30.0
1,2-Dichlorobenzene	Ave	0.7869	0.8030		10.2	10.0	2.1	30.0
n-Dodecane	Ave	0.8463	0.9078		10.7	10.0	7.3	30.0
1,2,4-Trichlorobenzene	Ave	0.6141	0.5011		8.16	10.0	-18.4	30.0
Hexachlorobutadiene	Ave	0.5398	0.5316		9.84	10.0	-1.5	30.0
Naphthalene	Ave	1.395	1.019		7.30	10.0	-26.9	30.0
1,2,3-Trichlorobenzene	Ave	0.5638	0.4816		8.54	10.0	-14.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab Sample ID: CCVIS 200-118979/2 Calibration Date: 07/26/2017 10:48

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26065_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9101	1.031		11.3	10.0	13.2	30.0
Dichlorodifluoromethane	Ave	2.848	2.896		10.2	10.0	1.7	30.0
Freon 22	Ave	1.943	1.970		10.1	10.0	1.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.798	2.717		9.71	10.0	-2.9	30.0
Chloromethane	Ave	1.141	1.116		9.78	10.0	-2.2	30.0
n-Butane	Ave	1.918	1.859		9.69	10.0	-3.1	30.0
Vinyl chloride	Ave	1.274	1.173		9.21	10.0	-7.9	30.0
1,3-Butadiene	Ave	0.9599	0.8893		9.26	10.0	-7.4	30.0
Bromomethane	Ave	0.9861	0.9003		9.13	10.0	-8.7	30.0
Chloroethane	Ave	0.5747	0.5246		9.13	10.0	-8.7	30.0
Isopentane	Ave	1.349	1.171		8.68	10.0	-13.2	30.0
Bromoethene(Vinyl Bromide)	Ave	1.002	0.9033		9.02	10.0	-9.8	30.0
Trichlorofluoromethane	Ave	2.685	2.527		9.41	10.0	-5.9	30.0
n-Pentane	Ave	1.959	1.756		8.96	10.0	-10.3	30.0
Ethanol	Ave	0.5944	0.6134		15.5	15.0	3.2	30.0
Ethyl ether	Ave	0.8017	0.7280		9.08	10.0	-9.2	30.0
Freon TF	Ave	2.071	1.891		9.13	10.0	-8.7	30.0
Acrolein	Ave	0.3219	0.3920		12.2	10.0	21.8	30.0
1,1-Dichloroethene	Ave	0.997	0.9077		9.10	10.0	-8.9	30.0
Acetone	Ave	1.749	1.724		9.85	10.0	-1.5	30.0
Carbon disulfide	Ave	2.991	2.783		9.30	10.0	-6.9	30.0
Isopropyl alcohol	Ave	2.078	1.972		9.49	10.0	-5.1	30.0
3-Chloropropene	Ave	1.558	1.567		10.1	10.0	0.6	30.0
Acetonitrile	Ave	0.9117	0.8835		9.69	10.0	-3.1	30.0
Methylene Chloride	Ave	1.415	1.323		9.35	10.0	-6.5	30.0
tert-Butyl alcohol	Ave	2.531	2.465		9.74	10.0	-2.6	30.0
Methyl tert-butyl ether	Ave	3.286	3.134		9.54	10.0	-4.6	30.0
trans-1,2-Dichloroethene	Ave	1.792	1.696		9.46	10.0	-5.4	30.0
Acrylonitrile	Ave	0.9164	0.8614		9.40	10.0	-6.0	30.0
n-Hexane	Ave	1.932	1.766		9.14	10.0	-8.6	30.0
1,1-Dichloroethane	Ave	2.361	2.168		9.18	10.0	-8.2	30.0
Vinyl acetate	Ave	3.252	3.289		10.1	10.0	1.1	30.0
cis-1,2-Dichloroethene	Ave	1.247	1.177		9.44	10.0	-5.6	30.0
Methyl Ethyl Ketone	Ave	0.6645	0.6061		9.12	10.0	-8.8	30.0
Ethyl acetate	Ave	0.0918	0.0903		9.84	10.0	-1.6	30.0
Tetrahydrofuran	Ave	0.2994	0.3074		10.3	10.0	2.7	30.0
Chloroform	Ave	2.610	2.494		9.55	10.0	-4.4	30.0
Cyclohexane	Ave	0.3215	0.2988		9.29	10.0	-7.1	30.0
1,1,1-Trichloroethane	Ave	0.4612	0.4390		9.52	10.0	-4.8	30.0
Carbon tetrachloride	Ave	0.4491	0.4410		9.82	10.0	-1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab Sample ID: CCVIS 200-118979/2 Calibration Date: 07/26/2017 10:48

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26065_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.409	1.353		9.60	10.0	-4.0	30.0
Benzene	Ave	0.7959	0.7444		9.35	10.0	-6.5	30.0
1,2-Dichloroethane	Ave	0.3313	0.3206		9.67	10.0	-3.2	30.0
n-Heptane	Ave	0.5599	0.5595		9.99	10.0	-0.0	30.0
n-Butanol	Ave	0.1795	0.1712		9.54	10.0	-4.6	30.0
Trichloroethene	Ave	0.3383	0.3054		9.03	10.0	-9.7	30.0
1,2-Dichloropropane	Ave	0.3312	0.3240		9.78	10.0	-2.2	30.0
Methyl methacrylate	Ave	0.3013	0.2901		9.63	10.0	-3.7	30.0
1,4-Dioxane	Ave	0.1674	0.1496		8.94	10.0	-10.6	30.0
Dibromomethane	Ave	0.2875	0.2525		8.78	10.0	-12.2	30.0
Bromodichloromethane	Ave	0.5489	0.5338		9.72	10.0	-2.8	30.0
cis-1,3-Dichloropropene	Ave	0.4595	0.4414		9.60	10.0	-3.9	30.0
methyl isobutyl ketone	Ave	0.7089	0.7549		10.6	10.0	6.5	30.0
Toluene	Ave	0.6215	0.5906		9.50	10.0	-5.0	30.0
n-Octane	Ave	0.7992	0.8384		10.5	10.0	4.9	30.0
trans-1,3-Dichloropropene	Ave	0.4889	0.4534		9.27	10.0	-7.3	30.0
1,1,2-Trichloroethane	Ave	0.3237	0.3144		9.71	10.0	-2.9	30.0
Tetrachloroethene	Ave	0.4746	0.4224		8.90	10.0	-11.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7587	0.8233		10.8	10.0	8.5	30.0
Dibromochloromethane	Ave	0.5513	0.5557		10.1	10.0	0.8	30.0
1,2-Dibromoethane	Ave	0.5488	0.5213		9.50	10.0	-5.0	30.0
Chlorobenzene	Ave	0.8169	0.7706		9.43	10.0	-5.7	30.0
Ethylbenzene	Ave	1.414	1.362		9.63	10.0	-3.7	30.0
n-Nonane	Ave	0.7778	0.7979		10.3	10.0	2.6	30.0
m,p-Xylene	Ave	0.5308	0.5089		19.2	20.0	-4.1	30.0
Xylene, o-	Ave	0.5199	0.4914		9.45	10.0	-5.5	30.0
Styrene	Ave	0.7987	0.7876		9.86	10.0	-1.4	30.0
Bromoform	Ave	0.4706	0.5487		11.7	10.0	16.6	30.0
Cumene	Ave	1.533	1.471		9.59	10.0	-4.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8549	0.8446		9.88	10.0	-1.2	30.0
n-Propylbenzene	Ave	1.960	1.934		9.87	10.0	-1.3	30.0
1,2,3-Trichloropropane	Ave	0.6968	0.6853		9.83	10.0	-1.6	30.0
n-Decane	Ave	0.9746	1.091		11.2	10.0	11.9	30.0
2-Chlorotoluene	Ave	1.339	1.358		10.1	10.0	1.4	30.0
4-Ethyltoluene	Ave	1.516	1.539		10.2	10.0	1.5	30.0
1,3,5-Trimethylbenzene	Ave	1.273	1.259		9.88	10.0	-1.1	30.0
Alpha Methyl Styrene	Ave	0.5826	0.6001		10.3	10.0	3.0	30.0
tert-Butylbenzene	Ave	1.175	1.150		9.79	10.0	-2.1	30.0
1,2,4-Trimethylbenzene	Ave	1.279	1.286		10.0	10.0	0.5	30.0
sec-Butylbenzene	Ave	1.849	1.860		10.1	10.0	0.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Lab Sample ID: CCVIS 200-118979/2 Calibration Date: 07/26/2017 10:48

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26065_02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.508	1.519		10.1	10.0	0.7	30.0
1,3-Dichlorobenzene	Ave	0.8276	0.8243		9.96	10.0	-0.4	30.0
1,4-Dichlorobenzene	Ave	0.8278	0.8214		9.92	10.0	-0.8	30.0
Benzyl chloride	Ave	1.102	1.262		11.4	10.0	14.5	30.0
n-Butylbenzene	Ave	1.509	1.594		10.6	10.0	5.6	30.0
n-Undecane	Ave	1.021	1.079		10.6	10.0	5.7	30.0
1,2-Dichlorobenzene	Ave	0.7869	0.7697		9.78	10.0	-2.2	30.0
n-Dodecane	Ave	0.8463	0.8876		10.5	10.0	4.9	30.0
1,2,4-Trichlorobenzene	Ave	0.6141	0.5354		8.72	10.0	-12.8	30.0
Hexachlorobutadiene	Ave	0.5398	0.4856		8.99	10.0	-10.0	30.0
Naphthalene	Ave	1.395	1.269		9.17	10.0	-9.0	30.0
1,2,3-Trichlorobenzene	Ave	0.5638	0.5085		9.74	10.0	-9.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab Sample ID: ICV 200-117345/19 Calibration Date: 06/08/2017 10:51

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 25386_19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9839	0.9186		9.33	10.0	-6.6	30.0
Dichlorodifluoromethane	Ave	2.304	2.175		9.44	10.0	-5.6	30.0
Freon 22	Ave	1.710	1.627		9.51	10.0	-4.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.233	2.331		10.4	10.0	4.4	30.0
Chloromethane	Ave	1.040	0.9545		9.18	10.0	-8.2	30.0
n-Butane	Ave	1.844	1.793		9.72	10.0	-2.7	30.0
Vinyl chloride	Ave	1.074	0.9440		8.79	10.0	-12.1	30.0
1,3-Butadiene	Ave	0.8306	0.7530		9.06	10.0	-9.4	30.0
Bromomethane	Ave	0.7992	0.7362		9.21	10.0	-7.9	30.0
Chloroethane	Ave	0.4622	0.4366		9.44	10.0	-5.5	30.0
Isopentane	Ave	1.187	1.280		10.8	10.0	7.8	30.0
Bromoethene(Vinyl Bromide)	Ave	0.7618	0.6924		9.09	10.0	-9.1	30.0
Trichlorofluoromethane	Ave	1.975	1.856		9.40	10.0	-6.0	30.0
n-Pentane	Ave	1.888	2.082		11.0	10.0	10.3	30.0
Ethanol	Ave	0.5188	0.5241		15.2	15.0	1.0	30.0
Ethyl ether	Ave	0.6180	0.6597		10.7	10.0	6.7	30.0
Acrolein	Ave	0.2924	0.3760		12.9	10.0	28.6	30.0
Freon TF	Ave	1.464	1.384		9.45	10.0	-5.5	30.0
1,1-Dichloroethene	Ave	0.7285	0.6830		9.37	10.0	-6.3	30.0
Acetone	Ave	1.584	1.596		10.1	10.0	0.8	30.0
Carbon disulfide	Ave	2.251	2.447		10.9	10.0	8.7	30.0
Isopropyl alcohol	Ave	1.870	1.606		8.59	10.0	-14.1	30.0
3-Chloropropene	Ave	1.396	1.374		9.84	10.0	-1.6	30.0
Acetonitrile	Ave	0.8951	0.9715		10.9	10.0	8.5	30.0
Methylene Chloride	Ave	1.155	1.136		9.83	10.0	-1.7	30.0
tert-Butyl alcohol	Ave	2.107	1.899		9.01	10.0	-9.8	30.0
Methyl tert-butyl ether	Ave	2.467	2.378		9.64	10.0	-3.6	30.0
trans-1,2-Dichloroethene	Ave	1.365	1.392		10.2	10.0	1.9	30.0
Acrylonitrile	Ave	0.7323	0.7490		10.2	10.0	2.3	30.0
n-Hexane	Ave	1.458	1.556		10.7	10.0	6.7	30.0
1,1-Dichloroethane	Ave	1.783	1.693		9.49	10.0	-5.1	30.0
Vinyl acetate	Ave	2.985	3.104		10.4	10.0	4.0	30.0
cis-1,2-Dichloroethene	Ave	0.8844	0.8280		9.36	10.0	-6.4	30.0
Methyl Ethyl Ketone	Ave	0.4931	0.4615		9.36	10.0	-6.4	30.0
Ethyl acetate	Ave	0.0657	0.0693		10.5	10.0	5.5	30.0
Tetrahydrofuran	Ave	0.2887	0.2919		10.1	10.0	1.1	30.0
Chloroform	Ave	1.869	1.833		9.81	10.0	-1.9	30.0
Cyclohexane	Ave	0.2319	0.2237		9.64	10.0	-3.5	30.0
1,1,1-Trichloroethane	Ave	0.3495	0.3331		9.53	10.0	-4.7	30.0
Carbon tetrachloride	Ave	0.3337	0.3196		9.57	10.0	-4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab Sample ID: ICV 200-117345/19 Calibration Date: 06/08/2017 10:51

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 25386_19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.110	1.084		9.77	10.0	-2.3	30.0
Benzene	Ave	0.5927	0.5584		9.42	10.0	-5.8	30.0
1,2-Dichloroethane	Ave	0.2727	0.2635		9.66	10.0	-3.4	30.0
n-Heptane	Ave	0.5063	0.4854		9.59	10.0	-4.1	30.0
n-Butanol	Ave	0.1549	0.1531		9.89	10.0	-1.1	30.0
Trichloroethene	Ave	0.2389	0.2230		9.33	10.0	-6.6	30.0
1,2-Dichloropropane	Ave	0.2590	0.2408		9.30	10.0	-7.0	30.0
Methyl methacrylate	Ave	0.2343	0.2254		9.62	10.0	-3.8	30.0
1,4-Dioxane	Ave	0.1244	0.1077		8.65	10.0	-13.5	30.0
Dibromomethane	Ave	0.1967	0.1785		9.07	10.0	-9.3	30.0
Bromodichloromethane	Ave	0.4297	0.4066		9.46	10.0	-5.4	30.0
cis-1,3-Dichloropropene	Ave	0.3500	0.3360		9.60	10.0	-4.0	30.0
methyl isobutyl ketone	Ave	0.6455	0.6314		9.78	10.0	-2.2	30.0
Toluene	Ave	0.4360	0.4166		9.55	10.0	-4.4	30.0
n-Octane	Ave	0.7019	0.6999		9.97	10.0	-0.3	30.0
trans-1,3-Dichloropropene	Ave	0.3654	0.3474		9.51	10.0	-4.9	30.0
1,1,2-Trichloroethane	Ave	0.2258	0.2213		9.80	10.0	-2.0	30.0
Tetrachloroethene	Ave	0.3270	0.2909		8.89	10.0	-11.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6661	0.6563		9.85	10.0	-1.5	30.0
Dibromochloromethane	Ave	0.3656	0.3519		9.62	10.0	-3.7	30.0
1,2-Dibromoethane	Ave	0.3666	0.3556		9.70	10.0	-3.0	30.0
Chlorobenzene	Ave	0.5442	0.5087		9.35	10.0	-6.5	30.0
Ethylbenzene	Ave	0.995	0.9486		9.53	10.0	-4.7	30.0
n-Nonane	Ave	0.6097	0.5995		9.83	10.0	-1.7	30.0
m,p-Xylene	Ave	0.3736	0.3490		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.3635	0.3381		9.30	10.0	-7.0	30.0
Styrene	Ave	0.5594	0.5429		9.70	10.0	-3.0	30.0
Bromoform	Ave	0.3292	0.3285		9.98	10.0	-0.2	30.0
Cumene	Ave	1.054	1.002		9.50	10.0	-5.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6140	0.6028		9.82	10.0	-1.8	30.0
n-Propylbenzene	Ave	1.397	1.334		9.54	10.0	-4.5	30.0
1,2,3-Trichloropropane	Ave	0.5063	0.4770		9.42	10.0	-5.8	30.0
4-Ethyltoluene	Ave	1.085	1.084		9.99	10.0	-0.0	30.0
n-Decane	Ave	0.7916	0.8236		10.4	10.0	4.0	30.0
2-Chlorotoluene	Ave	0.9754	0.9524		9.76	10.0	-2.4	30.0
1,3,5-Trimethylbenzene	Ave	0.8932	0.8617		9.64	10.0	-3.5	30.0
Alpha Methyl Styrene	Ave	0.4021	0.4179		10.4	10.0	3.9	30.0
tert-Butylbenzene	Ave	0.7973	0.7792		9.77	10.0	-2.3	30.0
1,2,4-Trimethylbenzene	Ave	0.8998	0.8890		9.88	10.0	-1.2	30.0
sec-Butylbenzene	Ave	1.302	1.287		9.88	10.0	-1.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab Sample ID: ICV 200-117345/19 Calibration Date: 06/08/2017 10:51

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 25386_19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.052	1.010		9.59	10.0	-4.0	30.0
1,3-Dichlorobenzene	Ave	0.5677	0.5596		9.86	10.0	-1.4	30.0
1,4-Dichlorobenzene	Ave	0.5646	0.5541		9.81	10.0	-1.9	30.0
Benzyl chloride	Ave	0.8281	0.8222		9.93	10.0	-0.7	30.0
n-Butylbenzene	Ave	1.111	1.008		9.07	10.0	-9.2	30.0
n-Undecane	Ave	0.8297	0.7479		9.01	10.0	-9.9	30.0
1,2-Dichlorobenzene	Ave	0.5347	0.5172		9.67	10.0	-3.3	30.0
n-Dodecane	Ave	0.4071	0.2685		6.59	10.0	-34.0*	30.0
1,2,4-Trichlorobenzene	Ave	0.2565	0.2040		7.95	10.0	-20.5	30.0
Hexachlorobutadiene	Ave	0.3170	0.2943		9.28	10.0	-7.2	30.0
Naphthalene	Ave	0.5465	0.3961		7.25	10.0	-27.5	30.0
1,2,3-Trichlorobenzene	Ave	0.1331	0.0884		6.64	10.0	-33.6*	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab Sample ID: CCVIS 200-119262/3 Calibration Date: 08/02/2017 11:26

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 26165_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9839	1.401		14.2	10.0	42.4*	30.0
Dichlorodifluoromethane	Ave	2.304	2.497		10.8	10.0	8.4	30.0
Freon 22	Ave	1.710	2.322		13.6	10.0	35.8*	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.233	2.813		12.6	10.0	26.0	30.0
Chloromethane	Ave	1.040	1.298		12.5	10.0	24.9	30.0
n-Butane	Ave	1.844	2.588		14.0	10.0	40.4*	30.0
Vinyl chloride	Ave	1.074	1.199		11.2	10.0	11.6	30.0
1,3-Butadiene	Ave	0.8306	0.997		12.0	10.0	20.1	30.0
Bromomethane	Ave	0.7992	0.8177		10.2	10.0	2.3	30.0
Chloroethane	Ave	0.4622	0.5075		11.0	10.0	9.8	30.0
Isopentane	Ave	1.187	1.747		14.7	10.0	47.1*	30.0
Bromoethene(Vinyl Bromide)	Ave	0.7618	0.6755		8.86	10.0	-11.3	30.0
Trichlorofluoromethane	Ave	1.975	2.087		10.6	10.0	5.7	30.0
n-Pentane	Ave	1.888	2.718		14.4	10.0	44.0*	30.0
Ethanol	Ave	0.5188	0.5976		17.3	15.0	15.2	30.0
Ethyl ether	Ave	0.6180	0.7706		12.5	10.0	24.7	30.0
Acrolein	Ave	0.2924	0.3609		12.3	10.0	23.4	30.0
Freon TF	Ave	1.464	1.427		9.74	10.0	-2.6	30.0
1,1-Dichloroethene	Ave	0.7285	0.6951		9.54	10.0	-4.6	30.0
Acetone	Ave	1.584	2.468		15.6	10.0	55.8*	30.0
Carbon disulfide	Ave	2.251	2.662		11.8	10.0	18.3	30.0
Isopropyl alcohol	Ave	1.870	2.125		11.4	10.0	13.6	30.0
3-Chloropropene	Ave	1.396	1.756		12.6	10.0	25.7	30.0
Acetonitrile	Ave	0.8951	1.295		14.5	10.0	44.7*	30.0
Methylene Chloride	Ave	1.155	1.467		12.7	10.0	27.0	30.0
tert-Butyl alcohol	Ave	2.107	2.316		11.0	10.0	10.0	30.0
Methyl tert-butyl ether	Ave	2.467	2.717		11.0	10.0	10.1	30.0
trans-1,2-Dichloroethene	Ave	1.365	1.667		12.2	10.0	22.1	30.0
Acrylonitrile	Ave	0.7323	0.9195		12.6	10.0	25.6	30.0
n-Hexane	Ave	1.458	1.813		12.4	10.0	24.4	30.0
1,1-Dichloroethane	Ave	1.783	1.989		11.2	10.0	11.6	30.0
Vinyl acetate	Ave	2.985	4.206		14.1	10.0	40.9*	30.0
cis-1,2-Dichloroethene	Ave	0.8844	0.8721		9.86	10.0	-1.4	30.0
Methyl Ethyl Ketone	Ave	0.4931	0.5230		10.6	10.0	6.1	30.0
Ethyl acetate	Ave	0.0657	0.0715		10.9	10.0	8.8	30.0
Tetrahydrofuran	Ave	0.2887	0.3833		13.3	10.0	32.8*	30.0
Chloroform	Ave	1.869	2.054		11.0	10.0	9.9	30.0
Cyclohexane	Ave	0.2319	0.2295		9.89	10.0	-1.0	30.0
1,1,1-Trichloroethane	Ave	0.3495	0.3634		10.4	10.0	4.0	30.0
Carbon tetrachloride	Ave	0.3337	0.3397		10.2	10.0	1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab Sample ID: CCVIS 200-119262/3 Calibration Date: 08/02/2017 11:26

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 26165_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.110	1.234		11.1	10.0	11.2	30.0
Benzene	Ave	0.5927	0.5942		10.0	10.0	0.2	30.0
1,2-Dichloroethane	Ave	0.2727	0.3324		12.2	10.0	21.9	30.0
n-Heptane	Ave	0.5063	0.6309		12.5	10.0	24.6	30.0
n-Butanol	Ave	0.1549	0.1826		11.8	10.0	17.9	30.0
Trichloroethene	Ave	0.2389	0.2415		10.1	10.0	1.1	30.0
1,2-Dichloropropane	Ave	0.2590	0.2866		11.1	10.0	10.6	30.0
Methyl methacrylate	Ave	0.2343	0.2627		11.2	10.0	12.1	30.0
1,4-Dioxane	Ave	0.1244	0.1181		9.49	10.0	-5.1	30.0
Dibromomethane	Ave	0.1967	0.1857		9.44	10.0	-5.6	30.0
Bromodichloromethane	Ave	0.4297	0.4591		10.7	10.0	6.8	30.0
cis-1,3-Dichloropropene	Ave	0.3500	0.3859		11.0	10.0	10.3	30.0
methyl isobutyl ketone	Ave	0.6455	0.8678		13.4	10.0	34.4*	30.0
Toluene	Ave	0.4360	0.4373		10.0	10.0	0.3	30.0
n-Octane	Ave	0.7019	0.9465		13.5	10.0	34.9*	30.0
trans-1,3-Dichloropropene	Ave	0.3654	0.4149		11.4	10.0	13.5	30.0
1,1,2-Trichloroethane	Ave	0.2258	0.2359		10.4	10.0	4.5	30.0
Tetrachloroethene	Ave	0.3270	0.2876		8.79	10.0	-12.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6661	0.8712		13.1	10.0	30.8*	30.0
Dibromochloromethane	Ave	0.3656	0.3318		9.07	10.0	-9.2	30.0
1,2-Dibromoethane	Ave	0.3666	0.3610		9.84	10.0	-1.5	30.0
Chlorobenzene	Ave	0.5442	0.5222		9.59	10.0	-4.0	30.0
Ethylbenzene	Ave	0.995	0.9851		9.90	10.0	-1.0	30.0
n-Nonane	Ave	0.6097	0.6818		11.2	10.0	11.8	30.0
m,p-Xylene	Ave	0.3736	0.3555		19.0	20.0	-4.9	30.0
Xylene, o-	Ave	0.3635	0.3449		9.48	10.0	-5.1	30.0
Styrene	Ave	0.5594	0.5506		9.84	10.0	-1.6	30.0
Bromoform	Ave	0.3292	0.2542		7.72	10.0	-22.8	30.0
Cumene	Ave	1.054	1.025		9.72	10.0	-2.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6140	0.6302		10.3	10.0	2.6	30.0
n-Propylbenzene	Ave	1.397	1.397		10.0	10.0	0.0	30.0
1,2,3-Trichloropropane	Ave	0.5063	0.5199		10.3	10.0	2.7	30.0
4-Ethyltoluene	Ave	1.085	1.110		10.2	10.0	2.3	30.0
2-Chlorotoluene	Ave	0.9754	0.9845		10.1	10.0	0.9	30.0
n-Decane	Ave	0.7916	0.9524		12.0	10.0	20.3	30.0
1,3,5-Trimethylbenzene	Ave	0.8932	0.8805		9.86	10.0	-1.4	30.0
Alpha Methyl Styrene	Ave	0.4021	0.4204		10.5	10.0	4.5	30.0
tert-Butylbenzene	Ave	0.7973	0.7847		9.84	10.0	-1.6	30.0
1,2,4-Trimethylbenzene	Ave	0.8998	0.9002		10.0	10.0	0.0	30.0
sec-Butylbenzene	Ave	1.302	1.302		10.0	10.0	-0.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Lab Sample ID: CCVIS 200-119262/3 Calibration Date: 08/02/2017 11:26

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 26165_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.052	1.043		9.92	10.0	-0.8	30.0
1,3-Dichlorobenzene	Ave	0.5677	0.5527		9.73	10.0	-2.6	30.0
1,4-Dichlorobenzene	Ave	0.5646	0.5458		9.66	10.0	-3.3	30.0
Benzyl chloride	Ave	0.8281	0.7985		9.64	10.0	-3.6	30.0
n-Butylbenzene	Ave	1.111	1.148		10.3	10.0	3.3	30.0
n-Undecane	Ave	0.8297	0.9558		11.5	10.0	15.2	30.0
1,2-Dichlorobenzene	Ave	0.5347	0.5110		9.56	10.0	-4.4	30.0
n-Dodecane	Ave	0.4071	0.5030		12.4	10.0	23.6	30.0
1,2,4-Trichlorobenzene	Ave	0.2565	0.2439		9.51	10.0	-4.9	30.0
Hexachlorobutadiene	Ave	0.3170	0.2863		9.03	10.0	-9.7	30.0
Naphthalene	Ave	0.5465	0.4408		8.06	10.0	-19.3	30.0
1,2,3-Trichlorobenzene	Ave	0.1331	0.1392		10.5	10.0	4.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab Sample ID: ICV 200-117412/19 Calibration Date: 06/09/2017 12:24

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25406-19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5077	0.5072		9.99	10.0	-0.1	30.0
Dichlorodifluoromethane	Ave	2.316	2.196		9.48	10.0	-5.1	30.0
Freon 22	Ave	1.141	1.114		9.76	10.0	-2.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.276	2.475		10.9	10.0	8.8	30.0
Chloromethane	Ave	0.6596	0.6433		9.75	10.0	-2.5	30.0
n-Butane	Ave	1.085	1.092		10.1	10.0	0.7	30.0
Vinyl chloride	Ave	0.8883	0.8694		9.79	10.0	-2.1	30.0
1,3-Butadiene	Ave	0.6512	0.6185		9.50	10.0	-5.0	30.0
Bromomethane	Ave	1.150	1.152		10.0	10.0	0.2	30.0
Chloroethane	Ave	0.5847	0.5931		10.1	10.0	1.4	30.0
Isopentane	Ave	0.9829	1.125		11.4	10.0	14.4	30.0
Bromoethene(Vinyl Bromide)	Ave	1.285	1.305		10.2	10.0	1.6	30.0
Trichlorofluoromethane	Ave	2.731	2.606		9.54	10.0	-4.6	30.0
n-Pentane	Ave	1.515	1.779		11.7	10.0	17.4	30.0
Ethanol	Ave	0.4168	0.4460		16.1	15.0	7.0	30.0
Ethyl ether	Ave	0.7137	0.8452		11.8	10.0	18.4	30.0
Acrolein	Ave	0.3150	0.4290		13.6	10.0	36.2*	30.0
Freon TF	Ave	2.405	2.470		10.3	10.0	2.7	30.0
1,1-Dichloroethene	Ave	1.211	1.251		10.3	10.0	3.3	30.0
Acetone	Ave	1.262	1.399		11.1	10.0	10.8	30.0
Isopropyl alcohol	Ave	1.551	1.536		9.90	10.0	-1.0	30.0
Carbon disulfide	Ave	3.085	3.747		12.1	10.0	21.5	30.0
3-Chloropropene	Ave	1.091	1.144		10.5	10.0	4.9	30.0
Acetonitrile	Ave	0.7049	0.7882		11.2	10.0	11.8	30.0
Methylene Chloride	Ave	1.055	1.071		10.2	10.0	1.6	30.0
tert-Butyl alcohol	Ave	2.288	2.304		10.1	10.0	0.7	30.0
Methyl tert-butyl ether	Ave	3.221	3.350		10.4	10.0	4.0	30.0
trans-1,2-Dichloroethene	Ave	1.493	1.646		11.0	10.0	10.2	30.0
Acrylonitrile	Ave	0.7400	0.8463		11.4	10.0	14.4	30.0
n-Hexane	Ave	1.623	1.876		11.6	10.0	15.6	30.0
1,1-Dichloroethane	Ave	2.007	2.027		10.1	10.0	1.0	30.0
Vinyl acetate	Ave	2.285	2.574		11.3	10.0	12.6	30.0
Methyl Ethyl Ketone	Ave	0.6215	0.6679		10.7	10.0	7.5	30.0
cis-1,2-Dichloroethene	Ave	1.397	1.430		10.2	10.0	2.3	30.0
Ethyl acetate	Ave	0.1096	0.1272		11.6	10.0	16.0	30.0
Tetrahydrofuran	Ave	0.2208	0.2392		10.8	10.0	8.3	30.0
Chloroform	Ave	2.374	2.399		10.1	10.0	1.0	30.0
1,1,1-Trichloroethane	Ave	0.4960	0.4832		9.74	10.0	-2.6	30.0
Cyclohexane	Ave	0.3692	0.3867		10.5	10.0	4.7	30.0
Carbon tetrachloride	Ave	0.5169	0.4987		9.65	10.0	-3.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab Sample ID: ICV 200-117412/19 Calibration Date: 06/09/2017 12:24

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25406-19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.146	1.209		10.5	10.0	5.5	30.0
Benzene	Ave	0.8204	0.8482		10.3	10.0	3.4	30.0
1,2-Dichloroethane	Ave	0.2692	0.2653		9.85	10.0	-1.4	30.0
n-Heptane	Ave	0.3812	0.3929		10.3	10.0	3.1	30.0
n-Butanol	Ave	0.1578	0.1784		11.3	10.0	13.1	30.0
Trichloroethene	Ave	0.3727	0.3745		10.0	10.0	0.5	30.0
1,2-Dichloropropane	Ave	0.2804	0.2889		10.3	10.0	3.1	30.0
Methyl methacrylate	Ave	0.2826	0.3013		10.7	10.0	6.6	30.0
1,4-Dioxane	Ave	0.1845	0.1853		10.0	10.0	0.4	30.0
Dibromomethane	Ave	0.4196	0.4100		9.77	10.0	-2.3	30.0
Bromodichloromethane	Ave	0.5499	0.5389		9.80	10.0	-2.0	30.0
cis-1,3-Dichloropropene	Ave	0.4409	0.4549		10.3	10.0	3.2	30.0
methyl isobutyl ketone	Ave	0.4890	0.4959		10.1	10.0	1.4	30.0
n-Octane	Ave	0.5296	0.5487		10.4	10.0	3.6	30.0
Toluene	Ave	0.7171	0.7314		10.2	10.0	2.0	30.0
trans-1,3-Dichloropropene	Ave	0.4288	0.4405		10.3	10.0	2.7	30.0
1,1,2-Trichloroethane	Ave	0.3346	0.3500		10.5	10.0	4.6	30.0
Tetrachloroethene	Ave	0.6858	0.6751		9.84	10.0	-1.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5352	0.5435		10.2	10.0	1.5	30.0
Dibromochloromethane	Ave	0.7211	0.6997		9.70	10.0	-3.0	30.0
1,2-Dibromoethane	Ave	0.6509	0.6698		10.3	10.0	2.9	30.0
Chlorobenzene	Ave	1.016	1.025		10.1	10.0	0.9	30.0
Ethylbenzene	Ave	1.534	1.554		10.1	10.0	1.3	30.0
n-Nonane	Ave	0.6329	0.6608		10.4	10.0	4.4	30.0
m,p-Xylene	Ave	0.6373	0.6424		20.2	20.0	0.8	30.0
Xylene, o-	Ave	0.6369	0.6303		9.89	10.0	-1.0	30.0
Styrene	Ave	0.9807	1.001		10.2	10.0	2.0	30.0
Bromoform	Ave	0.7176	0.6926		9.65	10.0	-3.5	30.0
Cumene	Ave	1.822	1.800		9.88	10.0	-1.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8756	0.9111		10.4	10.0	4.1	30.0
n-Propylbenzene	Ave	2.067	2.077		10.0	10.0	0.5	30.0
1,2,3-Trichloropropane	Ave	0.6254	0.6265		10.0	10.0	0.2	30.0
n-Decane	Ave	0.7971	0.8109		10.2	10.0	1.7	30.0
4-Ethyltoluene	Ave	1.794	1.848		10.3	10.0	3.0	30.0
2-Chlorotoluene	Ave	1.402	1.395		9.95	10.0	-0.5	30.0
1,3,5-Trimethylbenzene	Ave	1.475	1.484		10.1	10.0	0.6	30.0
Alpha Methyl Styrene	Ave	0.7673	0.8013		10.4	10.0	4.4	30.0
tert-Butylbenzene	Ave	1.467	1.444		9.84	10.0	-1.6	30.0
1,2,4-Trimethylbenzene	Ave	1.478	1.453		9.83	10.0	-1.7	30.0
sec-Butylbenzene	Ave	2.223	2.150		9.67	10.0	-3.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab Sample ID: ICV 200-117412/19 Calibration Date: 06/09/2017 12:24

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25406-19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.872	1.745		9.32	10.0	-6.8	30.0
1,3-Dichlorobenzene	Ave	1.079	1.073		9.94	10.0	-0.6	30.0
1,4-Dichlorobenzene	Ave	1.051	1.043		9.92	10.0	-0.8	30.0
Benzyl chloride	Ave	1.157	1.093		9.45	10.0	-5.5	30.0
n-Undecane	Ave	0.8544	0.8822		10.3	10.0	3.3	30.0
n-Butylbenzene	Ave	1.593	1.471		9.23	10.0	-7.7	30.0
1,2-Dichlorobenzene	Ave	1.023	0.9883		9.66	10.0	-3.4	30.0
n-Dodecane	Ave	0.6267	0.6036		9.63	10.0	-3.7	30.0
1,2,4-Trichlorobenzene	Ave	0.6230	0.5903		9.47	10.0	-5.2	30.0
Hexachlorobutadiene	Ave	0.7035	0.6500		9.24	10.0	-7.6	30.0
Naphthalene	Ave	1.358	1.149		8.46	10.0	-15.4	30.0
1,2,3-Trichlorobenzene	Ave	0.5042	0.4458		8.84	10.0	-11.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab Sample ID: CCVIS 200-119211/2 Calibration Date: 08/01/2017 11:06

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 26148-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5077	0.4529		8.90	9.98	-10.8	30.0
Dichlorodifluoromethane	Ave	2.316	2.092		9.01	9.98	-9.7	30.0
Freon 22	Ave	1.141	0.9933		8.68	9.98	-13.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.276	1.978		8.67	9.98	-13.1	30.0
Chloromethane	Ave	0.6596	0.5493		8.31	9.98	-16.7	30.0
n-Butane	Ave	1.085	0.9114		8.38	9.98	-16.0	30.0
Vinyl chloride	Ave	0.8883	0.7502		8.43	9.98	-15.5	30.0
1,3-Butadiene	Ave	0.6512	0.5321		8.15	9.98	-18.3	30.0
Bromomethane	Ave	1.150	1.003		8.70	9.98	-12.8	30.0
Chloroethane	Ave	0.5847	0.5068		8.65	9.98	-13.3	30.0
Isopentane	Ave	0.9829	0.8398		8.52	9.98	-14.6	30.0
Bromoethene(Vinyl Bromide)	Ave	1.285	1.158		8.99	9.98	-9.9	30.0
Trichlorofluoromethane	Ave	2.731	2.470		9.02	9.98	-9.6	30.0
n-Pentane	Ave	1.515	1.301		8.57	9.98	-14.1	30.0
Ethanol	Ave	0.4168	0.3686		11.8	13.3	-11.6	30.0
Ethyl ether	Ave	0.7137	0.6127		8.56	9.98	-14.2	30.0
Acrolein	Ave	0.3150	0.2124		6.73	9.98	-32.6*	30.0
Freon TF	Ave	2.405	2.124		8.81	9.98	-11.7	30.0
1,1-Dichloroethene	Ave	1.211	1.077		8.88	9.98	-11.0	30.0
Acetone	Ave	1.262	1.160		9.17	9.98	-8.1	30.0
Isopropyl alcohol	Ave	1.551	1.367		8.80	9.98	-11.8	30.0
Carbon disulfide	Ave	3.085	2.717		8.79	9.98	-11.9	30.0
3-Chloropropene	Ave	1.091	0.9179		8.39	9.98	-15.9	30.0
Acetonitrile	Ave	0.7049	0.5582		7.90	9.98	-20.8	30.0
Methylene Chloride	Ave	1.055	0.8877		8.40	9.98	-15.8	30.0
tert-Butyl alcohol	Ave	2.288	2.050		8.94	9.98	-10.4	30.0
Methyl tert-butyl ether	Ave	3.221	2.872		8.90	9.98	-10.8	30.0
trans-1,2-Dichloroethene	Ave	1.493	1.295		8.65	9.98	-13.3	30.0
Acrylonitrile	Ave	0.7400	0.6372		8.59	9.98	-13.9	30.0
n-Hexane	Ave	1.623	1.393		8.56	9.98	-14.2	30.0
1,1-Dichloroethane	Ave	2.007	1.694		8.42	9.98	-15.6	30.0
Vinyl acetate	Ave	2.285	1.986		8.67	9.98	-13.1	30.0
Methyl Ethyl Ketone	Ave	0.6215	0.5418		8.70	9.98	-12.8	30.0
cis-1,2-Dichloroethene	Ave	1.397	1.234		8.81	9.98	-11.7	30.0
Ethyl acetate	Ave	0.1096	0.0973		8.86	9.98	-11.2	30.0
Tetrahydrofuran	Ave	0.2208	0.1880		8.50	9.98	-14.9	30.0
Chloroform	Ave	2.374	2.093		8.80	9.98	-11.8	30.0
1,1,1-Trichloroethane	Ave	0.4960	0.4423		8.90	9.98	-10.8	30.0
Cyclohexane	Ave	0.3692	0.3180		8.59	9.98	-13.9	30.0
Carbon tetrachloride	Ave	0.5169	0.4523		8.73	9.98	-12.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab Sample ID: CCVIS 200-119211/2 Calibration Date: 08/01/2017 11:06

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 26148-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.146	0.9823		8.55	9.98	-14.3	30.0
Benzene	Ave	0.8204	0.7013		8.53	9.98	-14.5	30.0
1,2-Dichloroethane	Ave	0.2692	0.2378		8.82	9.98	-11.6	30.0
n-Heptane	Ave	0.3812	0.3196		8.37	9.98	-16.1	30.0
n-Butanol	Ave	0.1578	0.1360		8.59	9.98	-13.9	30.0
Trichloroethene	Ave	0.3727	0.3221		8.62	9.98	-13.6	30.0
1,2-Dichloropropane	Ave	0.2804	0.2409		8.57	9.98	-14.1	30.0
Methyl methacrylate	Ave	0.2826	0.2467		8.71	9.98	-12.7	30.0
1,4-Dioxane	Ave	0.1845	0.1615		8.73	9.98	-12.5	30.0
Dibromomethane	Ave	0.4196	0.3666		8.72	9.98	-12.6	30.0
Bromodichloromethane	Ave	0.5499	0.4788		8.69	9.98	-12.9	30.0
cis-1,3-Dichloropropene	Ave	0.4409	0.3801		8.60	9.98	-13.8	30.0
methyl isobutyl ketone	Ave	0.4890	0.4153		8.47	9.98	-15.1	30.0
n-Octane	Ave	0.5296	0.4517		8.51	9.98	-14.7	30.0
Toluene	Ave	0.7171	0.5899		8.21	9.98	-17.7	30.0
trans-1,3-Dichloropropene	Ave	0.4288	0.3675		8.55	9.98	-14.3	30.0
1,1,2-Trichloroethane	Ave	0.3346	0.2764		8.24	9.98	-17.4	30.0
Tetrachloroethene	Ave	0.6858	0.5642		8.21	9.98	-17.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5352	0.4259		7.94	9.98	-20.4	30.0
Dibromochloromethane	Ave	0.7211	0.6146		8.50	9.98	-14.8	30.0
1,2-Dibromoethane	Ave	0.6509	0.5474		8.39	9.98	-15.9	30.0
Chlorobenzene	Ave	1.016	0.8378		8.23	9.98	-17.5	30.0
Ethylbenzene	Ave	1.534	1.277		8.30	9.98	-16.8	30.0
n-Nonane	Ave	0.6329	0.5228		8.24	9.98	-17.4	30.0
m,p-Xylene	Ave	0.6373	0.5382		16.9	20.0	-15.6	30.0
Xylene, o-	Ave	0.6369	0.5320		8.33	9.98	-16.5	30.0
Styrene	Ave	0.9807	0.8310		8.45	9.98	-15.3	30.0
Bromoform	Ave	0.7176	0.5998		8.34	9.98	-16.4	30.0
Cumene	Ave	1.822	1.537		8.42	9.98	-15.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8756	0.7330		8.35	9.98	-16.3	30.0
n-Propylbenzene	Ave	2.067	1.755		8.47	9.98	-15.1	30.0
1,2,3-Trichloropropane	Ave	0.6254	0.5229		8.34	9.98	-16.4	30.0
n-Decane	Ave	0.7971	0.6432		8.05	9.98	-19.3	30.0
4-Ethyltoluene	Ave	1.794	1.510		8.40	9.98	-15.8	30.0
2-Chlorotoluene	Ave	1.402	1.194		8.49	9.98	-14.9	30.0
1,3,5-Trimethylbenzene	Ave	1.475	1.183		8.00	9.98	-19.8	30.0
Alpha Methyl Styrene	Ave	0.7673	0.6370		8.28	9.98	-17.0	30.0
tert-Butylbenzene	Ave	1.467	1.188		8.08	9.98	-19.0	30.0
1,2,4-Trimethylbenzene	Ave	1.478	1.191		8.04	9.98	-19.4	30.0
sec-Butylbenzene	Ave	2.223	1.780		7.99	9.98	-19.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Lab Sample ID: CCVIS 200-119211/2 Calibration Date: 08/01/2017 11:06

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 26148-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.872	1.519		8.10	9.98	-18.8	30.0
1,3-Dichlorobenzene	Ave	1.079	0.8721		8.06	9.98	-19.2	30.0
1,4-Dichlorobenzene	Ave	1.051	0.8486		8.06	9.98	-19.3	30.0
Benzyl chloride	Ave	1.157	0.8295		7.15	9.98	-28.3	30.0
n-Undecane	Ave	0.8544	0.7298		8.52	9.98	-14.6	30.0
n-Butylbenzene	Ave	1.593	1.319		8.26	9.98	-17.2	30.0
1,2-Dichlorobenzene	Ave	1.023	0.8142		7.94	9.98	-20.4	30.0
n-Dodecane	Ave	0.6267	0.5613		8.94	9.98	-10.4	30.0
1,2,4-Trichlorobenzene	Ave	0.6230	0.5590		8.95	9.98	-10.3	30.0
Hexachlorobutadiene	Ave	0.7035	0.6166		8.75	9.98	-12.4	30.0
Naphthalene	Ave	1.358	1.105		8.12	9.98	-18.6	30.0
1,2,3-Trichlorobenzene	Ave	0.5042	0.5015		9.92	9.98	-0.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab Sample ID: ICV 200-117345/19 Calibration Date: 06/08/2017 10:51

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 25386_19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9839	0.9186		9.33	10.0	-6.6	30.0
Dichlorodifluoromethane	Ave	2.304	2.175		9.44	10.0	-5.6	30.0
Freon 22	Ave	1.710	1.627		9.51	10.0	-4.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.233	2.331		10.4	10.0	4.4	30.0
Chloromethane	Ave	1.040	0.9545		9.18	10.0	-8.2	30.0
n-Butane	Ave	1.844	1.793		9.72	10.0	-2.7	30.0
Vinyl chloride	Ave	1.074	0.9440		8.79	10.0	-12.1	30.0
1,3-Butadiene	Ave	0.8306	0.7530		9.06	10.0	-9.4	30.0
Bromomethane	Ave	0.7992	0.7362		9.21	10.0	-7.9	30.0
Chloroethane	Ave	0.4622	0.4366		9.44	10.0	-5.5	30.0
Isopentane	Ave	1.187	1.280		10.8	10.0	7.8	30.0
Bromoethene(Vinyl Bromide)	Ave	0.7618	0.6924		9.09	10.0	-9.1	30.0
Trichlorofluoromethane	Ave	1.975	1.856		9.40	10.0	-6.0	30.0
n-Pentane	Ave	1.888	2.082		11.0	10.0	10.3	30.0
Ethanol	Ave	0.5188	0.5241		15.2	15.0	1.0	30.0
Ethyl ether	Ave	0.6180	0.6597		10.7	10.0	6.7	30.0
Acrolein	Ave	0.2924	0.3760		12.9	10.0	28.6	30.0
Freon TF	Ave	1.464	1.384		9.45	10.0	-5.5	30.0
1,1-Dichloroethene	Ave	0.7285	0.6830		9.37	10.0	-6.3	30.0
Acetone	Ave	1.584	1.596		10.1	10.0	0.8	30.0
Carbon disulfide	Ave	2.251	2.447		10.9	10.0	8.7	30.0
Isopropyl alcohol	Ave	1.870	1.606		8.59	10.0	-14.1	30.0
3-Chloropropene	Ave	1.396	1.374		9.84	10.0	-1.6	30.0
Acetonitrile	Ave	0.8951	0.9715		10.9	10.0	8.5	30.0
Methylene Chloride	Ave	1.155	1.136		9.83	10.0	-1.7	30.0
tert-Butyl alcohol	Ave	2.107	1.899		9.01	10.0	-9.8	30.0
Methyl tert-butyl ether	Ave	2.467	2.378		9.64	10.0	-3.6	30.0
trans-1,2-Dichloroethene	Ave	1.365	1.392		10.2	10.0	1.9	30.0
Acrylonitrile	Ave	0.7323	0.7490		10.2	10.0	2.3	30.0
n-Hexane	Ave	1.458	1.556		10.7	10.0	6.7	30.0
1,1-Dichloroethane	Ave	1.783	1.693		9.49	10.0	-5.1	30.0
Vinyl acetate	Ave	2.985	3.104		10.4	10.0	4.0	30.0
cis-1,2-Dichloroethene	Ave	0.8844	0.8280		9.36	10.0	-6.4	30.0
Methyl Ethyl Ketone	Ave	0.4931	0.4615		9.36	10.0	-6.4	30.0
Ethyl acetate	Ave	0.0657	0.0693		10.5	10.0	5.5	30.0
Tetrahydrofuran	Ave	0.2887	0.2919		10.1	10.0	1.1	30.0
Chloroform	Ave	1.869	1.833		9.81	10.0	-1.9	30.0
Cyclohexane	Ave	0.2319	0.2237		9.64	10.0	-3.5	30.0
1,1,1-Trichloroethane	Ave	0.3495	0.3331		9.53	10.0	-4.7	30.0
Carbon tetrachloride	Ave	0.3337	0.3196		9.57	10.0	-4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab Sample ID: ICV 200-117345/19 Calibration Date: 06/08/2017 10:51

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 25386_19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.110	1.084		9.77	10.0	-2.3	30.0
Benzene	Ave	0.5927	0.5584		9.42	10.0	-5.8	30.0
1,2-Dichloroethane	Ave	0.2727	0.2635		9.66	10.0	-3.4	30.0
n-Heptane	Ave	0.5063	0.4854		9.59	10.0	-4.1	30.0
n-Butanol	Ave	0.1549	0.1531		9.89	10.0	-1.1	30.0
Trichloroethene	Ave	0.2389	0.2230		9.33	10.0	-6.6	30.0
1,2-Dichloropropane	Ave	0.2590	0.2408		9.30	10.0	-7.0	30.0
Methyl methacrylate	Ave	0.2343	0.2254		9.62	10.0	-3.8	30.0
1,4-Dioxane	Ave	0.1244	0.1077		8.65	10.0	-13.5	30.0
Dibromomethane	Ave	0.1967	0.1785		9.07	10.0	-9.3	30.0
Bromodichloromethane	Ave	0.4297	0.4066		9.46	10.0	-5.4	30.0
cis-1,3-Dichloropropene	Ave	0.3500	0.3360		9.60	10.0	-4.0	30.0
methyl isobutyl ketone	Ave	0.6455	0.6314		9.78	10.0	-2.2	30.0
Toluene	Ave	0.4360	0.4166		9.55	10.0	-4.4	30.0
n-Octane	Ave	0.7019	0.6999		9.97	10.0	-0.3	30.0
trans-1,3-Dichloropropene	Ave	0.3654	0.3474		9.51	10.0	-4.9	30.0
1,1,2-Trichloroethane	Ave	0.2258	0.2213		9.80	10.0	-2.0	30.0
Tetrachloroethene	Ave	0.3270	0.2909		8.89	10.0	-11.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6661	0.6563		9.85	10.0	-1.5	30.0
Dibromochloromethane	Ave	0.3656	0.3519		9.62	10.0	-3.7	30.0
1,2-Dibromoethane	Ave	0.3666	0.3556		9.70	10.0	-3.0	30.0
Chlorobenzene	Ave	0.5442	0.5087		9.35	10.0	-6.5	30.0
Ethylbenzene	Ave	0.995	0.9486		9.53	10.0	-4.7	30.0
n-Nonane	Ave	0.6097	0.5995		9.83	10.0	-1.7	30.0
m,p-Xylene	Ave	0.3736	0.3490		18.7	20.0	-6.6	30.0
Xylene, o-	Ave	0.3635	0.3381		9.30	10.0	-7.0	30.0
Styrene	Ave	0.5594	0.5429		9.70	10.0	-3.0	30.0
Bromoform	Ave	0.3292	0.3285		9.98	10.0	-0.2	30.0
Cumene	Ave	1.054	1.002		9.50	10.0	-5.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6140	0.6028		9.82	10.0	-1.8	30.0
n-Propylbenzene	Ave	1.397	1.334		9.54	10.0	-4.5	30.0
1,2,3-Trichloropropane	Ave	0.5063	0.4770		9.42	10.0	-5.8	30.0
4-Ethyltoluene	Ave	1.085	1.084		9.99	10.0	-0.0	30.0
n-Decane	Ave	0.7916	0.8236		10.4	10.0	4.0	30.0
2-Chlorotoluene	Ave	0.9754	0.9524		9.76	10.0	-2.4	30.0
1,3,5-Trimethylbenzene	Ave	0.8932	0.8617		9.64	10.0	-3.5	30.0
Alpha Methyl Styrene	Ave	0.4021	0.4179		10.4	10.0	3.9	30.0
tert-Butylbenzene	Ave	0.7973	0.7792		9.77	10.0	-2.3	30.0
1,2,4-Trimethylbenzene	Ave	0.8998	0.8890		9.88	10.0	-1.2	30.0
sec-Butylbenzene	Ave	1.302	1.287		9.88	10.0	-1.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab Sample ID: ICV 200-117345/19 Calibration Date: 06/08/2017 10:51

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 25386_19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.052	1.010		9.59	10.0	-4.0	30.0
1,3-Dichlorobenzene	Ave	0.5677	0.5596		9.86	10.0	-1.4	30.0
1,4-Dichlorobenzene	Ave	0.5646	0.5541		9.81	10.0	-1.9	30.0
Benzyl chloride	Ave	0.8281	0.8222		9.93	10.0	-0.7	30.0
n-Butylbenzene	Ave	1.111	1.008		9.07	10.0	-9.2	30.0
n-Undecane	Ave	0.8297	0.7479		9.01	10.0	-9.9	30.0
1,2-Dichlorobenzene	Ave	0.5347	0.5172		9.67	10.0	-3.3	30.0
n-Dodecane	Ave	0.4071	0.2685		6.59	10.0	-34.0*	30.0
1,2,4-Trichlorobenzene	Ave	0.2565	0.2040		7.95	10.0	-20.5	30.0
Hexachlorobutadiene	Ave	0.3170	0.2943		9.28	10.0	-7.2	30.0
Naphthalene	Ave	0.5465	0.3961		7.25	10.0	-27.5	30.0
1,2,3-Trichlorobenzene	Ave	0.1331	0.0884		6.64	10.0	-33.6*	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab Sample ID: CCVIS 200-119262/3 Calibration Date: 08/02/2017 11:26

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 26165_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9839	1.401		14.2	10.0	42.4*	30.0
Dichlorodifluoromethane	Ave	2.304	2.497		10.8	10.0	8.4	30.0
Freon 22	Ave	1.710	2.322		13.6	10.0	35.8*	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.233	2.813		12.6	10.0	26.0	30.0
Chloromethane	Ave	1.040	1.298		12.5	10.0	24.9	30.0
n-Butane	Ave	1.844	2.588		14.0	10.0	40.4*	30.0
Vinyl chloride	Ave	1.074	1.199		11.2	10.0	11.6	30.0
1,3-Butadiene	Ave	0.8306	0.997		12.0	10.0	20.1	30.0
Bromomethane	Ave	0.7992	0.8177		10.2	10.0	2.3	30.0
Chloroethane	Ave	0.4622	0.5075		11.0	10.0	9.8	30.0
Isopentane	Ave	1.187	1.747		14.7	10.0	47.1*	30.0
Bromoethene(Vinyl Bromide)	Ave	0.7618	0.6755		8.86	10.0	-11.3	30.0
Trichlorofluoromethane	Ave	1.975	2.087		10.6	10.0	5.7	30.0
n-Pentane	Ave	1.888	2.718		14.4	10.0	44.0*	30.0
Ethanol	Ave	0.5188	0.5976		17.3	15.0	15.2	30.0
Ethyl ether	Ave	0.6180	0.7706		12.5	10.0	24.7	30.0
Acrolein	Ave	0.2924	0.3609		12.3	10.0	23.4	30.0
Freon TF	Ave	1.464	1.427		9.74	10.0	-2.6	30.0
1,1-Dichloroethene	Ave	0.7285	0.6951		9.54	10.0	-4.6	30.0
Acetone	Ave	1.584	2.468		15.6	10.0	55.8*	30.0
Carbon disulfide	Ave	2.251	2.662		11.8	10.0	18.3	30.0
Isopropyl alcohol	Ave	1.870	2.125		11.4	10.0	13.6	30.0
3-Chloropropene	Ave	1.396	1.756		12.6	10.0	25.7	30.0
Acetonitrile	Ave	0.8951	1.295		14.5	10.0	44.7*	30.0
Methylene Chloride	Ave	1.155	1.467		12.7	10.0	27.0	30.0
tert-Butyl alcohol	Ave	2.107	2.316		11.0	10.0	10.0	30.0
Methyl tert-butyl ether	Ave	2.467	2.717		11.0	10.0	10.1	30.0
trans-1,2-Dichloroethene	Ave	1.365	1.667		12.2	10.0	22.1	30.0
Acrylonitrile	Ave	0.7323	0.9195		12.6	10.0	25.6	30.0
n-Hexane	Ave	1.458	1.813		12.4	10.0	24.4	30.0
1,1-Dichloroethane	Ave	1.783	1.989		11.2	10.0	11.6	30.0
Vinyl acetate	Ave	2.985	4.206		14.1	10.0	40.9*	30.0
cis-1,2-Dichloroethene	Ave	0.8844	0.8721		9.86	10.0	-1.4	30.0
Methyl Ethyl Ketone	Ave	0.4931	0.5230		10.6	10.0	6.1	30.0
Ethyl acetate	Ave	0.0657	0.0715		10.9	10.0	8.8	30.0
Tetrahydrofuran	Ave	0.2887	0.3833		13.3	10.0	32.8*	30.0
Chloroform	Ave	1.869	2.054		11.0	10.0	9.9	30.0
Cyclohexane	Ave	0.2319	0.2295		9.89	10.0	-1.0	30.0
1,1,1-Trichloroethane	Ave	0.3495	0.3634		10.4	10.0	4.0	30.0
Carbon tetrachloride	Ave	0.3337	0.3397		10.2	10.0	1.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab Sample ID: CCVIS 200-119262/3 Calibration Date: 08/02/2017 11:26

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 26165_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.110	1.234		11.1	10.0	11.2	30.0
Benzene	Ave	0.5927	0.5942		10.0	10.0	0.2	30.0
1,2-Dichloroethane	Ave	0.2727	0.3324		12.2	10.0	21.9	30.0
n-Heptane	Ave	0.5063	0.6309		12.5	10.0	24.6	30.0
n-Butanol	Ave	0.1549	0.1826		11.8	10.0	17.9	30.0
Trichloroethene	Ave	0.2389	0.2415		10.1	10.0	1.1	30.0
1,2-Dichloropropane	Ave	0.2590	0.2866		11.1	10.0	10.6	30.0
Methyl methacrylate	Ave	0.2343	0.2627		11.2	10.0	12.1	30.0
1,4-Dioxane	Ave	0.1244	0.1181		9.49	10.0	-5.1	30.0
Dibromomethane	Ave	0.1967	0.1857		9.44	10.0	-5.6	30.0
Bromodichloromethane	Ave	0.4297	0.4591		10.7	10.0	6.8	30.0
cis-1,3-Dichloropropene	Ave	0.3500	0.3859		11.0	10.0	10.3	30.0
methyl isobutyl ketone	Ave	0.6455	0.8678		13.4	10.0	34.4*	30.0
Toluene	Ave	0.4360	0.4373		10.0	10.0	0.3	30.0
n-Octane	Ave	0.7019	0.9465		13.5	10.0	34.9*	30.0
trans-1,3-Dichloropropene	Ave	0.3654	0.4149		11.4	10.0	13.5	30.0
1,1,2-Trichloroethane	Ave	0.2258	0.2359		10.4	10.0	4.5	30.0
Tetrachloroethene	Ave	0.3270	0.2876		8.79	10.0	-12.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.6661	0.8712		13.1	10.0	30.8*	30.0
Dibromochloromethane	Ave	0.3656	0.3318		9.07	10.0	-9.2	30.0
1,2-Dibromoethane	Ave	0.3666	0.3610		9.84	10.0	-1.5	30.0
Chlorobenzene	Ave	0.5442	0.5222		9.59	10.0	-4.0	30.0
Ethylbenzene	Ave	0.995	0.9851		9.90	10.0	-1.0	30.0
n-Nonane	Ave	0.6097	0.6818		11.2	10.0	11.8	30.0
m,p-Xylene	Ave	0.3736	0.3555		19.0	20.0	-4.9	30.0
Xylene, o-	Ave	0.3635	0.3449		9.48	10.0	-5.1	30.0
Styrene	Ave	0.5594	0.5506		9.84	10.0	-1.6	30.0
Bromoform	Ave	0.3292	0.2542		7.72	10.0	-22.8	30.0
Cumene	Ave	1.054	1.025		9.72	10.0	-2.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6140	0.6302		10.3	10.0	2.6	30.0
n-Propylbenzene	Ave	1.397	1.397		10.0	10.0	0.0	30.0
1,2,3-Trichloropropane	Ave	0.5063	0.5199		10.3	10.0	2.7	30.0
4-Ethyltoluene	Ave	1.085	1.110		10.2	10.0	2.3	30.0
2-Chlorotoluene	Ave	0.9754	0.9845		10.1	10.0	0.9	30.0
n-Decane	Ave	0.7916	0.9524		12.0	10.0	20.3	30.0
1,3,5-Trimethylbenzene	Ave	0.8932	0.8805		9.86	10.0	-1.4	30.0
Alpha Methyl Styrene	Ave	0.4021	0.4204		10.5	10.0	4.5	30.0
tert-Butylbenzene	Ave	0.7973	0.7847		9.84	10.0	-1.6	30.0
1,2,4-Trimethylbenzene	Ave	0.8998	0.9002		10.0	10.0	0.0	30.0
sec-Butylbenzene	Ave	1.302	1.302		10.0	10.0	-0.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Lab Sample ID: CCVIS 200-119262/3 Calibration Date: 08/02/2017 11:26

Instrument ID: CHC.i Calib Start Date: 06/07/2017 14:43

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/08/2017 10:01

Lab File ID: 26165_03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.052	1.043		9.92	10.0	-0.8	30.0
1,3-Dichlorobenzene	Ave	0.5677	0.5527		9.73	10.0	-2.6	30.0
1,4-Dichlorobenzene	Ave	0.5646	0.5458		9.66	10.0	-3.3	30.0
Benzyl chloride	Ave	0.8281	0.7985		9.64	10.0	-3.6	30.0
n-Butylbenzene	Ave	1.111	1.148		10.3	10.0	3.3	30.0
n-Undecane	Ave	0.8297	0.9558		11.5	10.0	15.2	30.0
1,2-Dichlorobenzene	Ave	0.5347	0.5110		9.56	10.0	-4.4	30.0
n-Dodecane	Ave	0.4071	0.5030		12.4	10.0	23.6	30.0
1,2,4-Trichlorobenzene	Ave	0.2565	0.2439		9.51	10.0	-4.9	30.0
Hexachlorobutadiene	Ave	0.3170	0.2863		9.03	10.0	-9.7	30.0
Naphthalene	Ave	0.5465	0.4408		8.06	10.0	-19.3	30.0
1,2,3-Trichlorobenzene	Ave	0.1331	0.1392		10.5	10.0	4.5	30.0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Instrument ID: CHG.i Start Date: 07/11/2017 15:33

Analysis Batch Number: 118437 End Date: 07/12/2017 05:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118437/1		07/11/2017 15:33	1	200-25865-001.D	RTX-624 0.32(mm)
VIBLK 200-118437/2		07/11/2017 16:35	1		RTX-624 0.32(mm)
IC 200-118437/3		07/11/2017 17:26	1	200-25865-003.D	RTX-624 0.32(mm)
IC 200-118437/4		07/11/2017 18:16	1	200-25865-004.D	RTX-624 0.32(mm)
IC 200-118437/5		07/11/2017 19:07	1	200-25865-005.D	RTX-624 0.32(mm)
IC 200-118437/6		07/11/2017 19:57	1	200-25865-006.D	RTX-624 0.32(mm)
ICIS 200-118437/7		07/11/2017 20:48	1	200-25865-007.D	RTX-624 0.32(mm)
IC 200-118437/8		07/11/2017 21:38	1	200-25865-008.D	RTX-624 0.32(mm)
IC 200-118437/9		07/11/2017 22:29	1	200-25865-009.D	RTX-624 0.32(mm)
IC 200-118437/10		07/11/2017 23:20	1	200-25865-010.D	RTX-624 0.32(mm)
VIBLK 200-118437/11		07/12/2017 00:11	1		RTX-624 0.32(mm)
VIBLK 200-118437/12		07/12/2017 01:01	1		RTX-624 0.32(mm)
VIBLK 200-118437/13		07/12/2017 01:52	1		RTX-624 0.32(mm)
ICV 200-118437/14		07/12/2017 02:42	1	200-25865-014.D	RTX-624 0.32(mm)
ZZZZZ		07/12/2017 03:32	1		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 04:22	1		RTX-624 0.32(mm)
VIBLK 200-118437/17		07/12/2017 05:13	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Instrument ID: CHG.i Start Date: 08/03/2017 10:10

Analysis Batch Number: 119318 End Date: 08/04/2017 09:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-119318/1		08/03/2017 10:10	1	200-26195-001.D	RTX-624 0.32(mm)
CCVIS 200-119318/2		08/03/2017 10:59	1	200-26195-002.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 11:50	1		RTX-624 0.32(mm)
MB 200-119318/4		08/03/2017 12:40	1	200-26195-004.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 13:31	1		RTX-624 0.32(mm)
VIBLK 200-119318/6		08/03/2017 14:37	1		RTX-624 0.32(mm)
LCS 200-119318/7		08/03/2017 15:28	1	200-26195-007.D	RTX-624 0.32(mm)
200-39198-9		08/03/2017 16:28	0.2	200-26195-008.D	RTX-624 0.32(mm)
200-39198-10		08/03/2017 17:19	0.2	200-26195-009.D	RTX-624 0.32(mm)
200-39198-11		08/03/2017 18:11	0.2	200-26195-010.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 19:01	1		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 19:52	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 20:43	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 21:34	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 22:25	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 23:17	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 00:08	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 01:00	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 01:51	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 02:42	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 03:34	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 04:25	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 05:17	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 06:08	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 09:00	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 09:52	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Instrument ID: CHW.i Start Date: 06/19/2017 12:59

Analysis Batch Number: 117699 End Date: 06/20/2017 02:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117699/1		06/19/2017 12:59	1	25526-01.d	RTX-624 0.32(mm)
VIBLK 200-117699/2		06/19/2017 13:52	1		RTX-624 0.32(mm)
IC 200-117699/3		06/19/2017 14:42	1	25526-03.d	RTX-624 0.32(mm)
IC 200-117699/4		06/19/2017 15:34	1	25526-04.d	RTX-624 0.32(mm)
IC 200-117699/5		06/19/2017 16:26	1	25526-05.d	RTX-624 0.32(mm)
IC 200-117699/6		06/19/2017 17:19	1	25526-06.d	RTX-624 0.32(mm)
ICIS 200-117699/7		06/19/2017 18:11	1	25526-07.d	RTX-624 0.32(mm)
IC 200-117699/8		06/19/2017 19:04	1	25526-08.d	RTX-624 0.32(mm)
IC 200-117699/9		06/19/2017 19:56	1	25526-09.d	RTX-624 0.32(mm)
IC 200-117699/10		06/19/2017 20:48	1	25526-10.d	RTX-624 0.32(mm)
VIBLK 200-117699/11		06/19/2017 21:40	1		RTX-624 0.32(mm)
VIBLK 200-117699/12		06/19/2017 22:33	1		RTX-624 0.32(mm)
ICV 200-117699/13		06/19/2017 23:25	1	25526-13.d	RTX-624 0.32(mm)
ZZZZZ		06/20/2017 00:18	1		RTX-624 0.32(mm)
ZZZZZ		06/20/2017 01:11	1		RTX-624 0.32(mm)
VIBLK 200-117699/16		06/20/2017 02:04	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Instrument ID: CHW.i Start Date: 07/11/2017 09:33

Analysis Batch Number: 118406 End Date: 07/12/2017 05:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118406/1		07/11/2017 09:33	1	25849-01.d	RTX-624 0.32(mm)
ZZZZZ		07/11/2017 10:38	1		RTX-624 0.32(mm)
CCVIS 200-118406/3		07/11/2017 11:31	1	25849-03.d	RTX-624 0.32(mm)
LCS 200-118406/4		07/11/2017 12:24	1	25849-04.d	RTX-624 0.32(mm)
MB 200-118406/5		07/11/2017 13:17	1	25849-05.d	RTX-624 0.32(mm)
ZZZZZ		07/11/2017 14:10	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 15:03	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 15:56	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 16:49	1		RTX-624 0.32(mm)
200-39198-1		07/11/2017 17:58	0.2	25849-10.d	RTX-624 0.32(mm)
200-39198-2		07/11/2017 19:11	0.2	25849-11.d	RTX-624 0.32(mm)
200-39198-3		07/11/2017 20:21	0.2	25849-12.d	RTX-624 0.32(mm)
200-39198-4		07/11/2017 21:32	0.2	25849-13.d	RTX-624 0.32(mm)
200-39198-5		07/11/2017 22:42	0.2	25849-14.d	RTX-624 0.32(mm)
200-39198-6		07/11/2017 23:51	0.2	25849-15.d	RTX-624 0.32(mm)
200-39198-7		07/12/2017 01:02	0.2	25849-16.d	RTX-624 0.32(mm)
200-39198-8		07/12/2017 02:12	0.2	25849-17.d	RTX-624 0.32(mm)
ZZZZZ		07/12/2017 03:22	0.2		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 04:33	0.2		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 05:43	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39198-1

SDG No.:

Instrument ID: CHW.i Start Date: 07/18/2017 13:59

Analysis Batch Number: 118667 End Date: 07/19/2017 13:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118667/1		07/18/2017 13:59	1	25955-01.d	RTX-624 0.32(mm)
CCVIS 200-118667/2		07/18/2017 14:59	1	25955-02.d	RTX-624 0.32(mm)
ZZZZZ		07/18/2017 15:52	1		RTX-624 0.32(mm)
MB 200-118667/4		07/18/2017 16:45	1	25955-04.d	RTX-624 0.32(mm)
LCS 200-118667/5		07/18/2017 17:38	1	25955-05.d	RTX-624 0.32(mm)
ZZZZZ		07/18/2017 18:49	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 20:00	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 21:10	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 22:20	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 23:30	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 00:40	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 01:49	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 02:59	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 04:24	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 05:33	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 06:26	1		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 07:19	1		RTX-624 0.32(mm)
200-39198-12		07/19/2017 08:29	0.2	25955-18.d	RTX-624 0.32(mm)
ZZZZZ		07/19/2017 09:39	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 10:49	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 11:59	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 13:09	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Instrument ID: CHG.i Start Date: 07/11/2017 15:33

Analysis Batch Number: 118437 End Date: 07/12/2017 05:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118437/1		07/11/2017 15:33	1	200-25865-001.D	RTX-624 0.32(mm)
VIBLK 200-118437/2		07/11/2017 16:35	1		RTX-624 0.32(mm)
IC 200-118437/3		07/11/2017 17:26	1	200-25865-003.D	RTX-624 0.32(mm)
IC 200-118437/4		07/11/2017 18:16	1	200-25865-004.D	RTX-624 0.32(mm)
IC 200-118437/5		07/11/2017 19:07	1	200-25865-005.D	RTX-624 0.32(mm)
IC 200-118437/6		07/11/2017 19:57	1	200-25865-006.D	RTX-624 0.32(mm)
ICIS 200-118437/7		07/11/2017 20:48	1	200-25865-007.D	RTX-624 0.32(mm)
IC 200-118437/8		07/11/2017 21:38	1	200-25865-008.D	RTX-624 0.32(mm)
IC 200-118437/9		07/11/2017 22:29	1	200-25865-009.D	RTX-624 0.32(mm)
IC 200-118437/10		07/11/2017 23:20	1	200-25865-010.D	RTX-624 0.32(mm)
VIBLK 200-118437/11		07/12/2017 00:11	1		RTX-624 0.32(mm)
VIBLK 200-118437/12		07/12/2017 01:01	1		RTX-624 0.32(mm)
VIBLK 200-118437/13		07/12/2017 01:52	1		RTX-624 0.32(mm)
ICV 200-118437/14		07/12/2017 02:42	1	200-25865-014.D	RTX-624 0.32(mm)
ZZZZZ		07/12/2017 03:32	1		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 04:22	1		RTX-624 0.32(mm)
VIBLK 200-118437/17		07/12/2017 05:13	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Instrument ID: CHG.i Start Date: 08/03/2017 10:10

Analysis Batch Number: 119318 End Date: 08/04/2017 09:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-119318/1		08/03/2017 10:10	1	200-26195-001.D	RTX-624 0.32(mm)
CCVIS 200-119318/2		08/03/2017 10:59	1	200-26195-002.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 11:50	1		RTX-624 0.32(mm)
MB 200-119318/4		08/03/2017 12:40	1	200-26195-004.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 13:31	1		RTX-624 0.32(mm)
VIBLK 200-119318/6		08/03/2017 14:37	1		RTX-624 0.32(mm)
LCS 200-119318/7		08/03/2017 15:28	1	200-26195-007.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 16:28	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 17:19	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 18:11	0.2		RTX-624 0.32(mm)
ZZZZZ		08/03/2017 19:01	1		RTX-624 0.32(mm)
200-39232-5		08/03/2017 19:52	0.2	200-26195-012.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 20:43	0.2		RTX-624 0.32(mm)
200-39232-7		08/03/2017 21:34	0.2	200-26195-014.D	RTX-624 0.32(mm)
ZZZZZ		08/03/2017 22:25	0.2		RTX-624 0.32(mm)
200-39232-9		08/03/2017 23:17	0.2	200-26195-016.D	RTX-624 0.32(mm)
200-39232-10		08/04/2017 00:08	0.2	200-26195-017.D	RTX-624 0.32(mm)
200-39232-11		08/04/2017 01:00	0.2	200-26195-018.D	RTX-624 0.32(mm)
200-39232-12		08/04/2017 01:51	0.2	200-26195-019.D	RTX-624 0.32(mm)
ZZZZZ		08/04/2017 02:42	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 03:34	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 04:25	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 05:17	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 06:08	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 09:00	0.2		RTX-624 0.32(mm)
ZZZZZ		08/04/2017 09:52	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Instrument ID: CHW.i Start Date: 06/19/2017 12:59

Analysis Batch Number: 117699 End Date: 06/20/2017 02:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117699/1		06/19/2017 12:59	1	25526-01.d	RTX-624 0.32(mm)
VIBLK 200-117699/2		06/19/2017 13:52	1		RTX-624 0.32(mm)
IC 200-117699/3		06/19/2017 14:42	1	25526-03.d	RTX-624 0.32(mm)
IC 200-117699/4		06/19/2017 15:34	1	25526-04.d	RTX-624 0.32(mm)
IC 200-117699/5		06/19/2017 16:26	1	25526-05.d	RTX-624 0.32(mm)
IC 200-117699/6		06/19/2017 17:19	1	25526-06.d	RTX-624 0.32(mm)
ICIS 200-117699/7		06/19/2017 18:11	1	25526-07.d	RTX-624 0.32(mm)
IC 200-117699/8		06/19/2017 19:04	1	25526-08.d	RTX-624 0.32(mm)
IC 200-117699/9		06/19/2017 19:56	1	25526-09.d	RTX-624 0.32(mm)
IC 200-117699/10		06/19/2017 20:48	1	25526-10.d	RTX-624 0.32(mm)
VIBLK 200-117699/11		06/19/2017 21:40	1		RTX-624 0.32(mm)
VIBLK 200-117699/12		06/19/2017 22:33	1		RTX-624 0.32(mm)
ICV 200-117699/13		06/19/2017 23:25	1	25526-13.d	RTX-624 0.32(mm)
ZZZZZ		06/20/2017 00:18	1		RTX-624 0.32(mm)
ZZZZZ		06/20/2017 01:11	1		RTX-624 0.32(mm)
VIBLK 200-117699/16		06/20/2017 02:04	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39232-1

SDG No.:

Instrument ID: CHW.i Start Date: 07/18/2017 13:59

Analysis Batch Number: 118667 End Date: 07/19/2017 13:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118667/1		07/18/2017 13:59	1	25955-01.d	RTX-624 0.32(mm)
CCVIS 200-118667/2		07/18/2017 14:59	1	25955-02.d	RTX-624 0.32(mm)
ZZZZZ		07/18/2017 15:52	1		RTX-624 0.32(mm)
MB 200-118667/4		07/18/2017 16:45	1	25955-04.d	RTX-624 0.32(mm)
LCS 200-118667/5		07/18/2017 17:38	1	25955-05.d	RTX-624 0.32(mm)
ZZZZZ		07/18/2017 18:49	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 20:00	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 21:10	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 22:20	0.2		RTX-624 0.32(mm)
ZZZZZ		07/18/2017 23:30	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 00:40	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 01:49	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 02:59	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 04:24	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 05:33	0.2		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 06:26	1		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 07:19	1		RTX-624 0.32(mm)
ZZZZZ		07/19/2017 08:29	0.2		RTX-624 0.32(mm)
200-39232-1		07/19/2017 09:39	0.2	25955-19.d	RTX-624 0.32(mm)
200-39232-2		07/19/2017 10:49	0.2	25955-20.d	RTX-624 0.32(mm)
200-39232-3		07/19/2017 11:59	0.2	25955-21.d	RTX-624 0.32(mm)
200-39232-4		07/19/2017 13:09	0.2	25955-22.d	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Instrument ID: CHX.i Start Date: 07/10/2017 12:41

Analysis Batch Number: 118373 End Date: 07/11/2017 03:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118373/1		07/10/2017 12:41	1	25833_01.D	RTX-624 0.32(mm)
VIBLK 200-118373/2		07/10/2017 13:36	1		RTX-624 0.32(mm)
VIBLK 200-118373/3		07/10/2017 14:26	1		RTX-624 0.32(mm)
IC 200-118373/4		07/10/2017 15:17	1	25833_04.D	RTX-624 0.32(mm)
IC 200-118373/5		07/10/2017 16:07	1	25833_05.D	RTX-624 0.32(mm)
IC 200-118373/6		07/10/2017 16:58	1	25833_06.D	RTX-624 0.32(mm)
IC 200-118373/7		07/10/2017 17:48	1	25833_07.D	RTX-624 0.32(mm)
ICIS 200-118373/8		07/10/2017 18:38	1	25833_08.D	RTX-624 0.32(mm)
IC 200-118373/9		07/10/2017 19:28	1	25833_09.D	RTX-624 0.32(mm)
IC 200-118373/10		07/10/2017 20:19	1	25833_10.D	RTX-624 0.32(mm)
IC 200-118373/11		07/10/2017 21:09	1	25833_11.D	RTX-624 0.32(mm)
VIBLK 200-118373/12		07/10/2017 21:59	1		RTX-624 0.32(mm)
VIBLK 200-118373/13		07/10/2017 22:50	1		RTX-624 0.32(mm)
VIBLK 200-118373/14		07/10/2017 23:40	1		RTX-624 0.32(mm)
ICV 200-118373/15		07/11/2017 00:30	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 01:20	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 02:10	1		RTX-624 0.32(mm)
VIBLK 200-118373/18		07/11/2017 03:00	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39423-1

SDG No.:

Instrument ID: CHX.i Start Date: 07/26/2017 10:02

Analysis Batch Number: 118979 End Date: 07/27/2017 09:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118979/1		07/26/2017 10:02	1	26065_01.D	RTX-624 0.32(mm)
CCVIS 200-118979/2		07/26/2017 10:48	1	26065_02.D	RTX-624 0.32(mm)
LCS 200-118979/3		07/26/2017 11:38	1	26065_03.D	RTX-624 0.32(mm)
MB 200-118979/4		07/26/2017 12:29	1	26065_04.D	RTX-624 0.32(mm)
ZZZZZ		07/26/2017 13:57	2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 14:47	2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 15:37	2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 16:28	1		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 17:18	13		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 18:09	12.9		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 18:59	5		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 19:50	4		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 20:47	0.2		RTX-624 0.32(mm)
200-39423-10		07/26/2017 21:45	0.2	26065_14.D	RTX-624 0.32(mm)
ZZZZZ		07/26/2017 22:43	0.2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 23:41	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 00:39	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 01:36	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 02:34	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 09:51	13		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Instrument ID: CHX.i Start Date: 07/10/2017 12:41

Analysis Batch Number: 118373 End Date: 07/11/2017 03:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118373/1		07/10/2017 12:41	1	25833_01.D	RTX-624 0.32(mm)
VIBLK 200-118373/2		07/10/2017 13:36	1		RTX-624 0.32(mm)
VIBLK 200-118373/3		07/10/2017 14:26	1		RTX-624 0.32(mm)
IC 200-118373/4		07/10/2017 15:17	1	25833_04.D	RTX-624 0.32(mm)
IC 200-118373/5		07/10/2017 16:07	1	25833_05.D	RTX-624 0.32(mm)
IC 200-118373/6		07/10/2017 16:58	1	25833_06.D	RTX-624 0.32(mm)
IC 200-118373/7		07/10/2017 17:48	1	25833_07.D	RTX-624 0.32(mm)
ICIS 200-118373/8		07/10/2017 18:38	1	25833_08.D	RTX-624 0.32(mm)
IC 200-118373/9		07/10/2017 19:28	1	25833_09.D	RTX-624 0.32(mm)
IC 200-118373/10		07/10/2017 20:19	1	25833_10.D	RTX-624 0.32(mm)
IC 200-118373/11		07/10/2017 21:09	1	25833_11.D	RTX-624 0.32(mm)
VIBLK 200-118373/12		07/10/2017 21:59	1		RTX-624 0.32(mm)
VIBLK 200-118373/13		07/10/2017 22:50	1		RTX-624 0.32(mm)
VIBLK 200-118373/14		07/10/2017 23:40	1		RTX-624 0.32(mm)
ICV 200-118373/15		07/11/2017 00:30	1	25833_15.D	RTX-624 0.32(mm)
ZZZZZ		07/11/2017 01:20	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 02:10	1		RTX-624 0.32(mm)
VIBLK 200-118373/18		07/11/2017 03:00	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39424-1

SDG No.:

Instrument ID: CHX.i Start Date: 07/26/2017 10:02

Analysis Batch Number: 118979 End Date: 07/27/2017 09:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118979/1		07/26/2017 10:02	1	26065_01.D	RTX-624 0.32(mm)
CCVIS 200-118979/2		07/26/2017 10:48	1	26065_02.D	RTX-624 0.32(mm)
LCS 200-118979/3		07/26/2017 11:38	1	26065_03.D	RTX-624 0.32(mm)
MB 200-118979/4		07/26/2017 12:29	1	26065_04.D	RTX-624 0.32(mm)
ZZZZZ		07/26/2017 13:57	2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 14:47	2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 15:37	2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 16:28	1		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 17:18	13		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 18:09	12.9		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 18:59	5		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 19:50	4		RTX-624 0.32(mm)
200-39424-12		07/26/2017 20:47	0.2	26065_13.D	RTX-624 0.32(mm)
ZZZZZ		07/26/2017 21:45	0.2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 22:43	0.2		RTX-624 0.32(mm)
ZZZZZ		07/26/2017 23:41	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 00:39	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 01:36	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 02:34	0.2		RTX-624 0.32(mm)
ZZZZZ		07/27/2017 09:51	13		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Instrument ID: CHC.i Start Date: 06/07/2017 13:04

Analysis Batch Number: 117345 End Date: 06/08/2017 10:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117345/1		06/07/2017 13:04	1	25386_01.D	RTX-624 0.32(mm)
VIBLK 200-117345/2		06/07/2017 13:50	1		RTX-624 0.32(mm)
IC 200-117345/3		06/07/2017 14:43	1	25386_03.D	RTX-624 0.32(mm)
ZZZZZ		06/07/2017 15:36	1		RTX-624 0.32(mm)
ZZZZZ		06/07/2017 16:30	1		RTX-624 0.32(mm)
IC 200-117345/6		06/07/2017 17:23	1	25386_06.D	RTX-624 0.32(mm)
ICIS 200-117345/7		06/07/2017 18:16	1	25386_07.D	RTX-624 0.32(mm)
IC 200-117345/8		06/07/2017 19:10	1	25386_08.D	RTX-624 0.32(mm)
IC 200-117345/9		06/07/2017 20:03	1	25386_09.D	RTX-624 0.32(mm)
IC 200-117345/10		06/07/2017 20:56	1	25386_10.D	RTX-624 0.32(mm)
VIBLK 200-117345/11		06/07/2017 21:49	1		RTX-624 0.32(mm)
VIBLK 200-117345/12		06/07/2017 22:42	1		RTX-624 0.32(mm)
ZZZZZ		06/07/2017 23:36	1		RTX-624 0.32(mm)
ZZZZZ		06/08/2017 00:29	1		RTX-624 0.32(mm)
ZZZZZ		06/08/2017 01:23	1		RTX-624 0.32(mm)
ZZZZZ		06/08/2017 02:16	1		RTX-624 0.32(mm)
IC 200-117345/17		06/08/2017 09:08	1	25386_17.D	RTX-624 0.32(mm)
IC 200-117345/18		06/08/2017 10:01	1	25386_18.D	RTX-624 0.32(mm)
ICV 200-117345/19		06/08/2017 10:51	1	25386_19.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39486-1

SDG No.:

Instrument ID: CHC.i Start Date: 08/02/2017 09:48

Analysis Batch Number: 119262 End Date: 08/02/2017 21:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-119262/1		08/02/2017 09:48	1	26165_01.D	RTX-624 0.32(mm)
CCVIS 200-119262/2		08/02/2017 10:33	1		RTX-624 0.32(mm)
CCVIS 200-119262/3		08/02/2017 11:26	1	26165_03.D	RTX-624 0.32(mm)
LCS 200-119262/4		08/02/2017 12:20	1	26165_04.D	RTX-624 0.32(mm)
MB 200-119262/5		08/02/2017 13:13	1	26165_05.D	RTX-624 0.32(mm)
ZZZZZ		08/02/2017 14:12	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 15:11	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 16:10	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 17:03	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 17:56	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 18:54	0.2		RTX-624 0.32(mm)
200-39486-1		08/02/2017 19:53	0.2	26165_12.D	RTX-624 0.32(mm)
ZZZZZ		08/02/2017 20:51	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 21:50	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Instrument ID: CHB.i Start Date: 06/08/2017 15:13

Analysis Batch Number: 117412 End Date: 06/09/2017 12:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117412/1		06/08/2017 15:13	1	25406-01.D	RTX-624 0.32(mm)
VIBLK 200-117412/2		06/08/2017 16:03	1		RTX-624 0.32(mm)
IC 200-117412/3		06/08/2017 16:56	1	25406-03.D	RTX-624 0.32(mm)
IC 200-117412/4		06/08/2017 17:49	1	25406-04.D	RTX-624 0.32(mm)
IC 200-117412/5		06/08/2017 18:41	1	25406-05.D	RTX-624 0.32(mm)
IC 200-117412/6		06/08/2017 19:34	1	25406-06.D	RTX-624 0.32(mm)
ICIS 200-117412/7		06/08/2017 20:27	1	25406-07.D	RTX-624 0.32(mm)
IC 200-117412/8		06/08/2017 21:20	1	25406-08.D	RTX-624 0.32(mm)
IC 200-117412/9		06/08/2017 22:13	1	25406-09.D	RTX-624 0.32(mm)
ZZZZZ		06/08/2017 23:06	1		RTX-624 0.32(mm)
VIBLK 200-117412/11		06/08/2017 23:59	1		RTX-624 0.32(mm)
VIBLK 200-117412/12		06/09/2017 00:52	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 01:45	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 02:37	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 03:30	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 04:23	1		RTX-624 0.32(mm)
IC 200-117412/17		06/09/2017 10:03	1	25406-17.D	RTX-624 0.32(mm)
ZZZZZ		06/09/2017 10:56	1		RTX-624 0.32(mm)
ICV 200-117412/19		06/09/2017 12:24	1	25406-19.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39500-1

SDG No.:

Instrument ID: CHB.i Start Date: 08/01/2017 10:15

Analysis Batch Number: 119211 End Date: 08/02/2017 09:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-119211/1		08/01/2017 10:15	1	26148-01.D	RTX-624 0.32(mm)
CCVIS 200-119211/2		08/01/2017 11:06	1	26148-02.D	RTX-624 0.32(mm)
LCS 200-119211/3		08/01/2017 11:58	1	26148-03.D	RTX-624 0.32(mm)
MB 200-119211/4		08/01/2017 12:51	1	26148-04.D	RTX-624 0.32(mm)
ZZZZZ		08/01/2017 13:44	100		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 14:37	9.09		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 15:30	6.06		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 16:23	2.99		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 17:16	10		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 18:09	2.5		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 19:02	2.8		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 19:55	1.5		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 20:48	2		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 21:42	1		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 22:36	1		RTX-624 0.32(mm)
ZZZZZ		08/01/2017 23:29	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 00:22	2.5		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 01:15	5		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 02:08	2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 03:00	2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 04:03	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 05:06	0.2		RTX-624 0.32(mm)
200-39500-1		08/02/2017 06:10	0.2	26148-23.D	RTX-624 0.32(mm)
ZZZZZ		08/02/2017 07:02	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 07:55	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 09:01	5		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Instrument ID: CHC.i Start Date: 06/07/2017 13:04

Analysis Batch Number: 117345 End Date: 06/08/2017 10:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117345/1		06/07/2017 13:04	1	25386_01.D	RTX-624 0.32(mm)
VIBLK 200-117345/2		06/07/2017 13:50	1		RTX-624 0.32(mm)
IC 200-117345/3		06/07/2017 14:43	1	25386_03.D	RTX-624 0.32(mm)
ZZZZZ		06/07/2017 15:36	1		RTX-624 0.32(mm)
ZZZZZ		06/07/2017 16:30	1		RTX-624 0.32(mm)
IC 200-117345/6		06/07/2017 17:23	1	25386_06.D	RTX-624 0.32(mm)
ICIS 200-117345/7		06/07/2017 18:16	1	25386_07.D	RTX-624 0.32(mm)
IC 200-117345/8		06/07/2017 19:10	1	25386_08.D	RTX-624 0.32(mm)
IC 200-117345/9		06/07/2017 20:03	1	25386_09.D	RTX-624 0.32(mm)
IC 200-117345/10		06/07/2017 20:56	1	25386_10.D	RTX-624 0.32(mm)
VIBLK 200-117345/11		06/07/2017 21:49	1		RTX-624 0.32(mm)
VIBLK 200-117345/12		06/07/2017 22:42	1		RTX-624 0.32(mm)
ZZZZZ		06/07/2017 23:36	1		RTX-624 0.32(mm)
ZZZZZ		06/08/2017 00:29	1		RTX-624 0.32(mm)
ZZZZZ		06/08/2017 01:23	1		RTX-624 0.32(mm)
ZZZZZ		06/08/2017 02:16	1		RTX-624 0.32(mm)
IC 200-117345/17		06/08/2017 09:08	1	25386_17.D	RTX-624 0.32(mm)
IC 200-117345/18		06/08/2017 10:01	1	25386_18.D	RTX-624 0.32(mm)
ICV 200-117345/19		06/08/2017 10:51	1	25386_19.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39531-1

SDG No.:

Instrument ID: CHC.i Start Date: 08/02/2017 09:48

Analysis Batch Number: 119262 End Date: 08/02/2017 21:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-119262/1		08/02/2017 09:48	1	26165_01.D	RTX-624 0.32(mm)
CCVIS 200-119262/2		08/02/2017 10:33	1		RTX-624 0.32(mm)
CCVIS 200-119262/3		08/02/2017 11:26	1	26165_03.D	RTX-624 0.32(mm)
LCS 200-119262/4		08/02/2017 12:20	1	26165_04.D	RTX-624 0.32(mm)
MB 200-119262/5		08/02/2017 13:13	1	26165_05.D	RTX-624 0.32(mm)
ZZZZZ		08/02/2017 14:12	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 15:11	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 16:10	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 17:03	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 17:56	1		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 18:54	0.2		RTX-624 0.32(mm)
ZZZZZ		08/02/2017 19:53	0.2		RTX-624 0.32(mm)
200-39531-3		08/02/2017 20:51	0.2	26165_13.D	RTX-624 0.32(mm)
ZZZZZ		08/02/2017 21:50	0.2		RTX-624 0.32(mm)

Shipping and Receiving Documents

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: Becky Kinal	Samples Collected By: M. Jepsen	1 of 2 COCs
Company: AKRF, Inc.	Phone: 914-922-2362		
Address: 440 Park Ave. South 7th Fl	Email: bkinal@akrf.com		
City/State/Zip: New York, NY 10016	cmcfarlane@akrf.com; mjepsen@akrf		
Phone: 914-922-2362	Site Contact: Robert Bustamante		
FAX:	LA Contact: Melissa Deak		
Project Name: St. John Villa	Analysis Turnaround Time		
Site: Staten Island, NY	X Standard (Specify) 5 days		
PO # 89215	Rush (Specify):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 (SCA List)	NA-APH	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SV-8	8/22/17	9:58	10:40	-29.00	-4.00	#188	3790	X									X		
SV-7	8/22/17	10:32	11:33	-30.00	-6.00	5009	2535	X									X		
SV-6	8/22/17	10:59	12:00	-28.50	-6.00	3117	4794	X									X		
SV-9	8/22/17	13:48	14:41	-30.00	-2.00	3999	2563	X									X		
SV-10	8/22/17	14:12	15:06	-30.00	-6.50	4511	3419	X									X		
SV-12	8/22/17	14:50	15:51	-30.00	-6.00	4528	3659	X									X		

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (Inches of Hg)	Interior	Ambient
Start		
Stop		

200 39823 Chain of Custody

Special Instructions/QC Requirements & Comments:
- Analyze all samples for modified TO-15 list (SCA list of parameters is attached to C.O.C.s)
- Must hit NYSDOH reporting limits

Samples Shipped by:	Date/Time:	Samples Received by:	
Samples Relinquished by: Mark Jepsen	Date/Time: 8/23/17 17:00	Received by:	
Relinquished by:	Date/Time:	Received by: TASU 8/24/17 1030	

Lab Use Only Shipper Name: Opened by: Condition:

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

TestAmerica Analytical Testing Corp assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: Becky Kinal	Samples Collected By: M. Jepsen	2 of 2 COCs
Company: AKRF, Inc.	Phone: 914-922-2362		
Address: 440 Park Ave. S 7th Fl	Email: rkinal@akrf.com		
City/State/Zip: New York, NY 10016	cmatamoros@akrf.com, mjepsen@akrf.com		
Phone: 914-922-2362	Site Contact: Robert Bustamante		
FAX:	TA Contact: Melissa Haas		
Project Name: St John Villa	Analysis Turnaround Time		
Site: Staten Island NY	X Standard (Specify) 5 days		
PO # 89215	Rush (Specify):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum In Field, "Hg (Start)	Canister Vacuum In Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 (SCA List)	MA-APH	EPA 5C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SV-11	8/22/17	15:12	16:10	-30.00	-6.00	4505	3037	X									X		
SV-14	8/23/17	9:09	10:03	-30.00	-5.50	3584	2515	X									X		
SV-13	8/23/17	9:07	10:06	-30.00	-5.00	2763	4308	X									X		
SV-16	8/23/17	9:48	11:15	-30.00	-5.50	4193	4343	X									X		
SV-18	8/23/17	11:13	12:11	-30.00	-5.00	3932	4067	X									X		
SV-17	8/23/17	11:40	12:36	-29.50	-2.00	4720	2538	X									X		

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments:
- analyze all samples for modified TO-15 list (SCA list of parameters is attached to C.O.C.s)
- must hit NYSDOH reporting limits

Samples Shipped by:	Date/Time:	Samples Removed by:	
Samples Relinquished by: M. Jepsen	Date/Time: 8/23/17 17:00	Received by:	
Relinquished by:	Date/Time:	Received by: TASL 8/24/17 1030	

Lab Use Only Shipper Name: Opened by: Condition:

ORIGIN ID:NYA (646) 745-0905
TEST AMERICA NYC

47-32 32ND PLACE
SUITE 1141
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 23AUG17
ACTWGT: 10.20 LB
CAD: 1019055/CAFE3920
DIMS: 25x20x18 IN

BILL RECIPIENT

TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990 REF:
INV:
PO: DEPT:

FedEx Express

1 of 4

TRK# 0201 7700 9291 4729

THU - 24 AUG 3:00P
STANDARD OVERNIGHT

MASTER

NC BTVA

05403
VT-US BTV

Page 1 of 4

ORIGIN ID:NYA (646) 745-0905
TEST AMERICA NYC

47-32 32ND PLACE
SUITE 1141
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 23AUG17
ACTWGT: 10.00 LB
CAD: 1019055/CAFE3920
DIMS: 25x20x18 IN

BILL RECIPIENT

TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990 REF:
INV:
PO: DEPT:

FedEx Express

2 of 4

MPS# 0263 7700 9291 4589

Mstr# 7700 9291 4729

0201

THU - 24 AUG 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

ORIGIN ID:NYA (845) 745-3956
TESTAMERICA NYC

47-32 32ND PLACE,
SUITE 124
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 23AUG17
ACTWGT: 11.00 LB
CAD: 101055701/NET3920
DIMS: 26x20x16 IN

BILL RECIPIENT

TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990
REF:
PO:
DEPT:

FedEx Express

3 of 4
MPS# 7700 9291 4394
Mstr# 7700 9291 4729

THU - 24 AUG 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Page 4 of 4

ORIGIN ID:NYA (845) 745-3956
TESTAMERICA NYC

47-32 32ND PLACE,
SUITE 124
LONG ISLAND CITY, NY 11101
UNITED STATES US

SHIP DATE: 23AUG17
ACTWGT: 11.00 LB
CAD: 101055701/NET3920
DIMS: 26x20x16 IN

BILL RECIPIENT

TO SAMPLING RECEIVING BVT
TESTAMERICA
30 COMMUNITY DR STE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990
REF:
PO:
DEPT:

FedEx Express

4 of 4
MPS# 7700 9291 4100
Mstr# 7700 9291 4729

THU - 24 AUG 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 200-39823-1
SDG Number: 200-39823-1

Login Number: 39823
List Number: 1
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	075964,965,966,967
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 460-138369-1

Job Description: St John Villa; #89215

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Attention: Becky Kinal

Approved for release.
Allison L Bennett
Project Manager I
8/14/2017 1:25 PM

Designee for
Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
08/14/2017

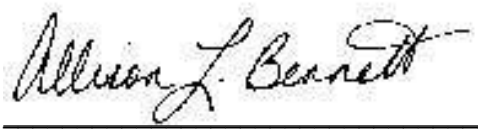
The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-138369-1

Job Description: St John Villa; #89215

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Allison L Bennett
Project Manager I
8/14/2017 1:25 PM

Designee for
Melissa Haas

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CASE NARRATIVE

Client: AKRF Inc

Project: St John Villa; #89215

Report Number: 460-138369-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/2/2017 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Receipt Exceptions

Sample volume was not provided for the following sample for the dissolved metals analysis: GW-15 (460-138369-14). Only 1 preserved metals container was received and it contains sediment. The lab will proceed with total metals analysis only using the 1 preserved container.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C. The samples were prepared on 08/02/2017 and analyzed on 08/07/2017 and 08/08/2017.

The continuing calibration verification (CCV) associated with batch 454638 recovered above the upper control limit for Vinyl chloride, Trichlorofluoromethane and n-Butylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) analyzed in batch 454712 was outside the method criteria for the following analytes: Vinyl chloride, Trichlorofluoromethane and n-Butylbenzene (biased high) and Bromoform (biased low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) associated with batch 454365 recovered above the upper control limit for Methyl acetate. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 454365 recovered outside control limits for the following analyte: Methyl acetate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Methylene Chloride was detected in method blank MB 460-454712/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride and m-Xylene & p-Xylene were detected in method blank LB3 460-453619/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-15 (460-138369-14) and Trip Blank (460-138369-15) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 08/06/2017.

The continuing calibration verification (CCV) analyzed in batch 460-454314 was outside the method criteria for the following analyte: Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Dichlorodifluoromethane and Trichlorofluoromethane failed the recovery criteria low for the MS of sample GW-15MS (460-138369-14) in batch 460-454314.

Dichlorodifluoromethane and Trichlorofluoromethane failed the recovery criteria low for the MSD of sample GW-15MSD (460-138369-14) in batch 460-454314. 1,4-Dioxane exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/04/2017 and 08/11/2017 and analyzed on 08/09/2017, 08/10/2017 and 08/12/2017.

The continuing calibration verification (CCV) analyzed in batch 460-454959 was outside the method criteria for the following analyte(s): Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) associated with batch 455794 recovered above the upper control limit for 4-Nitroaniline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 455229 recovered above the upper control limit for several compounds. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Phenol-d5 (Surr) failed the surrogate recovery criteria high for LCS 460-455782/2-A.

Nitrobenzene-d5 (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria high for LCS 460-455782/3-A.

Several analytes failed the recovery criteria low for the MS of sample 460-137947-5 in batch 460-454959.

For the MSD of sample 460-137947-5 in batch 460-454959, 2,4-Dinitrophenol failed the recovery criteria low. 2-Nitroaniline failed the recovery criteria high. Also, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol and Pentachlorophenol exceeded the RPD limit.

2-Chlorophenol, 4-Methylphenol and Hexachlorocyclopentadiene failed the recovery criteria low for the MS of sample 460-139004-6 in batch 460-455794.

For the MSD of sample 460-139004-6 in batch 460-455794, 2-Chlorophenol, Hexachlorocyclopentadiene and Phenol failed the recovery criteria low. Bis(2-chloroethyl)ether failed the recovery criteria high. Also, 2,4-Dinitrophenol, 3,3'-Dichlorobenzidine and 4-Methylphenol exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

Sample GW-15 (460-138369-14) was analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Method

8270D. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

The continuing calibration verification (CCV) analyzed in batch 460-453952 was outside the method criteria for the following analyte(s): Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS

Samples SB-1WC (460-138369-11), SB-15WC (460-138369-12) and SB-17WC (460-138369-13) were analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015D - GRO. The samples were prepared on 08/03/2017 and analyzed on 08/03/2017 and 08/04/2017.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS

Samples SB-1WC (460-138369-11), SB-15WC (460-138369-12) and SB-17WC (460-138369-13) were analyzed for diesel range organics in accordance with EPA SW-846 Method 8015D - DRO. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

C10-C44 failed the recovery criteria low for the MS of sample 180-68692-1 in batch 460-453940.

C10-C44 failed the recovery criteria low for the MSD of sample 180-68692-1 in batch 460-453940.

Refer to the QC report for details.

No other difficulties were encountered during the DRO analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

No difficulties were encountered during the Pesticides analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

CHLORINATED HERBICIDES

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 08/04/2017 and analyzed on 08/07/2017.

No difficulties were encountered during the herbicides analysis.

All quality control parameters were within the acceptance limits.

METALS

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3')

(460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for metals in accordance with EPA SW-846 Methods 6010C. The samples were prepared and analyzed on 08/03/2017.

Antimony, Copper and Manganese failed the recovery criteria low for the MS of sample 460-138335-1 in batch 460-453753.

Antimony failed the recovery criteria low for the MS of sample 460-138404-2 in batch 460-453753.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SB-1(1-3') (460-138369-1)[4X], SB-1(10-12') (460-138369-2)[4X], SB-14(1-3') (460-138369-3)[4X], SB-14(10-12') (460-138369-4)[4X], SB-15(1-3') (460-138369-5)[4X], SB-15(10-12') (460-138369-6)[4X], SB-16(1-3') (460-138369-7)[4X], SB-16(10-12') (460-138369-8)[4X], SB-17(1-3') (460-138369-9)[4X] and SB-17(10-12') (460-138369-10)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

METALS
Sample GW-15 (460-138369-14) was analyzed for metals in accordance with EPA SW-846 Method 6020A. The samples were prepared and analyzed on 08/04/2017.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

MERCURY
Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9) and SB-17(10-12') (460-138369-10) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 08/04/2017.

Mercury failed the recovery criteria low for the MS of sample 460-138286-7 in batch 460-454006.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the Hg analysis.

All other quality control parameters were within the acceptance limits.

MERCURY
Sample GW-15 (460-138369-14) was analyzed for mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/04/2017.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM
Samples SB-1WC (460-138369-11), SB-15WC (460-138369-12) and SB-17WC (460-138369-13) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were prepared on 08/05/2017 and analyzed on 08/06/2017.

No difficulties were encountered during the hexchrome Cr6 analysis.

All quality control parameters were within the acceptance limits.

CYANIDE
Samples SB-1WC (460-138369-11), SB-15WC (460-138369-12) and SB-17WC (460-138369-13) were analyzed for cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared and analyzed on 08/08/2017 and 08/09/2017.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples SB-1(1-3') (460-138369-1), SB-1(10-12') (460-138369-2), SB-14(1-3') (460-138369-3), SB-14(10-12') (460-138369-4), SB-15(1-3') (460-138369-5), SB-15(10-12') (460-138369-6), SB-16(1-3') (460-138369-7), SB-16(10-12') (460-138369-8), SB-17(1-3') (460-138369-9), SB-17(10-12') (460-138369-10), SB-1WC (460-138369-11), SB-15WC (460-138369-12) and SB-17WC (460-138369-13) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 08/07/2017.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-1	**SB-1(1-3')**					
Methylene Chloride		0.00075	J B	0.0010	mg/Kg	8260C
Arsenic		1.7	J	3.0	mg/Kg	6010C
Barium		25.6	J	39.6	mg/Kg	6010C
Beryllium		0.27	J	0.40	mg/Kg	6010C
Chromium		14.7		2.0	mg/Kg	6010C
Cobalt		8.4	J	9.9	mg/Kg	6010C
Copper		15.7		4.9	mg/Kg	6010C
Lead		8.8		2.0	mg/Kg	6010C
Manganese		171		3.0	mg/Kg	6010C
Nickel		47.2		7.9	mg/Kg	6010C
Vanadium		17.7		9.9	mg/Kg	6010C
Zinc		27.8		5.9	mg/Kg	6010C
Mercury		0.020		0.017	mg/Kg	7471B
Percent Moisture		4.7		1.0	%	Moisture
Percent Solids		95.3		1.0	%	Moisture
460-138369-2	**SB-1(10-12')**					
m-Xylene & p-Xylene		0.00021	J	0.0010	mg/Kg	8260C
Arsenic		3.1		3.1	mg/Kg	6010C
Barium		59.0		41.7	mg/Kg	6010C
Beryllium		0.51		0.42	mg/Kg	6010C
Chromium		23.2		2.1	mg/Kg	6010C
Cobalt		7.9	J	10.4	mg/Kg	6010C
Copper		33.4		5.2	mg/Kg	6010C
Lead		13.8		2.1	mg/Kg	6010C
Manganese		460		3.1	mg/Kg	6010C
Nickel		38.6		8.3	mg/Kg	6010C
Vanadium		26.2		10.4	mg/Kg	6010C
Zinc		46.8		6.3	mg/Kg	6010C
Percent Moisture		7.7		1.0	%	Moisture
Percent Solids		92.3		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-3	**SB-14(1-3')**					
Methylene Chloride		0.00066	J	0.0011	mg/Kg	8260C
m-Xylene & p-Xylene		0.00021	J	0.0011	mg/Kg	8260C
Arsenic		3.0	J	3.4	mg/Kg	6010C
Barium		59.2		44.9	mg/Kg	6010C
Beryllium		0.57		0.45	mg/Kg	6010C
Chromium		13.1		2.2	mg/Kg	6010C
Cobalt		5.4	J	11.2	mg/Kg	6010C
Copper		18.4		5.6	mg/Kg	6010C
Lead		34.8		2.2	mg/Kg	6010C
Manganese		465		3.4	mg/Kg	6010C
Nickel		36.3		9.0	mg/Kg	6010C
Vanadium		14.6		11.2	mg/Kg	6010C
Zinc		42.9		6.7	mg/Kg	6010C
Mercury		0.025		0.019	mg/Kg	7471B
Percent Moisture		11.9		1.0	%	Moisture
Percent Solids		88.1		1.0	%	Moisture
460-138369-4	**SB-14(10-12')**					
Acetone		0.0078		0.0058	mg/Kg	8260C
Methylene Chloride		0.00056	J B	0.0012	mg/Kg	8260C
Benzo[a]anthracene		0.035	J	0.042	mg/Kg	8270D
Benzo[a]pyrene		0.032	J	0.042	mg/Kg	8270D
Benzo[b]fluoranthene		0.055		0.042	mg/Kg	8270D
Benzo[k]fluoranthene		0.022	J	0.042	mg/Kg	8270D
Chrysene		0.043	J	0.42	mg/Kg	8270D
Fluoranthene		0.069	J	0.42	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.068		0.042	mg/Kg	8270D
Phenanthrene		0.032	J	0.42	mg/Kg	8270D
Pyrene		0.058	J	0.42	mg/Kg	8270D
Arsenic		3.0	J	3.7	mg/Kg	6010C
Barium		38.4	J	48.8	mg/Kg	6010C
Beryllium		0.52		0.49	mg/Kg	6010C
Chromium		25.2		2.4	mg/Kg	6010C
Cobalt		14.7		12.2	mg/Kg	6010C
Copper		12.1		6.1	mg/Kg	6010C
Lead		6.5		2.4	mg/Kg	6010C
Manganese		550		3.7	mg/Kg	6010C
Nickel		102		9.8	mg/Kg	6010C
Vanadium		20.3		12.2	mg/Kg	6010C
Zinc		39.4		7.3	mg/Kg	6010C
Percent Moisture		21.9		1.0	%	Moisture
Percent Solids		78.1		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-5	**SB-15(1-3')**					
Acetone		0.011		0.0054	mg/Kg	8260C
Methylene Chloride		0.00044	J B	0.0011	mg/Kg	8260C
m-Xylene & p-Xylene		0.00024	J B	0.0011	mg/Kg	8260C
Acenaphthene		0.061	J	0.37	mg/Kg	8270D
Acenaphthylene		0.023	J	0.37	mg/Kg	8270D
Anthracene		0.60		0.37	mg/Kg	8270D
Benzo[a]anthracene		2.5		0.037	mg/Kg	8270D
Benzo[a]pyrene		1.8		0.037	mg/Kg	8270D
Benzo[b]fluoranthene		3.1		0.037	mg/Kg	8270D
Benzo[g,h,i]perylene		0.89		0.37	mg/Kg	8270D
Benzo[k]fluoranthene		1.1		0.037	mg/Kg	8270D
Carbazole		0.32	J	0.37	mg/Kg	8270D
Chrysene		2.2		0.37	mg/Kg	8270D
Dibenz(a,h)anthracene		0.28		0.037	mg/Kg	8270D
Dibenzofuran		0.063	J	0.37	mg/Kg	8270D
Fluoranthene		6.1		0.37	mg/Kg	8270D
Fluorene		0.13	J	0.37	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		1.4		0.037	mg/Kg	8270D
Naphthalene		0.013	J	0.37	mg/Kg	8270D
Phenanthrene		3.2		0.37	mg/Kg	8270D
Pyrene		5.6		0.37	mg/Kg	8270D
Arsenic		2.8	J	3.1	mg/Kg	6010C
Barium		35.1	J	41.3	mg/Kg	6010C
Beryllium		0.27	J	0.41	mg/Kg	6010C
Chromium		11.8		2.1	mg/Kg	6010C
Cobalt		5.5	J	10.3	mg/Kg	6010C
Copper		19.8		5.2	mg/Kg	6010C
Lead		47.6		2.1	mg/Kg	6010C
Manganese		256		3.1	mg/Kg	6010C
Nickel		32.5		8.3	mg/Kg	6010C
Vanadium		15.6		10.3	mg/Kg	6010C
Zinc		52.0		6.2	mg/Kg	6010C
Mercury		0.028		0.019	mg/Kg	7471B
Percent Moisture		11.1		1.0	%	Moisture
Percent Solids		88.9		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-6	**SB-15(10-12')**					
Methylene Chloride		0.00070	J	0.00091	mg/Kg	8260C
Arsenic		1.4	J	3.0	mg/Kg	6010C
Barium		8.9	J	40.5	mg/Kg	6010C
Beryllium		0.21	J	0.41	mg/Kg	6010C
Chromium		8.5		2.0	mg/Kg	6010C
Cobalt		4.4	J	10.1	mg/Kg	6010C
Copper		5.8		5.1	mg/Kg	6010C
Lead		2.2		2.0	mg/Kg	6010C
Manganese		136		3.0	mg/Kg	6010C
Nickel		22.6		8.1	mg/Kg	6010C
Vanadium		8.7	J	10.1	mg/Kg	6010C
Zinc		14.7		6.1	mg/Kg	6010C
Percent Moisture		4.2		1.0	%	Moisture
Percent Solids		95.8		1.0	%	Moisture
460-138369-7	**SB-16(1-3')**					
Methylene Chloride		0.00051	J	0.0011	mg/Kg	8260C
Benzo[a]anthracene		0.084		0.037	mg/Kg	8270D
Benzo[a]pyrene		0.11		0.037	mg/Kg	8270D
Benzo[b]fluoranthene		0.17		0.037	mg/Kg	8270D
Benzo[g,h,i]perylene		0.062	J	0.37	mg/Kg	8270D
Benzo[k]fluoranthene		0.068		0.037	mg/Kg	8270D
Chrysene		0.12	J	0.37	mg/Kg	8270D
Fluoranthene		0.13	J	0.37	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.13		0.037	mg/Kg	8270D
Phenanthrene		0.048	J	0.37	mg/Kg	8270D
Pyrene		0.15	J	0.37	mg/Kg	8270D
Arsenic		83.5		3.1	mg/Kg	6010C
Barium		208		41.9	mg/Kg	6010C
Beryllium		0.39	J	0.42	mg/Kg	6010C
Cadmium		0.26	J	0.84	mg/Kg	6010C
Chromium		14.4		2.1	mg/Kg	6010C
Cobalt		5.1	J	10.5	mg/Kg	6010C
Copper		49.9		5.2	mg/Kg	6010C
Lead		963		2.1	mg/Kg	6010C
Manganese		377		3.1	mg/Kg	6010C
Nickel		28.7		8.4	mg/Kg	6010C
Vanadium		17.0		10.5	mg/Kg	6010C
Zinc		183		6.3	mg/Kg	6010C
Mercury		0.13		0.019	mg/Kg	7471B
Percent Moisture		11.7		1.0	%	Moisture
Percent Solids		88.3		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-8	**SB-16(10-12')**					
Methylene Chloride		0.00075	J B	0.0010	mg/Kg	8260C
m-Xylene & p-Xylene		0.00043	J B	0.0010	mg/Kg	8260C
Xylenes, Total		0.00043	J	0.0021	mg/Kg	8260C
Benzo[a]pyrene		0.011	J	0.035	mg/Kg	8270D
Benzo[b]fluoranthene		0.016	J	0.035	mg/Kg	8270D
Chrysene		0.017	J	0.35	mg/Kg	8270D
Fluoranthene		0.029	J	0.35	mg/Kg	8270D
Isophorone		0.032	J	0.14	mg/Kg	8270D
Phenanthrene		0.015	J	0.35	mg/Kg	8270D
Pyrene		0.024	J	0.35	mg/Kg	8270D
Arsenic		2.4	J	3.0	mg/Kg	6010C
Barium		20.9	J	40.5	mg/Kg	6010C
Beryllium		0.37	J	0.40	mg/Kg	6010C
Chromium		14.1		2.0	mg/Kg	6010C
Cobalt		5.7	J	10.1	mg/Kg	6010C
Copper		7.2		5.1	mg/Kg	6010C
Lead		4.8		2.0	mg/Kg	6010C
Manganese		251		3.0	mg/Kg	6010C
Nickel		16.5		8.1	mg/Kg	6010C
Vanadium		15.2		10.1	mg/Kg	6010C
Zinc		25.8		6.1	mg/Kg	6010C
Percent Moisture		6.7		1.0	%	Moisture
Percent Solids		93.3		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-9	**SB-17(1-3')**					
2-Methylnaphthalene		0.018	J	0.36	mg/Kg	8270D
Benzo[a]pyrene		0.030	J	0.036	mg/Kg	8270D
Benzo[b]fluoranthene		0.048		0.036	mg/Kg	8270D
Benzo[g,h,i]perylene		0.030	J	0.36	mg/Kg	8270D
Chrysene		0.042	J	0.36	mg/Kg	8270D
Dibenz(a,h)anthracene		0.041		0.036	mg/Kg	8270D
Fluoranthene		0.042	J	0.36	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.066		0.036	mg/Kg	8270D
Isophorone		4.5		0.15	mg/Kg	8270D
Naphthalene		0.016	J	0.36	mg/Kg	8270D
Phenanthrene		0.034	J	0.36	mg/Kg	8270D
Pyrene		0.039	J	0.36	mg/Kg	8270D
4,4'-DDE		0.0021	J	0.0074	mg/Kg	8081B
Arsenic		3.7		3.2	mg/Kg	6010C
Barium		78.1		42.4	mg/Kg	6010C
Beryllium		0.41	J	0.42	mg/Kg	6010C
Chromium		11.4		2.1	mg/Kg	6010C
Cobalt		5.1	J	10.6	mg/Kg	6010C
Copper		20.7		5.3	mg/Kg	6010C
Lead		33.8		2.1	mg/Kg	6010C
Manganese		195		3.2	mg/Kg	6010C
Nickel		15.0		8.5	mg/Kg	6010C
Vanadium		20.9		10.6	mg/Kg	6010C
Zinc		147		6.4	mg/Kg	6010C
Mercury		0.038		0.018	mg/Kg	7471B
Percent Moisture		9.2		1.0	%	Moisture
Percent Solids		90.8		1.0	%	Moisture
460-138369-10	**SB-17(10-12')**					
Methylene Chloride		0.00071	J B	0.0010	mg/Kg	8260C
Arsenic		2.0	J	3.2	mg/Kg	6010C
Barium		16.8	J	42.2	mg/Kg	6010C
Beryllium		0.27	J	0.42	mg/Kg	6010C
Chromium		15.5		2.1	mg/Kg	6010C
Cobalt		9.2	J	10.6	mg/Kg	6010C
Copper		6.5		5.3	mg/Kg	6010C
Lead		2.6		2.1	mg/Kg	6010C
Manganese		205		3.2	mg/Kg	6010C
Nickel		58.9		8.4	mg/Kg	6010C
Vanadium		11.6		10.6	mg/Kg	6010C
Zinc		20.3		6.3	mg/Kg	6010C
Percent Moisture		7.1		1.0	%	Moisture
Percent Solids		92.9		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138369-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138369-11	**SB-1WC**					
#2 Diesel Fuel		26		7.3	mg/Kg	8015D
C10-C44		110		9.5	mg/Kg	8015D
Percent Moisture		8.3		1.0	%	Moisture
Percent Solids		91.7		1.0	%	Moisture
460-138369-12	**SB-15WC**					
#2 Diesel Fuel		14		7.8	mg/Kg	8015D
C10-C44		32		10	mg/Kg	8015D
Percent Moisture		13.8		1.0	%	Moisture
Percent Solids		86.2		1.0	%	Moisture
460-138369-13	**SB-17WC**					
#2 Diesel Fuel		40		7.4	mg/Kg	8015D
C10-C44		260		9.6	mg/Kg	8015D
Cyanide, Total		0.69	J	1.1	mg/Kg	9012B
Percent Moisture		9.6		1.0	%	Moisture
Percent Solids		90.4		1.0	%	Moisture
460-138369-14	**GW-15**					
Acetone		7.9		5.0	ug/L	8260C
Caprolactam		4.5	J	10	ug/L	8270D
Di-n-butyl phthalate		1.3	J	10	ug/L	8270D
Arsenic		8.9		2.0	ug/L	6020A
Barium		45.6		4.0	ug/L	6020A
Beryllium		0.85		0.80	ug/L	6020A
Chromium		16.4		4.0	ug/L	6020A
Cobalt		6.6		4.0	ug/L	6020A
Copper		14.6		4.0	ug/L	6020A
Lead		7.8		1.2	ug/L	6020A
Manganese		674		8.0	ug/L	6020A
Nickel		19.3		4.0	ug/L	6020A
Silver		38.1		2.0	ug/L	6020A
Vanadium		14.9		4.0	ug/L	6020A
Zinc		61.4		16.0	ug/L	6020A
460-138369-15TB	**TRIP BLANK**					
Acetone		19		5.0	ug/L	8260C
Methylene Chloride		0.54	J	1.0	ug/L	8260C

METHOD SUMMARY

Client: AKRF Inc Job Number: 460-138369-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Closed System Purge and Trap	TAL EDI		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270D	
Microwave Extraction	TAL EDI		SW846 3546
Gasoline Range Organics (GRO) (GC)	TAL EDI	SW846 8015D	
Closed System Purge and Trap	TAL EDI		SW846 5035
Diesel Range Organics (DRO) (GC)	TAL EDI	SW846 8015D	
Microwave Extraction	TAL EDI		SW846 3546
Organochlorine Pesticides (GC)	TAL EDI	SW846 8081B	
Microwave Extraction	TAL EDI		SW846 3546
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082A	
Microwave Extraction	TAL EDI		SW846 3546
Herbicides (GC)	TAL EDI	SW846 8151A	
Extraction (Herbicides)	TAL EDI		SW846 8151A
Metals (ICP)	TAL EDI	SW846 6010C	
Preparation, Metals	TAL EDI		SW846 3050B
Mercury (CVAA)	TAL EDI	SW846 7471B	
Preparation, Mercury	TAL EDI		SW846 7471B
Chromium, Hexavalent	TAL EDI	SW846 7196A	
Alkaline Digestion (Chromium, Hexavalent)	TAL EDI		SW846 3060A
Percent Moisture	TAL EDI	EPA Moisture	
Cyanide, Total andor Amenable	TAL BUF	SW846 9012B	
Cyanide, Total and/or Amenable, Distillation	TAL BUF		SW846 9012B
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Purge and Trap	TAL EDI		SW846 5030C
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270D	
Liquid-Liquid Extraction (Separatory Funnel)	TAL EDI		SW846 3510C
Metals (ICP/MS)	TAL EDI	SW846 6020A	
Preparation, Total Metals	TAL EDI		SW846 3010A
Mercury (CVAA)	TAL EDI	SW846 7470A	
Preparation, Mercury	TAL EDI		SW846 7470A

Lab References:

TAL BUF = TestAmerica Buffalo

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: AKRF Inc

Job Number: 460-138369-1

Method	Analyst	Analyst ID
SW846 8260C	Boykin, Kenneth	KLB
SW846 8260C	Desai, Saurab	SZD
SW846 8260C	Martinez, Eddie	EMM
SW846 8260C	Tupayachi, Audberto	AAT
SW846 8270D	Acierno, Mark	MVA
SW846 8270D	Hamzi, Yahia A	YAH
SW846 8270D	Manlangit, Ferdie	FAM
SW846 8015D	Martinez, Eddie	EMM
SW846 8015D	Sarmiento, Daniel	DAS
SW846 8015D	Kouadio, Sylvia O	SOK
SW846 8081B	Kapoor, Sita	SAK
SW846 8082A	Patel, Jignesh	JHP
SW846 8151A	Kapoor, Sita	SAK
SW846 6010C	Huang, Yixin	YZH
SW846 6020A	Patel, Purva H	PHP
SW846 7470A	Sheikh, Razia B	RBS
SW846 7471B	Staib, Thomas	TJS
SW846 7196A	Leye, Mamadou	MAL
SW846 9012B	Leader, Michael D	MDL
EPA Moisture	Callahan, Rory W	RWC

SAMPLE SUMMARY

Client: AKRF Inc

Job Number: 460-138369-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-138369-1	SB-1(1-3')	Solid	08/01/2017 0855	08/02/2017 1300
460-138369-2	SB-1(10-12')	Solid	08/01/2017 0910	08/02/2017 1300
460-138369-3	SB-14(1-3')	Solid	08/01/2017 1020	08/02/2017 1300
460-138369-4	SB-14(10-12')	Solid	08/01/2017 1030	08/02/2017 1300
460-138369-5	SB-15(1-3')	Solid	08/01/2017 1055	08/02/2017 1300
460-138369-6	SB-15(10-12')	Solid	08/01/2017 1110	08/02/2017 1300
460-138369-7	SB-16(1-3')	Solid	08/01/2017 1200	08/02/2017 1300
460-138369-8	SB-16(10-12')	Solid	08/01/2017 1235	08/02/2017 1300
460-138369-9	SB-17(1-3')	Solid	08/01/2017 1345	08/02/2017 1300
460-138369-10	SB-17(10-12')	Solid	08/01/2017 1350	08/02/2017 1300
460-138369-11	SB-1WC	Solid	08/01/2017 0900	08/02/2017 1300
460-138369-12	SB-15WC	Solid	08/01/2017 1100	08/02/2017 1300
460-138369-13	SB-17WC	Solid	08/01/2017 1340	08/02/2017 1300
460-138369-14	GW-15	Water	08/01/2017 1435	08/02/2017 1300
460-138369-15TB	Trip Blank	Water	08/01/2017 0000	08/02/2017 1300

SAMPLE RESULTS

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1 | Date Sampled: 08/01/2017 0855
Client Matrix: Solid | % Moisture: 4.7 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	N57423.D
Dilution:	1.0			Initial Weight/Volume:	5.11 g
Analysis Date:	08/08/2017 1305			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2241				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000094	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000096	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00047	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00043	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.021	U	0.0094	0.021
2-Butanone (MEK)		0.0051	U	0.0011	0.0051
2-Hexanone		0.0051	U	0.00080	0.0051
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0051	U	0.00068	0.0051
Acetone		0.0051	U	0.0039	0.0051
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00044	0.0010
Bromomethane		0.0010	U	0.00049	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00054	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00045	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0051	U	0.0044	0.0051
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.00075	J B	0.00017	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00018	0.0010

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1 | Date Sampled: 08/01/2017 0855
Client Matrix: Solid | % Moisture: 4.7 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	N57423.D
Dilution:	1.0			Initial Weight/Volume:	5.11 g
Analysis Date:	08/08/2017 1305			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2241				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00020	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000098	0.0010
sec-Butylbenzene		0.0010	U	0.000090	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.0010	U	0.00064	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00056	0.0010
Xylenes, Total		0.0021	U	0.00026	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		78 - 135
4-Bromofluorobenzene	94		67 - 126
Dibromofluoromethane (Surr)	100		61 - 149
Toluene-d8 (Surr)	97		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	N57423.D
Dilution:	1.0			Initial Weight/Volume:	5.11 g
Analysis Date:	08/08/2017 1305			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2241				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.16	0.0067	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2 | Date Sampled: 08/01/2017 0910
Client Matrix: Solid | % Moisture: 7.7 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71671.D
Dilution:	1.0			Initial Weight/Volume:	5.28 g
Analysis Date:	08/07/2017 0757			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2029				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000094	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000096	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00047	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00043	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.021	U	0.0094	0.021
2-Butanone (MEK)		0.0051	U	0.0011	0.0051
2-Hexanone		0.0051	U	0.00080	0.0051
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0051	U	0.00068	0.0051
Acetone		0.0051	U	0.0039	0.0051
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00044	0.0010
Bromomethane		0.0010	U	0.00049	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00054	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00045	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0051	U *	0.0044	0.0051
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.0010	U	0.00017	0.0010
m-Xylene & p-Xylene		0.00021	J	0.00018	0.0010

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2 Date Sampled: 08/01/2017 0910
Client Matrix: Solid % Moisture: 7.7 Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71671.D
Dilution:	1.0			Initial Weight/Volume:	5.28 g
Analysis Date:	08/07/2017 0757			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2029				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000097	0.0010
sec-Butylbenzene		0.0010	U	0.000090	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.0010	U	0.00064	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00056	0.0010
Xylenes, Total		0.0021	U	0.00026	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		78 - 135
4-Bromofluorobenzene	114		67 - 126
Dibromofluoromethane (Surr)	108		61 - 149
Toluene-d8 (Surr)	109		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71671.D
Dilution:	1.0			Initial Weight/Volume:	5.28 g
Analysis Date:	08/07/2017 0757			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2029				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.73	0.0070	J N

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 | Date Sampled: 08/01/2017 1020
Client Matrix: Solid | % Moisture: 11.9 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71672.D
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	08/07/2017 0820			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2030				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00033	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00022	0.0011
1,1-Dichloroethene		0.0011	U	0.00024	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00050	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00032	0.0011
1,2-Dichloropropane		0.0011	U	0.00046	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00012	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.0099	0.022
2-Butanone (MEK)		0.0054	U	0.0012	0.0054
2-Hexanone		0.0054	U	0.00084	0.0054
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0054	U	0.00072	0.0054
Acetone		0.0054	U	0.0041	0.0054
Benzene		0.0011	U	0.00028	0.0011
Bromoform		0.0011	U	0.00046	0.0011
Bromomethane		0.0011	U	0.00051	0.0011
Carbon disulfide		0.0011	U	0.00029	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00030	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00057	0.0011
Chloroform		0.0011	U	0.00035	0.0011
Chloromethane		0.0011	U	0.00047	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00016	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Cyclohexane		0.0011	U	0.00024	0.0011
Dichlorobromomethane		0.0011	U	0.00028	0.0011
Dichlorodifluoromethane		0.0011	U	0.00037	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00019	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0054	U *	0.0047	0.0054
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00017	0.0011
Methylene Chloride		0.00066	J	0.00018	0.0011
m-Xylene & p-Xylene		0.00021	J	0.00019	0.0011

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 Date Sampled: 08/01/2017 1020
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71672.D
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	08/07/2017 0820			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2030				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00015	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000095	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00013	0.0011
Tetrachloroethene		0.0011	U	0.00015	0.0011
Toluene		0.0011	U	0.00068	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00027	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00044	0.0011
Vinyl chloride		0.0011	U	0.00059	0.0011
Xylenes, Total		0.0022	U	0.00027	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		78 - 135
4-Bromofluorobenzene	104		67 - 126
Dibromofluoromethane (Surr)	103		61 - 149
Toluene-d8 (Surr)	103		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71672.D
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	08/07/2017 0820			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2030				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.74	0.0069	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4 | Date Sampled: 08/01/2017 1030
Client Matrix: Solid | % Moisture: 21.9 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71667.D
Dilution:	1.0			Initial Weight/Volume:	5.52 g
Analysis Date:	08/07/2017 0622			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2242				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0012	U	0.00027	0.0012
1,1,2,2-Tetrachloroethane		0.0012	U	0.00025	0.0012
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0012	U	0.00035	0.0012
1,1,2-Trichloroethane		0.0012	U	0.00021	0.0012
1,1-Dichloroethane		0.0012	U	0.00024	0.0012
1,1-Dichloroethene		0.0012	U	0.00026	0.0012
1,2,3-Trichlorobenzene		0.0012	U	0.00021	0.0012
1,2,4-Trichlorobenzene		0.0012	U	0.00011	0.0012
1,2,4-Trimethylbenzene		0.0012	U	0.00011	0.0012
1,2-Dibromo-3-Chloropropane		0.0012	U	0.00053	0.0012
1,2-Dichlorobenzene		0.0012	U	0.00017	0.0012
1,2-Dichloroethane		0.0012	U	0.00034	0.0012
1,2-Dichloropropane		0.0012	U	0.00049	0.0012
1,3,5-Trimethylbenzene		0.0012	U	0.00013	0.0012
1,3-Dichlorobenzene		0.0012	U	0.00018	0.0012
1,4-Dichlorobenzene		0.0012	U	0.00012	0.0012
1,4-Dioxane		0.023	U	0.011	0.023
2-Butanone (MEK)		0.0058	U	0.0013	0.0058
2-Hexanone		0.0058	U	0.00090	0.0058
4-Isopropyltoluene		0.0012	U	0.00011	0.0012
4-Methyl-2-pentanone (MIBK)		0.0058	U	0.00077	0.0058
Acetone		0.0078		0.0044	0.0058
Benzene		0.0012	U	0.00030	0.0012
Bromoform		0.0012	U	0.00049	0.0012
Bromomethane		0.0012	U	0.00055	0.0012
Carbon disulfide		0.0012	U	0.00031	0.0012
Carbon tetrachloride		0.0012	U	0.00021	0.0012
Chlorobenzene		0.0012	U	0.00021	0.0012
Chlorobromomethane		0.0012	U	0.00033	0.0012
Chlorodibromomethane		0.0012	U	0.00022	0.0012
Chloroethane		0.0012	U	0.00061	0.0012
Chloroform		0.0012	U	0.00037	0.0012
Chloromethane		0.0012	U	0.00050	0.0012
cis-1,2-Dichloroethene		0.0012	U	0.00018	0.0012
cis-1,3-Dichloropropene		0.0012	U	0.00032	0.0012
Cyclohexane		0.0012	U	0.00026	0.0012
Dichlorobromomethane		0.0012	U	0.00030	0.0012
Dichlorodifluoromethane		0.0012	U	0.00039	0.0012
Ethylbenzene		0.0012	U	0.00023	0.0012
Ethylene Dibromide		0.0012	U	0.00021	0.0012
Isopropylbenzene		0.0012	U	0.00015	0.0012
Methyl acetate		0.0058	U *	0.0050	0.0058
Methyl tert-butyl ether		0.0012	U	0.00014	0.0012
Methylcyclohexane		0.0012	U	0.00019	0.0012
Methylene Chloride		0.00056	J B	0.00019	0.0012
m-Xylene & p-Xylene		0.0012	U	0.00020	0.0012

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4 Date Sampled: 08/01/2017 1030
Client Matrix: Solid % Moisture: 21.9 Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71667.D
Dilution:	1.0			Initial Weight/Volume:	5.52 g
Analysis Date:	08/07/2017 0622			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2242				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0012	U	0.00022	0.0012
n-Butylbenzene		0.0012	U	0.00016	0.0012
N-Propylbenzene		0.0012	U	0.00020	0.0012
o-Xylene		0.0012	U	0.00011	0.0012
sec-Butylbenzene		0.0012	U	0.00010	0.0012
Styrene		0.0012	U	0.00014	0.0012
tert-Butylbenzene		0.0012	U	0.00014	0.0012
Tetrachloroethene		0.0012	U	0.00017	0.0012
Toluene		0.0012	U	0.00072	0.0012
trans-1,2-Dichloroethene		0.0012	U	0.00029	0.0012
trans-1,3-Dichloropropene		0.0012	U	0.00031	0.0012
Trichloroethene		0.0012	U	0.00017	0.0012
Trichlorofluoromethane		0.0012	U	0.00047	0.0012
Vinyl chloride		0.0012	U	0.00063	0.0012
Xylenes, Total		0.0023	U	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		78 - 135
4-Bromofluorobenzene	113		67 - 126
Dibromofluoromethane (Surr)	106		61 - 149
Toluene-d8 (Surr)	106		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71667.D
Dilution:	1.0			Initial Weight/Volume:	5.52 g
Analysis Date:	08/07/2017 0622			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2242				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.72	0.0061	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5 | Date Sampled: 08/01/2017 1055
Client Matrix: Solid | % Moisture: 11.1 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71668.D
Dilution:	1.0			Initial Weight/Volume:	5.19 g
Analysis Date:	08/07/2017 0646			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2242				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00033	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00022	0.0011
1,1-Dichloroethene		0.0011	U	0.00024	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00020	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00010	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00010	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00050	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00032	0.0011
1,2-Dichloropropane		0.0011	U	0.00046	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00012	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.022	U	0.010	0.022
2-Butanone (MEK)		0.0054	U	0.0012	0.0054
2-Hexanone		0.0054	U	0.00085	0.0054
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0054	U	0.00072	0.0054
Acetone		0.011		0.0041	0.0054
Benzene		0.0011	U	0.00028	0.0011
Bromoform		0.0011	U	0.00046	0.0011
Bromomethane		0.0011	U	0.00051	0.0011
Carbon disulfide		0.0011	U	0.00029	0.0011
Carbon tetrachloride		0.0011	U	0.00020	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00030	0.0011
Chlorodibromomethane		0.0011	U	0.00021	0.0011
Chloroethane		0.0011	U	0.00057	0.0011
Chloroform		0.0011	U	0.00035	0.0011
Chloromethane		0.0011	U	0.00047	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00016	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Cyclohexane		0.0011	U	0.00024	0.0011
Dichlorobromomethane		0.0011	U	0.00028	0.0011
Dichlorodifluoromethane		0.0011	U	0.00037	0.0011
Ethylbenzene		0.0011	U	0.00022	0.0011
Ethylene Dibromide		0.0011	U	0.00020	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0054	U *	0.0047	0.0054
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00017	0.0011
Methylene Chloride		0.00044	J B	0.00018	0.0011
m-Xylene & p-Xylene		0.00024	J B	0.00019	0.0011

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5 Date Sampled: 08/01/2017 1055
Client Matrix: Solid % Moisture: 11.1 Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71668.D
Dilution:	1.0			Initial Weight/Volume:	5.19 g
Analysis Date:	08/07/2017 0646			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2242				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00021	0.0011
n-Butylbenzene		0.0011	U	0.00015	0.0011
N-Propylbenzene		0.0011	U	0.00019	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000095	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00013	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00068	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00027	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00044	0.0011
Vinyl chloride		0.0011	U	0.00059	0.0011
Xylenes, Total		0.0022	U	0.00027	0.0022

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		78 - 135
4-Bromofluorobenzene	108		67 - 126
Dibromofluoromethane (Surr)	103		61 - 149
Toluene-d8 (Surr)	106		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71668.D
Dilution:	1.0			Initial Weight/Volume:	5.19 g
Analysis Date:	08/07/2017 0646			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2242				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.72	0.0079	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6 | Date Sampled: 08/01/2017 1110
Client Matrix: Solid | % Moisture: 4.2 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71673.D
Dilution:	1.0			Initial Weight/Volume:	5.76 g
Analysis Date:	08/07/2017 0844			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2031				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00091	U	0.00021	0.00091
1,1,2,2-Tetrachloroethane		0.00091	U	0.00019	0.00091
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00091	U	0.00027	0.00091
1,1,2-Trichloroethane		0.00091	U	0.00016	0.00091
1,1-Dichloroethane		0.00091	U	0.00019	0.00091
1,1-Dichloroethene		0.00091	U	0.00020	0.00091
1,2,3-Trichlorobenzene		0.00091	U	0.00016	0.00091
1,2,4-Trichlorobenzene		0.00091	U	0.000083	0.00091
1,2,4-Trimethylbenzene		0.00091	U	0.000085	0.00091
1,2-Dibromo-3-Chloropropane		0.00091	U	0.00042	0.00091
1,2-Dichlorobenzene		0.00091	U	0.00013	0.00091
1,2-Dichloroethane		0.00091	U	0.00027	0.00091
1,2-Dichloropropane		0.00091	U	0.00038	0.00091
1,3,5-Trimethylbenzene		0.00091	U	0.00010	0.00091
1,3-Dichlorobenzene		0.00091	U	0.00014	0.00091
1,4-Dichlorobenzene		0.00091	U	0.000091	0.00091
1,4-Dioxane		0.018	U	0.0083	0.018
2-Butanone (MEK)		0.0045	U	0.0010	0.0045
2-Hexanone		0.0045	U	0.00071	0.0045
4-Isopropyltoluene		0.00091	U	0.000089	0.00091
4-Methyl-2-pentanone (MIBK)		0.0045	U	0.00060	0.0045
Acetone		0.0045	U	0.0034	0.0045
Benzene		0.00091	U	0.00023	0.00091
Bromoform		0.00091	U	0.00039	0.00091
Bromomethane		0.00091	U	0.00043	0.00091
Carbon disulfide		0.00091	U	0.00024	0.00091
Carbon tetrachloride		0.00091	U	0.00016	0.00091
Chlorobenzene		0.00091	U	0.00016	0.00091
Chlorobromomethane		0.00091	U	0.00025	0.00091
Chlorodibromomethane		0.00091	U	0.00018	0.00091
Chloroethane		0.00091	U	0.00047	0.00091
Chloroform		0.00091	U	0.00029	0.00091
Chloromethane		0.00091	U	0.00039	0.00091
cis-1,2-Dichloroethene		0.00091	U	0.00014	0.00091
cis-1,3-Dichloropropene		0.00091	U	0.00025	0.00091
Cyclohexane		0.00091	U	0.00020	0.00091
Dichlorobromomethane		0.00091	U	0.00023	0.00091
Dichlorodifluoromethane		0.00091	U	0.00031	0.00091
Ethylbenzene		0.00091	U	0.00018	0.00091
Ethylene Dibromide		0.00091	U	0.00016	0.00091
Isopropylbenzene		0.00091	U	0.00011	0.00091
Methyl acetate		0.0045	U *	0.0039	0.0045
Methyl tert-butyl ether		0.00091	U	0.00011	0.00091
Methylcyclohexane		0.00091	U	0.00014	0.00091
Methylene Chloride		0.00070	J	0.00015	0.00091
m-Xylene & p-Xylene		0.00091	U	0.00016	0.00091

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6 Date Sampled: 08/01/2017 1110
Client Matrix: Solid % Moisture: 4.2 Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71673.D
Dilution:	1.0			Initial Weight/Volume:	5.76 g
Analysis Date:	08/07/2017 0844			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2031				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00091	U	0.00017	0.00091
n-Butylbenzene		0.00091	U	0.00013	0.00091
N-Propylbenzene		0.00091	U	0.00016	0.00091
o-Xylene		0.00091	U	0.000086	0.00091
sec-Butylbenzene		0.00091	U	0.000080	0.00091
Styrene		0.00091	U	0.00011	0.00091
tert-Butylbenzene		0.00091	U	0.00011	0.00091
Tetrachloroethene		0.00091	U	0.00013	0.00091
Toluene		0.00091	U	0.00057	0.00091
trans-1,2-Dichloroethene		0.00091	U	0.00022	0.00091
trans-1,3-Dichloropropene		0.00091	U	0.00024	0.00091
Trichloroethene		0.00091	U	0.00013	0.00091
Trichlorofluoromethane		0.00091	U	0.00037	0.00091
Vinyl chloride		0.00091	U	0.00049	0.00091
Xylenes, Total		0.0018	U	0.00023	0.0018

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		78 - 135
4-Bromofluorobenzene	117		67 - 126
Dibromofluoromethane (Surr)	109		61 - 149
Toluene-d8 (Surr)	111		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	K71673.D
Dilution:	1.0			Initial Weight/Volume:	5.76 g
Analysis Date:	08/07/2017 0844			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2031				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.74	0.0063	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7 | Date Sampled: 08/01/2017 1200
Client Matrix: Solid | % Moisture: 11.7 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	N57390.D
Dilution:	1.0			Initial Weight/Volume:	5.37 g
Analysis Date:	08/07/2017 2351			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2033				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00025	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00023	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00032	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00019	0.0011
1,1-Dichloroethane		0.0011	U	0.00022	0.0011
1,1-Dichloroethene		0.0011	U	0.00024	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00019	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.000097	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.000099	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00048	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00015	0.0011
1,2-Dichloroethane		0.0011	U	0.00031	0.0011
1,2-Dichloropropane		0.0011	U	0.00045	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00012	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00017	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.021	U	0.0097	0.021
2-Butanone (MEK)		0.0053	U	0.0012	0.0053
2-Hexanone		0.0053	U	0.00082	0.0053
4-Isopropyltoluene		0.0011	U	0.00010	0.0011
4-Methyl-2-pentanone (MIBK)		0.0053	U	0.00070	0.0053
Acetone		0.0053	U	0.0040	0.0053
Benzene		0.0011	U	0.00027	0.0011
Bromoform		0.0011	U	0.00045	0.0011
Bromomethane		0.0011	U	0.00050	0.0011
Carbon disulfide		0.0011	U	0.00028	0.0011
Carbon tetrachloride		0.0011	U	0.00019	0.0011
Chlorobenzene		0.0011	U	0.00019	0.0011
Chlorobromomethane		0.0011	U	0.00030	0.0011
Chlorodibromomethane		0.0011	U	0.00020	0.0011
Chloroethane		0.0011	U	0.00055	0.0011
Chloroform		0.0011	U	0.00034	0.0011
Chloromethane		0.0011	U	0.00046	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00016	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00029	0.0011
Cyclohexane		0.0011	U	0.00023	0.0011
Dichlorobromomethane		0.0011	U	0.00027	0.0011
Dichlorodifluoromethane		0.0011	U	0.00036	0.0011
Ethylbenzene		0.0011	U	0.00021	0.0011
Ethylene Dibromide		0.0011	U	0.00019	0.0011
Isopropylbenzene		0.0011	U	0.00013	0.0011
Methyl acetate		0.0053	U	0.0045	0.0053
Methyl tert-butyl ether		0.0011	U	0.00013	0.0011
Methylcyclohexane		0.0011	U	0.00017	0.0011
Methylene Chloride		0.00051	J	0.00017	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00018	0.0011

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7 | Date Sampled: 08/01/2017 1200
Client Matrix: Solid | % Moisture: 11.7 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	N57390.D
Dilution:	1.0			Initial Weight/Volume:	5.37 g
Analysis Date:	08/07/2017 2351			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2033				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00020	0.0011
n-Butylbenzene		0.0011	U	0.00015	0.0011
N-Propylbenzene		0.0011	U	0.00018	0.0011
o-Xylene		0.0011	U	0.00010	0.0011
sec-Butylbenzene		0.0011	U	0.000093	0.0011
Styrene		0.0011	U	0.00013	0.0011
tert-Butylbenzene		0.0011	U	0.00013	0.0011
Tetrachloroethene		0.0011	U	0.00015	0.0011
Toluene		0.0011	U	0.00066	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00026	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00028	0.0011
Trichloroethene		0.0011	U	0.00015	0.0011
Trichlorofluoromethane		0.0011	U	0.00043	0.0011
Vinyl chloride		0.0011	U	0.00058	0.0011
Xylenes, Total		0.0021	U	0.00027	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		78 - 135
4-Bromofluorobenzene	100		67 - 126
Dibromofluoromethane (Surr)	101		61 - 149
Toluene-d8 (Surr)	98		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	N57390.D
Dilution:	1.0			Initial Weight/Volume:	5.37 g
Analysis Date:	08/07/2017 2351			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2033				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.15	0.0063	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: **SB-16(10-12')**

Lab Sample ID: 460-138369-8 | Date Sampled: 08/01/2017 1235
Client Matrix: Solid | % Moisture: 6.7 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71669.D
Dilution:	1.0			Initial Weight/Volume:	5.20 g
Analysis Date:	08/07/2017 0709			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2243				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000095	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000097	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00047	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00031	0.0010
1,2-Dichloropropane		0.0010	U	0.00044	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.021	U	0.0095	0.021
2-Butanone (MEK)		0.0052	U	0.0011	0.0052
2-Hexanone		0.0052	U	0.00080	0.0052
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0052	U	0.00068	0.0052
Acetone		0.0052	U	0.0039	0.0052
Benzene		0.0010	U	0.00027	0.0010
Bromoform		0.0010	U	0.00044	0.0010
Bromomethane		0.0010	U	0.00049	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00054	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00045	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00021	0.0010
Ethylene Dibromide		0.0010	U	0.00019	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0052	U *	0.0044	0.0052
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.00075	J B	0.00017	0.0010
m-Xylene & p-Xylene		0.00043	J B	0.00018	0.0010

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8 Date Sampled: 08/01/2017 1235
Client Matrix: Solid % Moisture: 6.7 Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71669.D
Dilution:	1.0			Initial Weight/Volume:	5.20 g
Analysis Date:	08/07/2017 0709			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2243				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00020	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000098	0.0010
sec-Butylbenzene		0.0010	U	0.000091	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.0010	U	0.00064	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00056	0.0010
Xylenes, Total		0.00043	J	0.00026	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		78 - 135
4-Bromofluorobenzene	115		67 - 126
Dibromofluoromethane (Surr)	109		61 - 149
Toluene-d8 (Surr)	109		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8
Client Matrix: Solid

% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	K71669.D
Dilution:	1.0			Initial Weight/Volume:	5.20 g
Analysis Date:	08/07/2017 0709			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2243				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.74	0.0070	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: **SB-17(1-3')**

Lab Sample ID: 460-138369-9 | Date Sampled: 08/01/2017 1345
Client Matrix: Solid | % Moisture: 9.2 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	N57389.D
Dilution:	1.0			Initial Weight/Volume:	4.71 g
Analysis Date:	08/07/2017 2328			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2034				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0012	U	0.00027	0.0012
1,1,2,2-Tetrachloroethane		0.0012	U	0.00025	0.0012
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0012	U	0.00035	0.0012
1,1,2-Trichloroethane		0.0012	U	0.00021	0.0012
1,1-Dichloroethane		0.0012	U	0.00024	0.0012
1,1-Dichloroethene		0.0012	U	0.00026	0.0012
1,2,3-Trichlorobenzene		0.0012	U	0.00021	0.0012
1,2,4-Trichlorobenzene		0.0012	U	0.00011	0.0012
1,2,4-Trimethylbenzene		0.0012	U	0.00011	0.0012
1,2-Dibromo-3-Chloropropane		0.0012	U	0.00054	0.0012
1,2-Dichlorobenzene		0.0012	U	0.00017	0.0012
1,2-Dichloroethane		0.0012	U	0.00035	0.0012
1,2-Dichloropropane		0.0012	U	0.00049	0.0012
1,3,5-Trimethylbenzene		0.0012	U	0.00013	0.0012
1,3-Dichlorobenzene		0.0012	U	0.00019	0.0012
1,4-Dichlorobenzene		0.0012	U	0.00012	0.0012
1,4-Dioxane		0.023	U	0.011	0.023
2-Butanone (MEK)		0.0058	U	0.0013	0.0058
2-Hexanone		0.0058	U	0.00091	0.0058
4-Isopropyltoluene		0.0012	U	0.00011	0.0012
4-Methyl-2-pentanone (MIBK)		0.0058	U	0.00078	0.0058
Acetone		0.0058	U	0.0044	0.0058
Benzene		0.0012	U	0.00030	0.0012
Bromoform		0.0012	U	0.00050	0.0012
Bromomethane		0.0012	U	0.00055	0.0012
Carbon disulfide		0.0012	U	0.00031	0.0012
Carbon tetrachloride		0.0012	U	0.00021	0.0012
Chlorobenzene		0.0012	U	0.00021	0.0012
Chlorobromomethane		0.0012	U	0.00033	0.0012
Chlorodibromomethane		0.0012	U	0.00023	0.0012
Chloroethane		0.0012	U	0.00061	0.0012
Chloroform		0.0012	U	0.00037	0.0012
Chloromethane		0.0012	U	0.00051	0.0012
cis-1,2-Dichloroethene		0.0012	U	0.00018	0.0012
cis-1,3-Dichloropropene		0.0012	U	0.00032	0.0012
Cyclohexane		0.0012	U	0.00026	0.0012
Dichlorobromomethane		0.0012	U	0.00030	0.0012
Dichlorodifluoromethane		0.0012	U	0.00040	0.0012
Ethylbenzene		0.0012	U	0.00023	0.0012
Ethylene Dibromide		0.0012	U	0.00021	0.0012
Isopropylbenzene		0.0012	U	0.00015	0.0012
Methyl acetate		0.0058	U	0.0050	0.0058
Methyl tert-butyl ether		0.0012	U	0.00015	0.0012
Methylcyclohexane		0.0012	U	0.00019	0.0012
Methylene Chloride		0.0012	U	0.00019	0.0012
m-Xylene & p-Xylene		0.0012	U	0.00020	0.0012

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9 | Date Sampled: 08/01/2017 1345
Client Matrix: Solid | % Moisture: 9.2 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	N57389.D
Dilution:	1.0			Initial Weight/Volume:	4.71 g
Analysis Date:	08/07/2017 2328			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2034				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0012	U	0.00022	0.0012
n-Butylbenzene		0.0012	U	0.00017	0.0012
N-Propylbenzene		0.0012	U	0.00020	0.0012
o-Xylene		0.0012	U	0.00011	0.0012
sec-Butylbenzene		0.0012	U	0.00010	0.0012
Styrene		0.0012	U	0.00014	0.0012
tert-Butylbenzene		0.0012	U	0.00014	0.0012
Tetrachloroethene		0.0012	U	0.00017	0.0012
Toluene		0.0012	U	0.00073	0.0012
trans-1,2-Dichloroethene		0.0012	U	0.00029	0.0012
trans-1,3-Dichloropropene		0.0012	U	0.00031	0.0012
Trichloroethene		0.0012	U	0.00017	0.0012
Trichlorofluoromethane		0.0012	U	0.00047	0.0012
Vinyl chloride		0.0012	U	0.00064	0.0012
Xylenes, Total		0.0023	U	0.00030	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		78 - 135
4-Bromofluorobenzene	102		67 - 126
Dibromofluoromethane (Surr)	105		61 - 149
Toluene-d8 (Surr)	99		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453597	Lab File ID:	N57389.D
Dilution:	1.0			Initial Weight/Volume:	4.71 g
Analysis Date:	08/07/2017 2328			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2034				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.16	0.0059	J

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: **SB-17(10-12')**

Lab Sample ID: 460-138369-10 | Date Sampled: 08/01/2017 1350
Client Matrix: Solid | % Moisture: 7.1 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	N57388.D
Dilution:	1.0			Initial Weight/Volume:	5.40 g
Analysis Date:	08/07/2017 2306			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2244				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00022	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00014	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00011	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.020	U	0.0092	0.020
2-Butanone (MEK)		0.0050	U	0.0011	0.0050
2-Hexanone		0.0050	U	0.00078	0.0050
4-Isopropyltoluene		0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)		0.0050	U	0.00066	0.0050
Acetone		0.0050	U	0.0038	0.0050
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00042	0.0010
Bromomethane		0.0010	U	0.00047	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U	0.00018	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00028	0.0010
Chlorodibromomethane		0.0010	U	0.00019	0.0010
Chloroethane		0.0010	U	0.00052	0.0010
Chloroform		0.0010	U	0.00032	0.0010
Chloromethane		0.0010	U	0.00043	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Cyclohexane		0.0010	U	0.00022	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U	0.00034	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0050	U	0.0043	0.0050
Methyl tert-butyl ether		0.0010	U	0.00012	0.0010
Methylcyclohexane		0.0010	U	0.00016	0.0010
Methylene Chloride		0.00071	J B	0.00016	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00017	0.0010

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10 | Date Sampled: 08/01/2017 1350
Client Matrix: Solid | % Moisture: 7.1 | Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	N57388.D
Dilution:	1.0			Initial Weight/Volume:	5.40 g
Analysis Date:	08/07/2017 2306			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2244				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00014	0.0010
N-Propylbenzene		0.0010	U	0.00017	0.0010
o-Xylene		0.0010	U	0.000095	0.0010
sec-Butylbenzene		0.0010	U	0.000088	0.0010
Styrene		0.0010	U	0.00012	0.0010
tert-Butylbenzene		0.0010	U	0.00012	0.0010
Tetrachloroethene		0.0010	U	0.00014	0.0010
Toluene		0.0010	U	0.00062	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00014	0.0010
Trichlorofluoromethane		0.0010	U	0.00040	0.0010
Vinyl chloride		0.0010	U	0.00054	0.0010
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		78 - 135
4-Bromofluorobenzene	99		67 - 126
Dibromofluoromethane (Surr)	99		61 - 149
Toluene-d8 (Surr)	98		73 - 121

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10
Client Matrix: Solid

% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Prep Method:	5035	Prep Batch:	460-453619	Lab File ID:	N57388.D
Dilution:	1.0			Initial Weight/Volume:	5.40 g
Analysis Date:	08/07/2017 2306			Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2244				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.15	0.0068	J

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: GW-15

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J59311.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0957			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0957				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.28	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.19	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.34	1.0
1,1,2-Trichloroethane	1.0	U	0.080	1.0
1,1-Dichloroethane	1.0	U	0.24	1.0
1,1-Dichloroethene	1.0	U	0.34	1.0
1,2,3-Trichlorobenzene	1.0	U	0.35	1.0
1,2,4-Trichlorobenzene	1.0	U	0.27	1.0
1,2,4-Trimethylbenzene	1.0	U	0.23	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.23	1.0
1,2-Dichlorobenzene	1.0	U	0.22	1.0
1,2-Dichloroethane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3,5-Trimethylbenzene	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.33	1.0
1,4-Dichlorobenzene	1.0	U	0.33	1.0
1,4-Dioxane	50	U	8.7	50
2-Butanone (MEK)	5.0	U	2.2	5.0
2-Hexanone	5.0	U	0.72	5.0
4-Isopropyltoluene	1.0	U	0.26	1.0
4-Methyl-2-pentanone (MIBK)	5.0	U	0.63	5.0
Acetone	7.9		1.1	5.0
Benzene	1.0	U	0.090	1.0
Bromoform	1.0	U	0.18	1.0
Bromomethane	1.0	U	0.18	1.0
Carbon disulfide	1.0	U	0.22	1.0
Carbon tetrachloride	1.0	U	0.33	1.0
Chlorobenzene	1.0	U	0.24	1.0
Chlorobromomethane	1.0	U	0.30	1.0
Chlorodibromomethane	1.0	U	0.22	1.0
Chloroethane	1.0	U	0.37	1.0
Chloroform	1.0	U	0.22	1.0
Chloromethane	1.0	U	0.22	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.26	1.0
Dichlorobromomethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.14	1.0
Ethylbenzene	1.0	U	0.30	1.0
Ethylene Dibromide	1.0	U	0.19	1.0
Isopropylbenzene	1.0	U	0.32	1.0
Methyl acetate	5.0	U	0.58	5.0
Methyl tert-butyl ether	1.0	U	0.13	1.0
Methylcyclohexane	1.0	U	0.22	1.0
Methylene Chloride	1.0	U	0.21	1.0
m-Xylene & p-Xylene	1.0	U	0.28	1.0

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: GW-15

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J59311.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0957			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0957				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.26	1.0
n-Butylbenzene	1.0	U	0.27	1.0
N-Propylbenzene	1.0	U	0.29	1.0
o-Xylene	1.0	U	0.32	1.0
sec-Butylbenzene	1.0	U	0.31	1.0
Styrene	1.0	U	0.17	1.0
tert-Butylbenzene	1.0	U	0.28	1.0
Tetrachloroethene	1.0	U	0.12	1.0
Toluene	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.18	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.15	1.0
Vinyl chloride	1.0	U	0.060	1.0
Xylenes, Total	2.0	U	0.28	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		74 - 132
4-Bromofluorobenzene	89		77 - 124
Dibromofluoromethane (Surr)	102		72 - 131
Toluene-d8 (Surr)	100		80 - 120

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **GW-15**

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J59311.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0957			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0957				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **Trip Blank**

Lab Sample ID: 460-138369-15TB
Client Matrix: Water

Date Sampled: 08/01/2017 0000
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J59310.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0931			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0931				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.28	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.19	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.34	1.0
1,1,2-Trichloroethane	1.0	U	0.080	1.0
1,1-Dichloroethane	1.0	U	0.24	1.0
1,1-Dichloroethene	1.0	U	0.34	1.0
1,2,3-Trichlorobenzene	1.0	U	0.35	1.0
1,2,4-Trichlorobenzene	1.0	U	0.27	1.0
1,2,4-Trimethylbenzene	1.0	U	0.23	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.23	1.0
1,2-Dichlorobenzene	1.0	U	0.22	1.0
1,2-Dichloroethane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3,5-Trimethylbenzene	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.33	1.0
1,4-Dichlorobenzene	1.0	U	0.33	1.0
1,4-Dioxane	50	U	8.7	50
2-Butanone (MEK)	5.0	U	2.2	5.0
2-Hexanone	5.0	U	0.72	5.0
4-Isopropyltoluene	1.0	U	0.26	1.0
4-Methyl-2-pentanone (MIBK)	5.0	U	0.63	5.0
Acetone	19		1.1	5.0
Benzene	1.0	U	0.090	1.0
Bromoform	1.0	U	0.18	1.0
Bromomethane	1.0	U	0.18	1.0
Carbon disulfide	1.0	U	0.22	1.0
Carbon tetrachloride	1.0	U	0.33	1.0
Chlorobenzene	1.0	U	0.24	1.0
Chlorobromomethane	1.0	U	0.30	1.0
Chlorodibromomethane	1.0	U	0.22	1.0
Chloroethane	1.0	U	0.37	1.0
Chloroform	1.0	U	0.22	1.0
Chloromethane	1.0	U	0.22	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.26	1.0
Dichlorobromomethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.14	1.0
Ethylbenzene	1.0	U	0.30	1.0
Ethylene Dibromide	1.0	U	0.19	1.0
Isopropylbenzene	1.0	U	0.32	1.0
Methyl acetate	5.0	U	0.58	5.0
Methyl tert-butyl ether	1.0	U	0.13	1.0
Methylcyclohexane	1.0	U	0.22	1.0
Methylene Chloride	0.54	J	0.21	1.0
m-Xylene & p-Xylene	1.0	U	0.28	1.0

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **Trip Blank**

Lab Sample ID: 460-138369-15TB
Client Matrix: Water

Date Sampled: 08/01/2017 0000
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J59310.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0931			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0931				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.26	1.0
n-Butylbenzene	1.0	U	0.27	1.0
N-Propylbenzene	1.0	U	0.29	1.0
o-Xylene	1.0	U	0.32	1.0
sec-Butylbenzene	1.0	U	0.31	1.0
Styrene	1.0	U	0.17	1.0
tert-Butylbenzene	1.0	U	0.28	1.0
Tetrachloroethene	1.0	U	0.12	1.0
Toluene	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.18	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.15	1.0
Vinyl chloride	1.0	U	0.060	1.0
Xylenes, Total	2.0	U	0.28	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		74 - 132
4-Bromofluorobenzene	88		77 - 124
Dibromofluoromethane (Surr)	102		72 - 131
Toluene-d8 (Surr)	101		80 - 120

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **Trip Blank**

Lab Sample ID: 460-138369-15TB
Client Matrix: Water

Date Sampled: 08/01/2017 0000
Date Received: 08/02/2017 1300

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J59310.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0931			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0931				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1 Date Sampled: 08/01/2017 0855
Client Matrix: Solid % Moisture: 4.7 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19538.D
Dilution:	1.0			Initial Weight/Volume:	15.0251 g
Analysis Date:	08/09/2017 0243			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.014	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.034	0.35
2,4,6-Trichlorophenol		0.14	U	0.0098	0.14
2,4-Dichlorophenol		0.14	U	0.0082	0.14
2,4-Dimethylphenol		0.35	U	0.076	0.35
2,4-Dinitrophenol		0.28	U	0.26	0.28
2,4-Dinitrotoluene		0.070	U	0.014	0.070
2,6-Dinitrotoluene		0.070	U	0.018	0.070
2-Chloronaphthalene		0.35	U	0.0079	0.35
2-Chlorophenol		0.35	U	0.0088	0.35
2-Methylnaphthalene		0.35	U	0.0076	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.011	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.039	0.14
3-Nitroaniline		0.35	U	0.010	0.35
4,6-Dinitro-2-methylphenol		0.28	U	0.092	0.28
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0089	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.010	0.35
4-Methylphenol		0.35	U	0.0094	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.70	U	0.17	0.70
Acenaphthene		0.35	U	0.0084	0.35
Acenaphthylene		0.35	U	0.0089	0.35
Acetophenone		0.35	U	0.0075	0.35
Anthracene		0.35	U	0.033	0.35
Atrazine		0.14	U	0.015	0.14
Benzaldehyde		0.35	U	0.026	0.35
Benzo[a]anthracene		0.035	U	0.029	0.035
Benzo[a]pyrene		0.035	U	0.010	0.035
Benzo[b]fluoranthene		0.035	U	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0082	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.025	0.35
Carbazole		0.35	U	0.0086	0.35
Chrysene		0.35	U	0.0094	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19538.D
Dilution:	1.0			Initial Weight/Volume:	15.0251 g
Analysis Date:	08/09/2017 0243			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.010	0.35
Diethyl phthalate		0.35	U	0.0098	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.010	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.35	U	0.010	0.35
Fluorene		0.35	U	0.0075	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.070	U	0.0097	0.070
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.023	0.035
Isophorone		0.14	U	0.0074	0.14
Naphthalene		0.35	U	0.0088	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.031	0.35
Pentachlorophenol		0.28	U	0.042	0.28
Phenanthrene		0.35	U	0.0092	0.35
Phenol		0.35	U	0.011	0.35
Pyrene		0.35	U	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	63		10 - 103
2-Fluorobiphenyl	69		38 - 95
2-Fluorophenol (Surr)	70		25 - 92
Nitrobenzene-d5 (Surr)	73		37 - 94
Phenol-d5 (Surr)	75		32 - 91
Terphenyl-d14 (Surr)	92		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(1-3')**

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19538.D
Dilution:	1.0			Initial Weight/Volume:	15.0251 g
Analysis Date:	08/09/2017 0243			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2 Date Sampled: 08/01/2017 0910
Client Matrix: Solid % Moisture: 7.7 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19605.D
Dilution:	1.0			Initial Weight/Volume:	15.0439 g
Analysis Date:	08/10/2017 0406			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.030	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0084	0.14
2,4-Dimethylphenol		0.36	U	0.079	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.072	U	0.014	0.072
2,6-Dinitrotoluene		0.072	U	0.019	0.072
2-Chloronaphthalene		0.36	U	0.0081	0.36
2-Chlorophenol		0.36	U	0.0091	0.36
2-Methylnaphthalene		0.36	U	0.0079	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.095	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.015	0.36
4-Chloroaniline		0.36	U	0.0092	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0097	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.72	U	0.17	0.72
Acenaphthene		0.36	U	0.0086	0.36
Acenaphthylene		0.36	U	0.0092	0.36
Acetophenone		0.36	U	0.0078	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.36	U	0.027	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.036	U	0.011	0.036
Benzo[b]fluoranthene		0.036	U	0.014	0.036
Benzo[g,h,i]perylene		0.36	U	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0084	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0089	0.36
Chrysene		0.36	U	0.0097	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2 | Date Sampled: 08/01/2017 0910
Client Matrix: Solid | % Moisture: 7.7 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19605.D
Dilution:	1.0			Initial Weight/Volume:	15.0439 g
Analysis Date:	08/10/2017 0406			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.010	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.36	U	0.011	0.36
Fluorene		0.36	U	0.0078	0.36
Hexachlorobenzene		0.036	U	0.014	0.036
Hexachlorobutadiene		0.072	U	0.010	0.072
Hexachlorocyclopentadiene		0.36	U	0.022	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.14	U	0.0077	0.14
Naphthalene		0.36	U	0.0091	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.032	0.36
Pentachlorophenol		0.29	U	0.043	0.29
Phenanthrene		0.36	U	0.0095	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.36	U	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	79		10 - 103
2-Fluorobiphenyl	64		38 - 95
2-Fluorophenol (Surr)	67		25 - 92
Nitrobenzene-d5 (Surr)	70		37 - 94
Phenol-d5 (Surr)	73		32 - 91
Terphenyl-d14 (Surr)	80		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19605.D
Dilution:	1.0			Initial Weight/Volume:	15.0439 g
Analysis Date:	08/10/2017 0406			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 Date Sampled: 08/01/2017 1020
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19540.D
Dilution:	1.0			Initial Weight/Volume:	15.0257 g
Analysis Date:	08/09/2017 0327			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.032	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.028	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0088	0.15
2,4-Dimethylphenol		0.37	U	0.082	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.076	U	0.015	0.076
2,6-Dinitrotoluene		0.076	U	0.020	0.076
2-Chloronaphthalene		0.37	U	0.0085	0.37
2-Chlorophenol		0.37	U	0.0095	0.37
2-Methylnaphthalene		0.37	U	0.0083	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.013	0.37
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.10	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0096	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.76	U	0.18	0.76
Acenaphthene		0.37	U	0.0091	0.37
Acenaphthylene		0.37	U	0.0096	0.37
Acetophenone		0.37	U	0.0082	0.37
Anthracene		0.37	U	0.036	0.37
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.37	U	0.029	0.37
Benzo[a]anthracene		0.037	U	0.031	0.037
Benzo[a]pyrene		0.037	U	0.011	0.037
Benzo[b]fluoranthene		0.037	U	0.015	0.037
Benzo[g,h,i]perylene		0.37	U	0.022	0.37
Benzo[k]fluoranthene		0.037	U	0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.012	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0088	0.037
Bis(2-ethylhexyl) phthalate		0.37	U	0.015	0.37
Butyl benzyl phthalate		0.37	U	0.012	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.37	U	0.0093	0.37
Chrysene		0.37	U	0.010	0.37
Dibenz(a,h)anthracene		0.037	U	0.019	0.037

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 | Date Sampled: 08/01/2017 1020
Client Matrix: Solid | % Moisture: 11.9 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19540.D
Dilution:	1.0			Initial Weight/Volume:	15.0257 g
Analysis Date:	08/09/2017 0327			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.37	U	0.011	0.37
Diethyl phthalate		0.37	U	0.011	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.37	U	0.011	0.37
Fluorene		0.37	U	0.0082	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.076	U	0.011	0.076
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.014	0.037
Indeno[1,2,3-cd]pyrene		0.037	U	0.025	0.037
Isophorone		0.15	U	0.0080	0.15
Naphthalene		0.37	U	0.0095	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.013	0.037
N-Nitrosodiphenylamine		0.37	U	0.034	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		0.37	U	0.010	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.37	U	0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	16		10 - 103
2-Fluorobiphenyl	62		38 - 95
2-Fluorophenol (Surr)	54		25 - 92
Nitrobenzene-d5 (Surr)	67		37 - 94
Phenol-d5 (Surr)	66		32 - 91
Terphenyl-d14 (Surr)	87		24 - 109

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 | Date Sampled: 08/01/2017 1020
Client Matrix: Solid | % Moisture: 11.9 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19540.D
Dilution:	1.0			Initial Weight/Volume:	15.0257 g
Analysis Date:	08/09/2017 0327			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 4**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
107-70-0	2-Pentanone, 4-methoxy-4-methyl-	3.65	0.47	J N
	Unknown	3.69	0.49	J
	Unknown	5.47	0.31	J
	Unknown	5.79	1.1	J

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4 Date Sampled: 08/01/2017 1030
Client Matrix: Solid % Moisture: 21.9 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19607.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/10/2017 0449			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.42	U	0.036	0.42
1,2,4,5-Tetrachlorobenzene		0.42	U	0.031	0.42
2,2'-oxybis[1-chloropropane]		0.42	U	0.017	0.42
2,3,4,6-Tetrachlorophenol		0.42	U	0.040	0.42
2,4,5-Trichlorophenol		0.42	U	0.042	0.42
2,4,6-Trichlorophenol		0.17	U	0.012	0.17
2,4-Dichlorophenol		0.17	U	0.010	0.17
2,4-Dimethylphenol		0.42	U	0.093	0.42
2,4-Dinitrophenol		0.34	U	0.32	0.34
2,4-Dinitrotoluene		0.086	U	0.017	0.086
2,6-Dinitrotoluene		0.086	U	0.022	0.086
2-Chloronaphthalene		0.42	U	0.0096	0.42
2-Chlorophenol		0.42	U	0.011	0.42
2-Methylnaphthalene		0.42	U	0.0093	0.42
2-Methylphenol		0.42	U	0.018	0.42
2-Nitroaniline		0.42	U	0.014	0.42
2-Nitrophenol		0.42	U	0.014	0.42
3,3'-Dichlorobenzidine		0.17	U	0.047	0.17
3-Nitroaniline		0.42	U	0.013	0.42
4,6-Dinitro-2-methylphenol		0.34	U	0.11	0.34
4-Bromophenyl phenyl ether		0.42	U	0.013	0.42
4-Chloro-3-methylphenol		0.42	U	0.018	0.42
4-Chloroaniline		0.42	U	0.011	0.42
4-Chlorophenyl phenyl ether		0.42	U	0.013	0.42
4-Methylphenol		0.42	U	0.011	0.42
4-Nitroaniline		0.42	U	0.016	0.42
4-Nitrophenol		0.86	U	0.20	0.86
Acenaphthene		0.42	U	0.010	0.42
Acenaphthylene		0.42	U	0.011	0.42
Acetophenone		0.42	U	0.0092	0.42
Anthracene		0.42	U	0.040	0.42
Atrazine		0.17	U	0.019	0.17
Benzaldehyde		0.42	U	0.032	0.42
Benzo[a]anthracene		0.035	J	0.035	0.042
Benzo[a]pyrene		0.032	J	0.013	0.042
Benzo[b]fluoranthene		0.055		0.016	0.042
Benzo[g,h,i]perylene		0.42	U	0.024	0.42
Benzo[k]fluoranthene		0.022	J	0.018	0.042
Bis(2-chloroethoxy)methane		0.42	U	0.013	0.42
Bis(2-chloroethyl)ether		0.042	U	0.010	0.042
Bis(2-ethylhexyl) phthalate		0.42	U	0.016	0.42
Butyl benzyl phthalate		0.42	U	0.013	0.42
Caprolactam		0.42	U	0.030	0.42
Carbazole		0.42	U	0.010	0.42
Chrysene		0.043	J	0.011	0.42
Dibenz(a,h)anthracene		0.042	U	0.022	0.042

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4 | Date Sampled: 08/01/2017 1030
Client Matrix: Solid | % Moisture: 21.9 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19607.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/10/2017 0449			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.42	U	0.013	0.42
Diethyl phthalate		0.42	U	0.012	0.42
Dimethyl phthalate		0.42	U	0.012	0.42
Di-n-butyl phthalate		0.42	U	0.013	0.42
Di-n-octyl phthalate		0.42	U	0.021	0.42
Fluoranthene		0.069	J	0.013	0.42
Fluorene		0.42	U	0.0092	0.42
Hexachlorobenzene		0.042	U	0.017	0.042
Hexachlorobutadiene		0.086	U	0.012	0.086
Hexachlorocyclopentadiene		0.42	U	0.026	0.42
Hexachloroethane		0.042	U	0.015	0.042
Indeno[1,2,3-cd]pyrene		0.068		0.028	0.042
Isophorone		0.17	U	0.0091	0.17
Naphthalene		0.42	U	0.011	0.42
Nitrobenzene		0.042	U	0.013	0.042
N-Nitrosodi-n-propylamine		0.042	U	0.014	0.042
N-Nitrosodiphenylamine		0.42	U	0.038	0.42
Pentachlorophenol		0.34	U	0.051	0.34
Phenanthrene		0.032	J	0.011	0.42
Phenol		0.42	U	0.014	0.42
Pyrene		0.058	J	0.019	0.42

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	52		10 - 103
2-Fluorobiphenyl	55		38 - 95
2-Fluorophenol (Surr)	53		25 - 92
Nitrobenzene-d5 (Surr)	55		37 - 94
Phenol-d5 (Surr)	58		32 - 91
Terphenyl-d14 (Surr)	73		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-14(10-12')**

Lab Sample ID: 460-138369-4
Client Matrix: Solid
% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19607.D
Dilution:	1.0			Initial Weight/Volume:	15.0418 g
Analysis Date:	08/10/2017 0449			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5 | Date Sampled: 08/01/2017 1055
Client Matrix: Solid | % Moisture: 11.1 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19602.D
Dilution:	1.0			Initial Weight/Volume:	15.0449 g
Analysis Date:	08/10/2017 0301			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.032	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.028	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0088	0.15
2,4-Dimethylphenol		0.37	U	0.082	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.075	U	0.015	0.075
2,6-Dinitrotoluene		0.075	U	0.020	0.075
2-Chloronaphthalene		0.37	U	0.0084	0.37
2-Chlorophenol		0.37	U	0.0094	0.37
2-Methylnaphthalene		0.37	U	0.0082	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.012	0.37
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.099	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0095	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.75	U	0.18	0.75
Acenaphthene		0.061	J	0.0090	0.37
Acenaphthylene		0.023	J	0.0095	0.37
Acetophenone		0.37	U	0.0081	0.37
Anthracene		0.60		0.035	0.37
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		2.5		0.031	0.037
Benzo[a]pyrene		1.8		0.011	0.037
Benzo[b]fluoranthene		3.1		0.014	0.037
Benzo[g,h,i]perylene		0.89		0.021	0.37
Benzo[k]fluoranthene		1.1		0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.012	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0088	0.037
Bis(2-ethylhexyl) phthalate		0.37	U	0.014	0.37
Butyl benzyl phthalate		0.37	U	0.011	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.32	J	0.0092	0.37
Chrysene		2.2		0.010	0.37
Dibenz(a,h)anthracene		0.28		0.019	0.037

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5 | Date Sampled: 08/01/2017 1055
Client Matrix: Solid | % Moisture: 11.1 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19602.D
Dilution:	1.0			Initial Weight/Volume:	15.0449 g
Analysis Date:	08/10/2017 0301			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.063	J	0.011	0.37
Diethyl phthalate		0.37	U	0.011	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		6.1		0.011	0.37
Fluorene		0.13	J	0.0081	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.075	U	0.010	0.075
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.014	0.037
Indeno[1,2,3-cd]pyrene		1.4		0.025	0.037
Isophorone		0.15	U	0.0080	0.15
Naphthalene		0.013	J	0.0094	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.012	0.037
N-Nitrosodiphenylamine		0.37	U	0.034	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		3.2		0.0099	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		5.6		0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	70		10 - 103
2-Fluorobiphenyl	61		38 - 95
2-Fluorophenol (Surr)	66		25 - 92
Nitrobenzene-d5 (Surr)	67		37 - 94
Phenol-d5 (Surr)	70		32 - 91
Terphenyl-d14 (Surr)	86		24 - 109

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5 Date Sampled: 08/01/2017 1055
Client Matrix: Solid % Moisture: 11.1 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19602.D
Dilution:	1.0			Initial Weight/Volume:	15.0449 g
Analysis Date:	08/10/2017 0301			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 6**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
141-79-7	3-Penten-2-one, 4-methyl-	2.53	0.45	J N
203-64-5	4H-Cyclopenta[def]phenanthrene	9.62	0.44	J N
205-82-3	Benzo[j]fluoranthene	13.56	0.36	J N
198-55-0	Perylene	13.83	1.3	J N
192-97-2	Benzo[e]pyrene	14.03	0.65	J N
215-58-7	Benzo[b]triphenylene	15.52	0.33	J N

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6 Date Sampled: 08/01/2017 1110
Client Matrix: Solid % Moisture: 4.2 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19541.D
Dilution:	1.0			Initial Weight/Volume:	15.0362 g
Analysis Date:	08/09/2017 0348			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.34	U	0.029	0.34
1,2,4,5-Tetrachlorobenzene		0.34	U	0.026	0.34
2,2'-oxybis[1-chloropropane]		0.34	U	0.014	0.34
2,3,4,6-Tetrachlorophenol		0.34	U	0.032	0.34
2,4,5-Trichlorophenol		0.34	U	0.034	0.34
2,4,6-Trichlorophenol		0.14	U	0.0098	0.14
2,4-Dichlorophenol		0.14	U	0.0081	0.14
2,4-Dimethylphenol		0.34	U	0.076	0.34
2,4-Dinitrophenol		0.28	U	0.26	0.28
2,4-Dinitrotoluene		0.070	U	0.014	0.070
2,6-Dinitrotoluene		0.070	U	0.018	0.070
2-Chloronaphthalene		0.34	U	0.0078	0.34
2-Chlorophenol		0.34	U	0.0087	0.34
2-Methylnaphthalene		0.34	U	0.0076	0.34
2-Methylphenol		0.34	U	0.015	0.34
2-Nitroaniline		0.34	U	0.011	0.34
2-Nitrophenol		0.34	U	0.012	0.34
3,3'-Dichlorobenzidine		0.14	U	0.038	0.14
3-Nitroaniline		0.34	U	0.010	0.34
4,6-Dinitro-2-methylphenol		0.28	U	0.092	0.28
4-Bromophenyl phenyl ether		0.34	U	0.011	0.34
4-Chloro-3-methylphenol		0.34	U	0.015	0.34
4-Chloroaniline		0.34	U	0.0088	0.34
4-Chlorophenyl phenyl ether		0.34	U	0.010	0.34
4-Methylphenol		0.34	U	0.0094	0.34
4-Nitroaniline		0.34	U	0.013	0.34
4-Nitrophenol		0.70	U	0.17	0.70
Acenaphthene		0.34	U	0.0083	0.34
Acenaphthylene		0.34	U	0.0088	0.34
Acetophenone		0.34	U	0.0075	0.34
Anthracene		0.34	U	0.033	0.34
Atrazine		0.14	U	0.015	0.14
Benzaldehyde		0.34	U	0.026	0.34
Benzo[a]anthracene		0.034	U	0.029	0.034
Benzo[a]pyrene		0.034	U	0.010	0.034
Benzo[b]fluoranthene		0.034	U	0.013	0.034
Benzo[g,h,i]perylene		0.34	U	0.020	0.34
Benzo[k]fluoranthene		0.034	U	0.015	0.034
Bis(2-chloroethoxy)methane		0.34	U	0.011	0.34
Bis(2-chloroethyl)ether		0.034	U	0.0081	0.034
Bis(2-ethylhexyl) phthalate		0.34	U	0.013	0.34
Butyl benzyl phthalate		0.34	U	0.011	0.34
Caprolactam		0.34	U	0.025	0.34
Carbazole		0.34	U	0.0085	0.34
Chrysene		0.34	U	0.0094	0.34
Dibenz(a,h)anthracene		0.034	U	0.018	0.034

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6 | Date Sampled: 08/01/2017 1110
Client Matrix: Solid | % Moisture: 4.2 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19541.D
Dilution:	1.0			Initial Weight/Volume:	15.0362 g
Analysis Date:	08/09/2017 0348			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.34	U	0.010	0.34
Diethyl phthalate		0.34	U	0.0098	0.34
Dimethyl phthalate		0.34	U	0.010	0.34
Di-n-butyl phthalate		0.34	U	0.010	0.34
Di-n-octyl phthalate		0.34	U	0.017	0.34
Fluoranthene		0.34	U	0.010	0.34
Fluorene		0.34	U	0.0075	0.34
Hexachlorobenzene		0.034	U	0.014	0.034
Hexachlorobutadiene		0.070	U	0.0097	0.070
Hexachlorocyclopentadiene		0.34	U	0.021	0.34
Hexachloroethane		0.034	U	0.013	0.034
Indeno[1,2,3-cd]pyrene		0.034	U	0.023	0.034
Isophorone		0.14	U	0.0074	0.14
Naphthalene		0.34	U	0.0087	0.34
Nitrobenzene		0.034	U	0.011	0.034
N-Nitrosodi-n-propylamine		0.034	U	0.012	0.034
N-Nitrosodiphenylamine		0.34	U	0.031	0.34
Pentachlorophenol		0.28	U	0.042	0.28
Phenanthrene		0.34	U	0.0092	0.34
Phenol		0.34	U	0.011	0.34
Pyrene		0.34	U	0.016	0.34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	62		10 - 103
2-Fluorobiphenyl	70		38 - 95
2-Fluorophenol (Surr)	71		25 - 92
Nitrobenzene-d5 (Surr)	74		37 - 94
Phenol-d5 (Surr)	73		32 - 91
Terphenyl-d14 (Surr)	90		24 - 109

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6 Date Sampled: 08/01/2017 1110
Client Matrix: Solid % Moisture: 4.2 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19541.D
Dilution:	1.0			Initial Weight/Volume:	15.0362 g
Analysis Date:	08/09/2017 0348			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7 Date Sampled: 08/01/2017 1200
Client Matrix: Solid % Moisture: 11.7 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19544.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/09/2017 0453			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.032	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.028	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0088	0.15
2,4-Dimethylphenol		0.37	U	0.082	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.076	U	0.015	0.076
2,6-Dinitrotoluene		0.076	U	0.020	0.076
2-Chloronaphthalene		0.37	U	0.0085	0.37
2-Chlorophenol		0.37	U	0.0095	0.37
2-Methylnaphthalene		0.37	U	0.0083	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.013	0.37
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.10	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0096	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.76	U	0.18	0.76
Acenaphthene		0.37	U	0.0090	0.37
Acenaphthylene		0.37	U	0.0096	0.37
Acetophenone		0.37	U	0.0081	0.37
Anthracene		0.37	U	0.035	0.37
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		0.084		0.031	0.037
Benzo[a]pyrene		0.11		0.011	0.037
Benzo[b]fluoranthene		0.17		0.015	0.037
Benzo[g,h,i]perylene		0.062	J	0.021	0.37
Benzo[k]fluoranthene		0.068		0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.012	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0088	0.037
Bis(2-ethylhexyl) phthalate		0.37	U	0.015	0.37
Butyl benzyl phthalate		0.37	U	0.012	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.37	U	0.0093	0.37
Chrysene		0.12	J	0.010	0.37
Dibenz(a,h)anthracene		0.037	U	0.019	0.037

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7 | Date Sampled: 08/01/2017 1200
Client Matrix: Solid | % Moisture: 11.7 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19544.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/09/2017 0453			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.37	U	0.011	0.37
Diethyl phthalate		0.37	U	0.011	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.13	J	0.011	0.37
Fluorene		0.37	U	0.0081	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.076	U	0.011	0.076
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.014	0.037
Indeno[1,2,3-cd]pyrene		0.13		0.025	0.037
Isophorone		0.15	U	0.0080	0.15
Naphthalene		0.37	U	0.0095	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.013	0.037
N-Nitrosodiphenylamine		0.37	U	0.034	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		0.048	J	0.0099	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.15	J	0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	49		10 - 103
2-Fluorobiphenyl	60		38 - 95
2-Fluorophenol (Surr)	61		25 - 92
Nitrobenzene-d5 (Surr)	65		37 - 94
Phenol-d5 (Surr)	62		32 - 91
Terphenyl-d14 (Surr)	75		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19544.D
Dilution:	1.0			Initial Weight/Volume:	15.0259 g
Analysis Date:	08/09/2017 0453			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8 Date Sampled: 08/01/2017 1235
Client Matrix: Solid % Moisture: 6.7 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19604.D
Dilution:	1.0			Initial Weight/Volume:	15.0471 g
Analysis Date:	08/10/2017 0344			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.015	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.035	0.35
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0083	0.14
2,4-Dimethylphenol		0.35	U	0.078	0.35
2,4-Dinitrophenol		0.28	U	0.27	0.28
2,4-Dinitrotoluene		0.072	U	0.014	0.072
2,6-Dinitrotoluene		0.072	U	0.019	0.072
2-Chloronaphthalene		0.35	U	0.0080	0.35
2-Chlorophenol		0.35	U	0.0090	0.35
2-Methylnaphthalene		0.35	U	0.0078	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.012	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.039	0.14
3-Nitroaniline		0.35	U	0.010	0.35
4,6-Dinitro-2-methylphenol		0.28	U	0.094	0.28
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0091	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.011	0.35
4-Methylphenol		0.35	U	0.0096	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.72	U	0.17	0.72
Acenaphthene		0.35	U	0.0085	0.35
Acenaphthylene		0.35	U	0.0091	0.35
Acetophenone		0.35	U	0.0077	0.35
Anthracene		0.35	U	0.034	0.35
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.35	U	0.027	0.35
Benzo[a]anthracene		0.035	U	0.029	0.035
Benzo[a]pyrene		0.011	J	0.011	0.035
Benzo[b]fluoranthene		0.016	J	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0083	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.025	0.35
Carbazole		0.35	U	0.0088	0.35
Chrysene		0.017	J	0.0096	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8 | Date Sampled: 08/01/2017 1235
Client Matrix: Solid | % Moisture: 6.7 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19604.D
Dilution:	1.0			Initial Weight/Volume:	15.0471 g
Analysis Date:	08/10/2017 0344			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.011	0.35
Diethyl phthalate		0.35	U	0.010	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.011	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.029	J	0.010	0.35
Fluorene		0.35	U	0.0077	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.072	U	0.0099	0.072
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.024	0.035
Isophorone		0.032	J	0.0076	0.14
Naphthalene		0.35	U	0.0090	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.032	0.35
Pentachlorophenol		0.28	U	0.043	0.28
Phenanthrene		0.015	J	0.0094	0.35
Phenol		0.35	U	0.012	0.35
Pyrene		0.024	J	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	35		10 - 103
2-Fluorobiphenyl	63		38 - 95
2-Fluorophenol (Surr)	62		25 - 92
Nitrobenzene-d5 (Surr)	68		37 - 94
Phenol-d5 (Surr)	70		32 - 91
Terphenyl-d14 (Surr)	74		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8
Client Matrix: Solid

% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455229	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19604.D
Dilution:	1.0			Initial Weight/Volume:	15.0471 g
Analysis Date:	08/10/2017 0344			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 5**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
3102-33-8	3-Penten-2-one, (E)-	2.03	0.33	J N
107-70-0	2-Pentanone, 4-methoxy-4-methyl-	3.59	0.42	J N
	Unknown	3.64	0.36	J
	Unknown	5.43	0.85	J
	Unknown	5.75	1.1	J

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9 Date Sampled: 08/01/2017 1345
Client Matrix: Solid % Moisture: 9.2 Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-455782	Lab File ID:	L19736.D
Dilution:	1.0			Initial Weight/Volume:	15.0125 g
Analysis Date:	08/12/2017 0802			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2250			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0086	0.15
2,4-Dimethylphenol		0.36	U	0.080	0.36
2,4-Dinitrophenol		0.29	U	0.28	0.29
2,4-Dinitrotoluene		0.074	U	0.014	0.074
2,6-Dinitrotoluene		0.074	U	0.019	0.074
2-Chloronaphthalene		0.36	U	0.0083	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.018	J	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.097	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.016	0.36
4-Chloroaniline		0.36	U	0.0094	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0099	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.74	U	0.17	0.74
Acenaphthene		0.36	U	0.0088	0.36
Acenaphthylene		0.36	U	0.0094	0.36
Acetophenone		0.36	U	0.0079	0.36
Anthracene		0.36	U	0.035	0.36
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.36	U	0.028	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.030	J	0.011	0.036
Benzo[b]fluoranthene		0.048		0.014	0.036
Benzo[g,h,i]perylene		0.030	J	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0086	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0090	0.36
Chrysene		0.042	J	0.0099	0.36
Dibenz(a,h)anthracene		0.041		0.019	0.036

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9 | Date Sampled: 08/01/2017 1345
Client Matrix: Solid | % Moisture: 9.2 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-455782	Lab File ID:	L19736.D
Dilution:	1.0			Initial Weight/Volume:	15.0125 g
Analysis Date:	08/12/2017 0802			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2250			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.011	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.042	J	0.011	0.36
Fluorene		0.36	U	0.0079	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.074	U	0.010	0.074
Hexachlorocyclopentadiene		0.36	U	0.023	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.066		0.024	0.036
Isophorone		4.5		0.0078	0.15
Naphthalene		0.016	J	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.034	J	0.0097	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.039	J	0.017	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	91		10 - 103
2-Fluorobiphenyl	78		38 - 95
2-Fluorophenol (Surr)	79		25 - 92
Nitrobenzene-d5 (Surr)	82		37 - 94
Phenol-d5 (Surr)	86		32 - 91
Terphenyl-d14 (Surr)	83		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-455782	Lab File ID:	L19736.D
Dilution:	1.0			Initial Weight/Volume:	15.0125 g
Analysis Date:	08/12/2017 0802			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2250			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 20**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.39	0.92	J
107-70-0	2-Pentanone, 4-methoxy-4-methyl-	3.53	0.36	J N
14786-82-4	Phenol, 4-methoxy-3-methyl-	3.60	0.81	J N
	Unknown	4.60	0.62	J
	Unknown	4.65	0.54	J
1193-18-6	2-Cyclohexen-1-one, 3-methyl-	4.77	5.4	J N
	Unknown	5.05	0.53	J
504-20-1	2,5-Heptadien-4-one, 2,6-dimethyl-	5.13	4.4	J N
	Unknown	5.37	3.1	J
	Unknown	5.68	0.98	J
875-59-2	4-Hydroxy-2-methylacetophenone	6.24	0.46	J N
491-09-8	2-Cyclohexen-1-one, 3-methyl-6-(1-methylethylidene)-	6.65	0.56	J N
74663-85-7	Cyclopropane, nonyl-	7.30	0.69	J N
70-55-3	Benzenesulfonamide, 4-methyl-	8.30	0.42	J N
112-41-4	1-Dodecene	8.35	0.68	J N
88-24-4	Phenol, 2,2'-methylenebis[6-(1,1-dimethylethyl)-4-ethyl-	11.67	0.45	J N
629-94-7	Heneicosane	13.58	0.41	J N
593-45-3	Octadecane	14.13	0.34	J N
	Unknown	15.27	0.44	J
629-78-7	Heptadecane	15.93	0.30	J N

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: **SB-17(10-12')**

Lab Sample ID: 460-138369-10 | Date Sampled: 08/01/2017 1350
Client Matrix: Solid | % Moisture: 7.1 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19542.D
Dilution:	1.0			Initial Weight/Volume:	15.0415 g
Analysis Date:	08/09/2017 0410			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.015	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.035	0.35
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0084	0.14
2,4-Dimethylphenol		0.35	U	0.078	0.35
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.072	U	0.014	0.072
2,6-Dinitrotoluene		0.072	U	0.019	0.072
2-Chloronaphthalene		0.35	U	0.0081	0.35
2-Chlorophenol		0.35	U	0.0090	0.35
2-Methylnaphthalene		0.35	U	0.0078	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.012	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.35	U	0.011	0.35
4,6-Dinitro-2-methylphenol		0.29	U	0.095	0.29
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0091	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.011	0.35
4-Methylphenol		0.35	U	0.0097	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.72	U	0.17	0.72
Acenaphthene		0.35	U	0.0086	0.35
Acenaphthylene		0.35	U	0.0091	0.35
Acetophenone		0.35	U	0.0077	0.35
Anthracene		0.35	U	0.034	0.35
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.35	U	0.027	0.35
Benzo[a]anthracene		0.035	U	0.030	0.035
Benzo[a]pyrene		0.035	U	0.011	0.035
Benzo[b]fluoranthene		0.035	U	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0084	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.026	0.35
Carbazole		0.35	U	0.0088	0.35
Chrysene		0.35	U	0.0097	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10 | Date Sampled: 08/01/2017 1350
Client Matrix: Solid | % Moisture: 7.1 | Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19542.D
Dilution:	1.0			Initial Weight/Volume:	15.0415 g
Analysis Date:	08/09/2017 0410			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.011	0.35
Diethyl phthalate		0.35	U	0.010	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.011	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.35	U	0.011	0.35
Fluorene		0.35	U	0.0077	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.072	U	0.010	0.072
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.024	0.035
Isophorone		0.14	U	0.0076	0.14
Naphthalene		0.35	U	0.0090	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.032	0.35
Pentachlorophenol		0.29	U	0.043	0.29
Phenanthrene		0.35	U	0.0095	0.35
Phenol		0.35	U	0.012	0.35
Pyrene		0.35	U	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	49		10 - 103
2-Fluorobiphenyl	66		38 - 95
2-Fluorophenol (Surr)	67		25 - 92
Nitrobenzene-d5 (Surr)	70		37 - 94
Phenol-d5 (Surr)	72		32 - 91
Terphenyl-d14 (Surr)	95		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10
Client Matrix: Solid

% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-453944	Lab File ID:	L19542.D
Dilution:	1.0			Initial Weight/Volume:	15.0415 g
Analysis Date:	08/09/2017 0410			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.68	0.37	J
	Unknown	5.47	1.1	J
	Unknown	5.78	0.70	J

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: GW-15

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Prep Method:	3510C	Prep Batch:	460-453875	Lab File ID:	N1210820.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1350			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	10	U	0.63	10
1,2,4,5-Tetrachlorobenzene	10	U	0.43	10
2,2'-oxybis[1-chloropropane]	10	U	0.93	10
2,3,4,6-Tetrachlorophenol	10	U	0.69	10
2,4,5-Trichlorophenol	10	U	0.49	10
2,4,6-Trichlorophenol	10	U	0.53	10
2,4-Dichlorophenol	10	U	0.63	10
2,4-Dimethylphenol	10	U	0.91	10
2,4-Dinitrophenol	20	U	2.4	20
2,4-Dinitrotoluene	2.0	U	1.0	2.0
2,6-Dinitrotoluene	2.0	U	0.88	2.0
2-Chloronaphthalene	10	U	0.61	10
2-Chlorophenol	10	U	0.74	10
2-Methylnaphthalene	10	U	0.88	10
2-Methylphenol	10	U	1.3	10
2-Nitroaniline	10	U	0.65	10
2-Nitrophenol	10	U	0.59	10
3,3'-Dichlorobenzidine	10	U	1.0	10
3-Nitroaniline	10	U	0.82	10
4,6-Dinitro-2-methylphenol	20	U	2.0	20
4-Bromophenyl phenyl ether	10	U	1.0	10
4-Chloro-3-methylphenol	10	U	0.76	10
4-Chloroaniline	10	U	0.73	10
4-Chlorophenyl phenyl ether	10	U	0.96	10
4-Methylphenol	10	U	0.87	10
4-Nitroaniline	10	U	0.48	10
4-Nitrophenol	20	U	4.7	20
Acenaphthene	10	U	0.88	10
Acenaphthylene	10	U	0.65	10
Acetophenone	10	U	1.0	10
Anthracene	10	U	0.57	10
Atrazine	2.0	U	0.77	2.0
Benzaldehyde	10	U	0.86	10
Benzo[a]anthracene	1.0	U	0.55	1.0
Benzo[a]pyrene	1.0	U	0.16	1.0
Benzo[b]fluoranthene	1.0	U	0.44	1.0
Benzo[g,h,i]perylene	10	U	0.75	10
Benzo[k]fluoranthene	1.0	U	0.18	1.0
Bis(2-chloroethoxy)methane	10	U	0.69	10
Bis(2-chloroethyl)ether	1.0	U	0.12	1.0
Bis(2-ethylhexyl) phthalate	2.0	U	0.72	2.0
Butyl benzyl phthalate	10	U	0.60	10
Caprolactam	4.5	J	1.1	10
Carbazole	10	U	0.85	10
Chrysene	2.0	U	0.67	2.0
Dibenz(a,h)anthracene	1.0	U	0.090	1.0

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **GW-15**

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Prep Method:	3510C	Prep Batch:	460-453875	Lab File ID:	N1210820.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1350			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dibenzofuran	10	U	0.85	10
Diethyl phthalate	10	U	1.0	10
Dimethyl phthalate	10	U	0.98	10
Di-n-butyl phthalate	1.3	J	0.82	10
Di-n-octyl phthalate	10	U	0.69	10
Fluoranthene	10	U	0.72	10
Fluorene	10	U	0.80	10
Hexachlorobenzene	1.0	U	0.47	1.0
Hexachlorobutadiene	1.0	U	0.76	1.0
Hexachlorocyclopentadiene	10	U	0.61	10
Hexachloroethane	1.0	U	0.090	1.0
Indeno[1,2,3-cd]pyrene	1.0	U	0.21	1.0
Isophorone	10	U	0.67	10
Naphthalene	10	U	0.80	10
Nitrobenzene	1.0	U	0.49	1.0
N-Nitrosodi-n-propylamine	1.0	U	0.83	1.0
N-Nitrosodiphenylamine	10	U	0.74	10
Pentachlorophenol	20	U	2.2	20
Phenanthrene	10	U	0.65	10
Phenol	10	U	0.41	10
Pyrene	10	U	0.83	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	98		26 - 139
2-Fluorobiphenyl	75		45 - 107
2-Fluorophenol (Surr)	41		25 - 58
Nitrobenzene-d5 (Surr)	86		51 - 108
Phenol-d5 (Surr)	25		14 - 39
Terphenyl-d14 (Surr)	108		40 - 148

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **GW-15**

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Prep Method:	3510C	Prep Batch:	460-453875	Lab File ID:	N1210820.D
Dilution:	1.0			Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1350			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1WC**

Lab Sample ID: 460-138369-11
Client Matrix: Solid
% Moisture: 8.3

Date Sampled: 08/01/2017 0900
Date Received: 08/02/2017 1300

8015D Gasoline Range Organics (GRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Prep Method:	5035	Prep Batch:	460-453629	Initial Weight/Volume:	4.06 g
Dilution:	50			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2114			Injection Volume:	5 mL
Prep Date:	08/03/2017 0021			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
GRO		3.4	U	3.4	3.4

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	107		80 - 135

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-15WC**

Lab Sample ID: 460-138369-12
Client Matrix: Solid

% Moisture: 13.8

Date Sampled: 08/01/2017 1100
Date Received: 08/02/2017 1300

8015D Gasoline Range Organics (GRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Prep Method:	5035	Prep Batch:	460-453629	Initial Weight/Volume:	6.68 g
Dilution:	50			Final Weight/Volume:	10 mL
Analysis Date:	08/03/2017 2143			Injection Volume:	5 mL
Prep Date:	08/03/2017 0022			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
GRO		2.2	U	2.2	2.2

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	105		80 - 135

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-17WC**

Lab Sample ID: 460-138369-13
Client Matrix: Solid
% Moisture: 9.6

Date Sampled: 08/01/2017 1340
Date Received: 08/02/2017 1300

8015D Gasoline Range Organics (GRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-454111	Instrument ID:	CVOAGC1
Prep Method:	5035	Prep Batch:	460-453871	Initial Weight/Volume:	5.07 g
Dilution:	50			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 2134			Injection Volume:	5 mL
Prep Date:	08/03/2017 2145			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
GRO		2.7	U	2.7	2.7

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	104		80 - 135

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1WC**

Lab Sample ID: 460-138369-11
Client Matrix: Solid
% Moisture: 8.3

Date Sampled: 08/01/2017 0900
Date Received: 08/02/2017 1300

8015D Diesel Range Organics (DRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Prep Method:	3546	Prep Batch:	460-453727	Lab File ID:	3F010404.D
Dilution:	1.0			Initial Weight/Volume:	15.0412 g
Analysis Date:	08/04/2017 1002			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
#2 Diesel Fuel		26		1.2	7.3
C10-C44		110		1.2	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	66		25 - 132

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-15WC**

Lab Sample ID: 460-138369-12
Client Matrix: Solid
% Moisture: 13.8

Date Sampled: 08/01/2017 1100
Date Received: 08/02/2017 1300

8015D Diesel Range Organics (DRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Prep Method:	3546	Prep Batch:	460-453727	Lab File ID:	3F010409.D
Dilution:	1.0			Initial Weight/Volume:	15.0288 g
Analysis Date:	08/04/2017 1112			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
#2 Diesel Fuel		14		1.3	7.8
C10-C44		32		1.3	10

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	76		25 - 132

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-17WC**

Lab Sample ID: 460-138369-13
Client Matrix: Solid
% Moisture: 9.6

Date Sampled: 08/01/2017 1340
Date Received: 08/02/2017 1300

8015D Diesel Range Organics (DRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Prep Method:	3546	Prep Batch:	460-453727	Lab File ID:	3F010410.D
Dilution:	1.0			Initial Weight/Volume:	15.0478 g
Analysis Date:	08/04/2017 1125			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
#2 Diesel Fuel		40		1.2	7.4
C10-C44		260		1.2	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	63		25 - 132

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0037 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0912			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0070	U	0.0012	0.0070
4,4'-DDE		0.0070	U	0.00083	0.0070
4,4'-DDT		0.0070	U	0.0013	0.0070
Aldrin		0.0070	U	0.0011	0.0070
alpha-BHC		0.0021	U	0.00071	0.0021
beta-BHC		0.0021	U	0.00079	0.0021
Chlordane (technical)		0.070	U	0.017	0.070
delta-BHC		0.0021	U	0.00043	0.0021
Dieldrin		0.0021	U	0.00091	0.0021
Endosulfan I		0.0070	U	0.0011	0.0070
Endosulfan II		0.0070	U	0.0018	0.0070
Endosulfan sulfate		0.0070	U	0.00088	0.0070
Endrin		0.0070	U	0.0010	0.0070
Endrin aldehyde		0.0070	U	0.0017	0.0070
Endrin ketone		0.0070	U	0.0014	0.0070
gamma-BHC (Lindane)		0.0021	U	0.00065	0.0021
Heptachlor		0.0070	U	0.00083	0.0070
Heptachlor epoxide		0.0070	U	0.0010	0.0070
Methoxychlor		0.0070	U	0.0016	0.0070
Toxaphene		0.070	U	0.025	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	121		50 - 150
Tetrachloro-m-xylene	119		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0037 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0912			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	118		47 - 150

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2 | Date Sampled: 08/01/2017 0910
Client Matrix: Solid | % Moisture: 7.7 | Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0098 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0925			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0073	U	0.0012	0.0073
4,4'-DDE		0.0073	U	0.00086	0.0073
4,4'-DDT		0.0073	U	0.0013	0.0073
Aldrin		0.0073	U	0.0011	0.0073
alpha-BHC		0.0022	U	0.00074	0.0022
beta-BHC		0.0022	U	0.00081	0.0022
Chlordane (technical)		0.073	U	0.018	0.073
delta-BHC		0.0022	U	0.00044	0.0022
Dieldrin		0.0022	U	0.00094	0.0022
Endosulfan I		0.0073	U	0.0011	0.0073
Endosulfan II		0.0073	U	0.0019	0.0073
Endosulfan sulfate		0.0073	U	0.00091	0.0073
Endrin		0.0073	U	0.0010	0.0073
Endrin aldehyde		0.0073	U	0.0017	0.0073
Endrin ketone		0.0073	U	0.0014	0.0073
gamma-BHC (Lindane)		0.0022	U	0.00067	0.0022
Heptachlor		0.0073	U	0.00086	0.0073
Heptachlor epoxide		0.0073	U	0.0011	0.0073
Methoxychlor		0.0073	U	0.0017	0.0073
Toxaphene		0.073	U	0.026	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	121		50 - 150
Tetrachloro-m-xylene	120		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0098 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0925			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		50 - 150
Tetrachloro-m-xylene	117		47 - 150

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 | Date Sampled: 08/01/2017 1020
Client Matrix: Solid | % Moisture: 11.9 | Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0938			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0076	U	0.0013	0.0076
4,4'-DDE		0.0076	U	0.00090	0.0076
4,4'-DDT		0.0076	U	0.0014	0.0076
Aldrin		0.0076	U	0.0011	0.0076
alpha-BHC		0.0023	U	0.00077	0.0023
beta-BHC		0.0023	U	0.00085	0.0023
Chlordane (technical)		0.076	U	0.018	0.076
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.00099	0.0023
Endosulfan I		0.0076	U	0.0012	0.0076
Endosulfan II		0.0076	U	0.0020	0.0076
Endosulfan sulfate		0.0076	U	0.00095	0.0076
Endrin		0.0076	U	0.0011	0.0076
Endrin aldehyde		0.0076	U	0.0018	0.0076
Endrin ketone		0.0076	U	0.0015	0.0076
gamma-BHC (Lindane)		0.0023	U	0.00070	0.0023
Heptachlor		0.0076	U	0.00090	0.0076
Heptachlor epoxide		0.0076	U	0.0011	0.0076
Methoxychlor		0.0076	U	0.0017	0.0076
Toxaphene		0.076	U	0.027	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	116		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0938			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0118 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0951			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0086	U	0.0015	0.0086
4,4'-DDE		0.0086	U	0.0010	0.0086
4,4'-DDT		0.0086	U	0.0016	0.0086
Aldrin		0.0086	U	0.0013	0.0086
alpha-BHC		0.0026	U	0.00087	0.0026
beta-BHC		0.0026	U	0.00096	0.0026
Chlordane (technical)		0.086	U	0.021	0.086
delta-BHC		0.0026	U	0.00052	0.0026
Dieldrin		0.0026	U	0.0011	0.0026
Endosulfan I		0.0086	U	0.0013	0.0086
Endosulfan II		0.0086	U	0.0022	0.0086
Endosulfan sulfate		0.0086	U	0.0011	0.0086
Endrin		0.0086	U	0.0012	0.0086
Endrin aldehyde		0.0086	U	0.0020	0.0086
Endrin ketone		0.0086	U	0.0017	0.0086
gamma-BHC (Lindane)		0.0026	U	0.00079	0.0026
Heptachlor		0.0086	U	0.0010	0.0086
Heptachlor epoxide		0.0086	U	0.0013	0.0086
Methoxychlor		0.0086	U	0.0020	0.0086
Toxaphene		0.086	U	0.031	0.086

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	126		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-14(10-12')**

Lab Sample ID: 460-138369-4
Client Matrix: Solid
% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0118 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0951			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	117		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0061 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1004			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0075	U	0.0013	0.0075
4,4'-DDE		0.0075	U	0.00089	0.0075
4,4'-DDT		0.0075	U	0.0014	0.0075
Aldrin		0.0075	U	0.0011	0.0075
alpha-BHC		0.0022	U	0.00076	0.0022
beta-BHC		0.0022	U	0.00084	0.0022
Chlordane (technical)		0.075	U	0.018	0.075
delta-BHC		0.0022	U	0.00046	0.0022
Dieldrin		0.0022	U	0.00098	0.0022
Endosulfan I		0.0075	U	0.0011	0.0075
Endosulfan II		0.0075	U	0.0019	0.0075
Endosulfan sulfate		0.0075	U	0.00094	0.0075
Endrin		0.0075	U	0.0011	0.0075
Endrin aldehyde		0.0075	U	0.0018	0.0075
Endrin ketone		0.0075	U	0.0015	0.0075
gamma-BHC (Lindane)		0.0022	U	0.00070	0.0022
Heptachlor		0.0075	U	0.00089	0.0075
Heptachlor epoxide		0.0075	U	0.0011	0.0075
Methoxychlor		0.0075	U	0.0017	0.0075
Toxaphene		0.075	U	0.027	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	122		50 - 150
Tetrachloro-m-xylene	123		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0061 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1004			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		50 - 150
Tetrachloro-m-xylene	120		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0033 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1016			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0070	U	0.0012	0.0070
4,4'-DDE		0.0070	U	0.00082	0.0070
4,4'-DDT		0.0070	U	0.0013	0.0070
Aldrin		0.0070	U	0.0011	0.0070
alpha-BHC		0.0021	U	0.00071	0.0021
beta-BHC		0.0021	U	0.00078	0.0021
Chlordane (technical)		0.070	U	0.017	0.070
delta-BHC		0.0021	U	0.00043	0.0021
Dieldrin		0.0021	U	0.00091	0.0021
Endosulfan I		0.0070	U	0.0011	0.0070
Endosulfan II		0.0070	U	0.0018	0.0070
Endosulfan sulfate		0.0070	U	0.00088	0.0070
Endrin		0.0070	U	0.0010	0.0070
Endrin aldehyde		0.0070	U	0.0016	0.0070
Endrin ketone		0.0070	U	0.0014	0.0070
gamma-BHC (Lindane)		0.0021	U	0.00065	0.0021
Heptachlor		0.0070	U	0.00082	0.0070
Heptachlor epoxide		0.0070	U	0.0010	0.0070
Methoxychlor		0.0070	U	0.0016	0.0070
Toxaphene		0.070	U	0.025	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-15(10-12')**

Lab Sample ID: 460-138369-6
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0033 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1016			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		50 - 150
Tetrachloro-m-xylene	112		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0047 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1029			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0076	U	0.0013	0.0076
4,4'-DDE		0.0076	U	0.00089	0.0076
4,4'-DDT		0.0076	U	0.0014	0.0076
Aldrin		0.0076	U	0.0011	0.0076
alpha-BHC		0.0023	U	0.00077	0.0023
beta-BHC		0.0023	U	0.00085	0.0023
Chlordane (technical)		0.076	U	0.018	0.076
delta-BHC		0.0023	U	0.00046	0.0023
Dieldrin		0.0023	U	0.00098	0.0023
Endosulfan I		0.0076	U	0.0012	0.0076
Endosulfan II		0.0076	U	0.0019	0.0076
Endosulfan sulfate		0.0076	U	0.00095	0.0076
Endrin		0.0076	U	0.0011	0.0076
Endrin aldehyde		0.0076	U	0.0018	0.0076
Endrin ketone		0.0076	U	0.0015	0.0076
gamma-BHC (Lindane)		0.0023	U	0.00070	0.0023
Heptachlor		0.0076	U	0.00089	0.0076
Heptachlor epoxide		0.0076	U	0.0011	0.0076
Methoxychlor		0.0076	U	0.0017	0.0076
Toxaphene		0.076	U	0.027	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	123		50 - 150
Tetrachloro-m-xylene	116		47 - 150

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7 Date Sampled: 08/01/2017 1200
Client Matrix: Solid % Moisture: 11.7 Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0047 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1029			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		50 - 150
Tetrachloro-m-xylene	116		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8
Client Matrix: Solid

% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0133 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1042			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0072	U	0.0012	0.0072
4,4'-DDE		0.0072	U	0.00085	0.0072
4,4'-DDT		0.0072	U	0.0013	0.0072
Aldrin		0.0072	U	0.0011	0.0072
alpha-BHC		0.0021	U	0.00073	0.0021
beta-BHC		0.0021	U	0.00080	0.0021
Chlordane (technical)		0.072	U	0.017	0.072
delta-BHC		0.0021	U	0.00044	0.0021
Dieldrin		0.0021	U	0.00093	0.0021
Endosulfan I		0.0072	U	0.0011	0.0072
Endosulfan II		0.0072	U	0.0018	0.0072
Endosulfan sulfate		0.0072	U	0.00090	0.0072
Endrin		0.0072	U	0.0010	0.0072
Endrin aldehyde		0.0072	U	0.0017	0.0072
Endrin ketone		0.0072	U	0.0014	0.0072
gamma-BHC (Lindane)		0.0021	U	0.00066	0.0021
Heptachlor		0.0072	U	0.00085	0.0072
Heptachlor epoxide		0.0072	U	0.0011	0.0072
Methoxychlor		0.0072	U	0.0016	0.0072
Toxaphene		0.072	U	0.026	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	109		50 - 150
Tetrachloro-m-xylene	107		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-16(10-12')**

Lab Sample ID: 460-138369-8
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0133 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1042			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		50 - 150
Tetrachloro-m-xylene	107		47 - 150

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9 | Date Sampled: 08/01/2017 1345
Client Matrix: Solid | % Moisture: 9.2 | Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0085 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1055			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0074	U	0.0013	0.0074
4,4'-DDE		0.0021	J	0.00087	0.0074
4,4'-DDT		0.0074	U	0.0014	0.0074
Aldrin		0.0074	U	0.0011	0.0074
alpha-BHC		0.0022	U	0.00075	0.0022
beta-BHC		0.0022	U	0.00083	0.0022
Chlordane (technical)		0.074	U	0.018	0.074
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00096	0.0022
Endosulfan I		0.0074	U	0.0011	0.0074
Endosulfan II		0.0074	U	0.0019	0.0074
Endosulfan sulfate		0.0074	U	0.00092	0.0074
Endrin		0.0074	U	0.0011	0.0074
Endrin aldehyde		0.0074	U	0.0017	0.0074
Endrin ketone		0.0074	U	0.0014	0.0074
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0074	U	0.00087	0.0074
Heptachlor epoxide		0.0074	U	0.0011	0.0074
Methoxychlor		0.0074	U	0.0017	0.0074
Toxaphene		0.074	U	0.027	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	115		50 - 150
Tetrachloro-m-xylene	116		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0085 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1055			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10 Date Sampled: 08/01/2017 1350
Client Matrix: Solid % Moisture: 7.1 Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1108			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0072	U	0.0012	0.0072
4,4'-DDE		0.0072	U	0.00085	0.0072
4,4'-DDT		0.0072	U	0.0013	0.0072
Aldrin		0.0072	U	0.0011	0.0072
alpha-BHC		0.0022	U	0.00073	0.0022
beta-BHC		0.0022	U	0.00081	0.0022
Chlordane (technical)		0.072	U	0.017	0.072
delta-BHC		0.0022	U	0.00044	0.0022
Dieldrin		0.0022	U	0.00094	0.0022
Endosulfan I		0.0072	U	0.0011	0.0072
Endosulfan II		0.0072	U	0.0019	0.0072
Endosulfan sulfate		0.0072	U	0.00090	0.0072
Endrin		0.0072	U	0.0010	0.0072
Endrin aldehyde		0.0072	U	0.0017	0.0072
Endrin ketone		0.0072	U	0.0014	0.0072
gamma-BHC (Lindane)		0.0022	U	0.00067	0.0022
Heptachlor		0.0072	U	0.00085	0.0072
Heptachlor epoxide		0.0072	U	0.0011	0.0072
Methoxychlor		0.0072	U	0.0016	0.0072
Toxaphene		0.072	U	0.026	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		50 - 150
Tetrachloro-m-xylene	119		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-17(10-12')**

Lab Sample ID: 460-138369-10
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-453864	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1108			Injection Volume:	1 uL
Prep Date:	08/03/2017 2112			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		50 - 150
Tetrachloro-m-xylene	115		47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0037 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0912			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.070	U	0.0093	0.070
Aroclor 1221		0.070	U	0.0093	0.070
Aroclor 1232		0.070	U	0.0093	0.070
Aroclor 1242		0.070	U	0.0093	0.070
Aroclor 1248		0.070	U	0.0093	0.070
Aroclor 1254		0.070	U	0.0096	0.070
Aroclor 1260		0.070	U	0.0096	0.070
Aroclor 1268		0.070	U	0.0096	0.070
Aroclor-1262		0.070	U	0.0096	0.070
Polychlorinated biphenyls, Total		0.070	U	0.0096	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	122		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0037 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0912			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	115		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0098 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0926			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.073	U	0.0096	0.073
Aroclor 1221		0.073	U	0.0096	0.073
Aroclor 1232		0.073	U	0.0096	0.073
Aroclor 1242		0.073	U	0.0096	0.073
Aroclor 1248		0.073	U	0.0096	0.073
Aroclor 1254		0.073	U	0.010	0.073
Aroclor 1260		0.073	U	0.010	0.073
Aroclor 1268		0.073	U	0.010	0.073
Aroclor-1262		0.073	U	0.010	0.073
Polychlorinated biphenyls, Total		0.073	U	0.010	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	115		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0098 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0926			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0951			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.076	U	0.010	0.076
Aroclor 1221		0.076	U	0.010	0.076
Aroclor 1232		0.076	U	0.010	0.076
Aroclor 1242		0.076	U	0.010	0.076
Aroclor 1248		0.076	U	0.010	0.076
Aroclor 1254		0.076	U	0.010	0.076
Aroclor 1260		0.076	U	0.010	0.076
Aroclor 1268		0.076	U	0.010	0.076
Aroclor-1262		0.076	U	0.010	0.076
Polychlorinated biphenyls, Total		0.076	U	0.010	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0015 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 0951			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	102		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0118 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1005			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.086	U	0.011	0.086
Aroclor 1221		0.086	U	0.011	0.086
Aroclor 1232		0.086	U	0.011	0.086
Aroclor 1242		0.086	U	0.011	0.086
Aroclor 1248		0.086	U	0.011	0.086
Aroclor 1254		0.086	U	0.012	0.086
Aroclor 1260		0.086	U	0.012	0.086
Aroclor 1268		0.086	U	0.012	0.086
Aroclor-1262		0.086	U	0.012	0.086
Polychlorinated biphenyls, Total		0.086	U	0.012	0.086

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0118 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1005			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	105		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0061 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1020			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.075	U	0.010	0.075
Aroclor 1221		0.075	U	0.010	0.075
Aroclor 1232		0.075	U	0.010	0.075
Aroclor 1242		0.075	U	0.010	0.075
Aroclor 1248		0.075	U	0.010	0.075
Aroclor 1254		0.075	U	0.010	0.075
Aroclor 1260		0.075	U	0.010	0.075
Aroclor 1268		0.075	U	0.010	0.075
Aroclor-1262		0.075	U	0.010	0.075
Polychlorinated biphenyls, Total		0.075	U	0.010	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0061 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1020			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	107		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0033 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1035			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.070	U	0.0093	0.070
Aroclor 1221		0.070	U	0.0093	0.070
Aroclor 1232		0.070	U	0.0093	0.070
Aroclor 1242		0.070	U	0.0093	0.070
Aroclor 1248		0.070	U	0.0093	0.070
Aroclor 1254		0.070	U	0.0096	0.070
Aroclor 1260		0.070	U	0.0096	0.070
Aroclor 1268		0.070	U	0.0096	0.070
Aroclor-1262		0.070	U	0.0096	0.070
Polychlorinated biphenyls, Total		0.070	U	0.0096	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0033 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1035			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0047 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1553			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.076	U	0.010	0.076
Aroclor 1221		0.076	U	0.010	0.076
Aroclor 1232		0.076	U	0.010	0.076
Aroclor 1242		0.076	U	0.010	0.076
Aroclor 1248		0.076	U	0.010	0.076
Aroclor 1254		0.076	U	0.010	0.076
Aroclor 1260		0.076	U	0.010	0.076
Aroclor 1268		0.076	U	0.010	0.076
Aroclor-1262		0.076	U	0.010	0.076
Polychlorinated biphenyls, Total		0.076	U	0.010	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	104		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0047 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1553			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	99		35 - 150

Client: AKRF Inc Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8 Date Sampled: 08/01/2017 1235
Client Matrix: Solid % Moisture: 6.7 Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0133 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1607			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.072	U	0.0095	0.072
Aroclor 1221		0.072	U	0.0095	0.072
Aroclor 1232		0.072	U	0.0095	0.072
Aroclor 1242		0.072	U	0.0095	0.072
Aroclor 1248		0.072	U	0.0095	0.072
Aroclor 1254		0.072	U	0.0099	0.072
Aroclor 1260		0.072	U	0.0099	0.072
Aroclor 1268		0.072	U	0.0099	0.072
Aroclor-1262		0.072	U	0.0099	0.072
Polychlorinated biphenyls, Total		0.072	U	0.0099	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	96		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-16(10-12')**

Lab Sample ID: 460-138369-8
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0133 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1607			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	92		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-17(1-3')**

Lab Sample ID: 460-138369-9
Client Matrix: Solid
% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0085 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1622			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.074	U	0.0098	0.074
Aroclor 1221		0.074	U	0.0098	0.074
Aroclor 1232		0.074	U	0.0098	0.074
Aroclor 1242		0.074	U	0.0098	0.074
Aroclor 1248		0.074	U	0.0098	0.074
Aroclor 1254		0.074	U	0.010	0.074
Aroclor 1260		0.074	U	0.010	0.074
Aroclor 1268		0.074	U	0.010	0.074
Aroclor-1262		0.074	U	0.010	0.074
Polychlorinated biphenyls, Total		0.074	U	0.010	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0085 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1622			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	102		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1636			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.072	U	0.0096	0.072
Aroclor 1221		0.072	U	0.0096	0.072
Aroclor 1232		0.072	U	0.0096	0.072
Aroclor 1242		0.072	U	0.0096	0.072
Aroclor 1248		0.072	U	0.0096	0.072
Aroclor 1254		0.072	U	0.0099	0.072
Aroclor 1260		0.072	U	0.0099	0.072
Aroclor 1268		0.072	U	0.0099	0.072
Aroclor-1262		0.072	U	0.0099	0.072
Polychlorinated biphenyls, Total		0.072	U	0.0099	0.072

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-17(10-12')**

Lab Sample ID: 460-138369-10
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454071	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-453866	Initial Weight/Volume:	+15.0013 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/04/2017 1636			Injection Volume:	1 uL
Prep Date:	08/03/2017 2117			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	100		35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0415 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1540			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0082	0.018
2,4-D		0.018	U	0.0082	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	132		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(1-3')**

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0415 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1540			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	119		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0257 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1555			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0084	0.018
2,4-D		0.018	U	0.0084	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	115		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2
Client Matrix: Solid
% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0257 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1555			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	111		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0296 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1609			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0088	0.019
2,4-D		0.019	U	0.0088	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	128		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-14(1-3')**

Lab Sample ID: 460-138369-3
Client Matrix: Solid
% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0296 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1609			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	114		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0372 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1624			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.022	U	0.010	0.022
2,4-D		0.022	U	0.010	0.022
Silvex (2,4,5-TP)		0.022	U	0.015	0.022

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	136		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-14(10-12')**

Lab Sample ID: 460-138369-4
Client Matrix: Solid
% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0372 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1624			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0408 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1639			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0088	0.019
2,4-D		0.019	U	0.0088	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	127		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0408 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1639			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	114		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0307 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1654			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0081	0.018
2,4-D		0.018	U	0.0081	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	129		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-15(10-12')**

Lab Sample ID: 460-138369-6
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0307 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1654			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	112		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0193 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1708			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0088	0.019
2,4-D		0.019	U	0.0088	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	136		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-16(1-3')**

Lab Sample ID: 460-138369-7
Client Matrix: Solid
% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0193 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1708			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	116		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-16(10-12')**

Lab Sample ID: 460-138369-8
Client Matrix: Solid

% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0227 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1723			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0084	0.018
2,4-D		0.018	U	0.0084	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	119		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-16(10-12')**

Lab Sample ID: 460-138369-8
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 08/01/2017 1235
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0227 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1723			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	110		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0281 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1738			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0086	0.019
2,4-D		0.019	U	0.0086	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	118		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0281 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1738			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	115		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10
Client Matrix: Solid

% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0348 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1753			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0084	0.018
2,4-D		0.018	U	0.0084	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	137		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: **SB-17(10-12')**

Lab Sample ID: 460-138369-10
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0348 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1753			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	110		80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(1-3')

Lab Sample ID: 460-138369-1
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 08/01/2017 0855
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453639	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.06 g
Analysis Date:	08/03/2017 1254			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0148				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.0	U	0.47	4.0
Arsenic		1.7	J	0.73	3.0
Barium		25.6	J	3.2	39.6
Beryllium		0.27	J	0.046	0.40
Cadmium		0.79	U	0.12	0.79
Chromium		14.7		0.55	2.0
Cobalt		8.4	J	1.1	9.9
Copper		15.7		1.1	4.9
Lead		8.8		0.60	2.0
Manganese		171		0.31	3.0
Nickel		47.2		0.75	7.9
Selenium		4.0	U	1.2	4.0
Silver		2.0	U	0.30	2.0
Thallium		4.0	U	1.2	4.0
Vanadium		17.7		1.2	9.9
Zinc		27.8		0.51	5.9

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/04/2017 1017			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.020		0.011	0.017

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 460-138369-2
Client Matrix: Solid

% Moisture: 7.7

Date Sampled: 08/01/2017 0910
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453639	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.04 g
Analysis Date:	08/03/2017 1258			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0148				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.50	4.2
Arsenic		3.1		0.77	3.1
Barium		59.0		3.4	41.7
Beryllium		0.51		0.048	0.42
Cadmium		0.83	U	0.12	0.83
Chromium		23.2		0.58	2.1
Cobalt		7.9	J	1.2	10.4
Copper		33.4		1.2	5.2
Lead		13.8		0.63	2.1
Manganese		460		0.32	3.1
Nickel		38.6		0.79	8.3
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		26.2		1.2	10.4
Zinc		46.8		0.54	6.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	08/04/2017 1018			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017	U	0.011	0.017

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/01/2017 1020
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.01 g
Analysis Date:	08/03/2017 1340			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.5	U	0.54	4.5
Arsenic		3.0	J	0.83	3.4
Barium		59.2		3.6	44.9
Beryllium		0.57		0.052	0.45
Cadmium		0.90	U	0.13	0.90
Chromium		13.1		0.62	2.2
Cobalt		5.4	J	1.3	11.2
Copper		18.4		1.3	5.6
Lead		34.8		0.68	2.2
Manganese		465		0.35	3.4
Nickel		36.3		0.85	9.0
Selenium		4.5	U	1.4	4.5
Silver		2.2	U	0.34	2.2
Thallium		4.5	U	1.3	4.5
Vanadium		14.6		1.3	11.2
Zinc		42.9		0.58	6.7

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/04/2017 1020			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.025		0.012	0.019

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-14(10-12')

Lab Sample ID: 460-138369-4
Client Matrix: Solid

% Moisture: 21.9

Date Sampled: 08/01/2017 1030
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.05 g
Analysis Date:	08/03/2017 1344			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.9	U	0.59	4.9
Arsenic		3.0	J	0.90	3.7
Barium		38.4	J	3.9	48.8
Beryllium		0.52		0.056	0.49
Cadmium		0.98	U	0.15	0.98
Chromium		25.2		0.68	2.4
Cobalt		14.7		1.4	12.2
Copper		12.1		1.4	6.1
Lead		6.5		0.74	2.4
Manganese		550		0.38	3.7
Nickel		102		0.93	9.8
Selenium		4.9	U	1.5	4.9
Silver		2.4	U	0.37	2.4
Thallium		4.9	U	1.4	4.9
Vanadium		20.3		1.5	12.2
Zinc		39.4		0.63	7.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/04/2017 1036			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.021	U	0.014	0.021

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5
Client Matrix: Solid

% Moisture: 11.1

Date Sampled: 08/01/2017 1055
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.09 g
Analysis Date:	08/03/2017 1348			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.1	U	0.50	4.1
Arsenic		2.8	J	0.76	3.1
Barium		35.1	J	3.3	41.3
Beryllium		0.27	J	0.047	0.41
Cadmium		0.83	U	0.12	0.83
Chromium		11.8		0.57	2.1
Cobalt		5.5	J	1.2	10.3
Copper		19.8		1.2	5.2
Lead		47.6		0.62	2.1
Manganese		256		0.32	3.1
Nickel		32.5		0.78	8.3
Selenium		4.1	U	1.2	4.1
Silver		2.1	U	0.31	2.1
Thallium		4.1	U	1.2	4.1
Vanadium		15.6		1.2	10.3
Zinc		52.0		0.53	6.2

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 1037			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.028		0.012	0.019

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-15(10-12')

Lab Sample ID: 460-138369-6
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 08/01/2017 1110
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.03 g
Analysis Date:	08/03/2017 1403			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.1	U	0.49	4.1
Arsenic		1.4	J	0.75	3.0
Barium		8.9	J	3.3	40.5
Beryllium		0.21	J	0.047	0.41
Cadmium		0.81	U	0.12	0.81
Chromium		8.5		0.56	2.0
Cobalt		4.4	J	1.2	10.1
Copper		5.8		1.1	5.1
Lead		2.2		0.61	2.0
Manganese		136		0.31	3.0
Nickel		22.6		0.77	8.1
Selenium		4.1	U	1.2	4.1
Silver		2.0	U	0.31	2.0
Thallium		4.1	U	1.2	4.1
Vanadium		8.7	J	1.2	10.1
Zinc		14.7		0.52	6.1

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	08/04/2017 1039			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017	U	0.011	0.017

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7
Client Matrix: Solid

% Moisture: 11.7

Date Sampled: 08/01/2017 1200
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.08 g
Analysis Date:	08/03/2017 1407			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.50	4.2
Arsenic		83.5		0.78	3.1
Barium		208		3.4	41.9
Beryllium		0.39	J	0.048	0.42
Cadmium		0.26	J	0.12	0.84
Chromium		14.4		0.58	2.1
Cobalt		5.1	J	1.2	10.5
Copper		49.9		1.2	5.2
Lead		963		0.63	2.1
Manganese		377		0.33	3.1
Nickel		28.7		0.80	8.4
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		17.0		1.2	10.5
Zinc		183		0.54	6.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/04/2017 1041			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.13		0.012	0.019

Client: AKRF Inc | Job Number: 460-138369-1

Client Sample ID: SB-16(10-12')

Lab Sample ID: 460-138369-8 | Date Sampled: 08/01/2017 1235
Client Matrix: Solid | % Moisture: 6.7 | Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.06 g
Analysis Date:	08/03/2017 1411			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.0	U	0.49	4.0
Arsenic		2.4	J	0.75	3.0
Barium		20.9	J	3.3	40.5
Beryllium		0.37	J	0.047	0.40
Cadmium		0.81	U	0.12	0.81
Chromium		14.1		0.56	2.0
Cobalt		5.7	J	1.2	10.1
Copper		7.2		1.1	5.1
Lead		4.8		0.61	2.0
Manganese		251		0.31	3.0
Nickel		16.5		0.77	8.1
Selenium		4.0	U	1.2	4.0
Silver		2.0	U	0.31	2.0
Thallium		4.0	U	1.2	4.0
Vanadium		15.2		1.2	10.1
Zinc		25.8		0.52	6.1

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 1046			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.012	0.018

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9
Client Matrix: Solid

% Moisture: 9.2

Date Sampled: 08/01/2017 1345
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.04 g
Analysis Date:	08/03/2017 1415			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.51	4.2
Arsenic		3.7		0.78	3.2
Barium		78.1		3.4	42.4
Beryllium		0.41	J	0.049	0.42
Cadmium		0.85	U	0.13	0.85
Chromium		11.4		0.59	2.1
Cobalt		5.1	J	1.2	10.6
Copper		20.7		1.2	5.3
Lead		33.8		0.64	2.1
Manganese		195		0.33	3.2
Nickel		15.0		0.80	8.5
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		20.9		1.3	10.6
Zinc		147		0.55	6.4

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/04/2017 1048			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.038		0.012	0.018

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10
Client Matrix: Solid
% Moisture: 7.1

Date Sampled: 08/01/2017 1350
Date Received: 08/02/2017 1300

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-453753	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0			Initial Weight/Volume:	1.02 g
Analysis Date:	08/03/2017 1419			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		4.2	U	0.51	4.2
Arsenic		2.0	J	0.78	3.2
Barium		16.8	J	3.4	42.2
Beryllium		0.27	J	0.049	0.42
Cadmium		0.84	U	0.13	0.84
Chromium		15.5		0.59	2.1
Cobalt		9.2	J	1.2	10.6
Copper		6.5		1.2	5.3
Lead		2.6		0.64	2.1
Manganese		205		0.33	3.2
Nickel		58.9		0.80	8.4
Selenium		4.2	U	1.3	4.2
Silver		2.1	U	0.32	2.1
Thallium		4.2	U	1.2	4.2
Vanadium		11.6		1.3	10.6
Zinc		20.3		0.55	6.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	08/04/2017 1049			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017	U	0.011	0.017

Client: AKRF Inc

Job Number: 460-138369-1

Client Sample ID: GW-15

Lab Sample ID: 460-138369-14
Client Matrix: Water

Date Sampled: 08/01/2017 1435
Date Received: 08/02/2017 1300

6020A Metals (ICP/MS)

Analysis Method:	6020A	Analysis Batch:	460-454088	Instrument ID:	ICPMS3
Prep Method:	3010A	Prep Batch:	460-453962	Lab File ID:	147SMPL.d
Dilution:	2.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/04/2017 1820			Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0839				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	2.0	U	0.62	2.0
Arsenic	8.9		0.64	2.0
Barium	45.6		1.2	4.0
Beryllium	0.85		0.24	0.80
Cadmium	2.0	U	0.71	2.0
Chromium	16.4		1.3	4.0
Cobalt	6.6		1.3	4.0
Copper	14.6		1.4	4.0
Lead	7.8		0.38	1.2
Manganese	674		2.5	8.0
Nickel	19.3		1.4	4.0
Selenium	10.0	U	0.73	10.0
Silver	38.1		1.3	2.0
Thallium	0.80	U	0.26	0.80
Vanadium	14.9		1.9	4.0
Zinc	61.4		7.0	16.0

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	460-454101	Instrument ID:	LEEMAN6
Prep Method:	7470A	Prep Batch:	460-454026	Lab File ID:	454026hg1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/04/2017 1445			Final Weight/Volume:	30 mL
Prep Date:	08/04/2017 1218				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.17	0.20

General Chemistry

Client Sample ID: **SB-1(1-3')**

Lab Sample ID: 460-138369-1 Date Sampled: 08/01/2017 0855
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	95.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-1(10-12')**

Lab Sample ID: 460-138369-2 Date Sampled: 08/01/2017 0910
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	92.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-14(1-3')

Lab Sample ID: 460-138369-3 Date Sampled: 08/01/2017 1020
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	88.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-14(10-12')**

Lab Sample ID: 460-138369-4 Date Sampled: 08/01/2017 1030
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	21.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	78.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-15(1-3')

Lab Sample ID: 460-138369-5 Date Sampled: 08/01/2017 1055
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	88.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-15(10-12')**

Lab Sample ID: 460-138369-6 Date Sampled: 08/01/2017 1110
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	95.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-16(1-3')

Lab Sample ID: 460-138369-7 Date Sampled: 08/01/2017 1200
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	88.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-16(10-12')**

Lab Sample ID: 460-138369-8 Date Sampled: 08/01/2017 1235
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	93.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-17(1-3')

Lab Sample ID: 460-138369-9 Date Sampled: 08/01/2017 1345
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	90.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-17(10-12')

Lab Sample ID: 460-138369-10 Date Sampled: 08/01/2017 1350
Client Matrix: Solid Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	92.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-1WC**

Lab Sample ID: 460-138369-11 Date Sampled: 08/01/2017 0900
Client Matrix: Solid % Moisture: 8.3 Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium, hexavalent	2.2	U	mg/Kg	0.43	2.2	1.0	7196A
Analysis Batch: 460-454349	Analysis Date: 08/06/2017 1152						DryWt Corrected: Y
Prep Batch: 460-454251	Prep Date: 08/05/2017 1744						
Cyanide, Total	1.0	U	mg/Kg	0.49	1.0	1.0	9012B
Analysis Batch: 480-371103	Analysis Date: 08/08/2017 1411						DryWt Corrected: Y
Prep Batch: 480-371031	Prep Date: 08/08/2017 1034						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	91.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-15WC

Lab Sample ID: 460-138369-12 Date Sampled: 08/01/2017 1100
Client Matrix: Solid % Moisture: 13.8 Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium, hexavalent	2.3	U	mg/Kg	0.46	2.3	1.0	7196A
Analysis Batch: 460-454349	Analysis Date: 08/06/2017 1152						DryWt Corrected: Y
Prep Batch: 460-454251	Prep Date: 08/05/2017 1744						
Cyanide, Total	1.1	U	mg/Kg	0.55	1.1	1.0	9012B
Analysis Batch: 480-371297	Analysis Date: 08/09/2017 1244						DryWt Corrected: Y
Prep Batch: 480-371235	Prep Date: 08/09/2017 0850						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	86.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-17WC

Lab Sample ID: 460-138369-13 Date Sampled: 08/01/2017 1340
Client Matrix: Solid % Moisture: 9.6 Date Received: 08/02/2017 1300

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium, hexavalent	2.2	U	mg/Kg	0.43	2.2	1.0	7196A
Analysis Batch: 460-454349	Analysis Date: 08/06/2017 1152						DryWt Corrected: Y
Prep Batch: 460-454251	Prep Date: 08/05/2017 1744						
Cyanide, Total	0.69	J	mg/Kg	0.52	1.1	1.0	9012B
Analysis Batch: 480-371297	Analysis Date: 08/09/2017 1240						DryWt Corrected: Y
Prep Batch: 480-371235	Prep Date: 08/09/2017 0850						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N
Percent Solids	90.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454553	Analysis Date: 08/07/2017 1241						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: AKRF Inc Job Number: 460-138369-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	LCS or LCSD is outside acceptance limits.
	*	MS or MSD is outside acceptance limits.
	B	The analyte was found in an associated blank, as well as in the sample.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	MS or MSD is outside acceptance limits.
	*	Surrogate is outside acceptance limits.
	A	The tentatively identified compound is a suspected aldol-condensation product.
	N	This flag indicates the presumptive evidence of a compound.
GC VOA		
	U	Analyzed for but not detected.
GC Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	*	MS or MSD is outside acceptance limits.

DATA REPORTING QUALIFIERS

Client: AKRF Inc Job Number: 460-138369-1

Lab Section	Qualifier	Description
Metals		
	U	Indicates analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Sample result is greater than the MDL but below the CRDL
	N	Spiked sample recovery is not within control limits.
General Chemistry		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

QUALITY CONTROL RESULTS

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-453597					
460-138369-2	SB-1(10-12')	T	Solid	5035	
460-138369-3	SB-14(1-3')	T	Solid	5035	
460-138369-6	SB-15(10-12')	T	Solid	5035	
460-138369-7	SB-16(1-3')	T	Solid	5035	
460-138369-9	SB-17(1-3')	T	Solid	5035	
Prep Batch: 460-453619					
LB3 460-453619/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	5035	
460-138369-1	SB-1(1-3')	T	Solid	5035	
460-138369-4	SB-14(10-12')	T	Solid	5035	
460-138369-5	SB-15(1-3')	T	Solid	5035	
460-138369-8	SB-16(10-12')	T	Solid	5035	
460-138369-10	SB-17(10-12')	T	Solid	5035	
Analysis Batch:460-454314					
LCS 460-454314/4	Lab Control Sample	T	Water	8260C	
MB 460-454314/7	Method Blank	T	Water	8260C	
460-138369-14	GW-15	T	Water	8260C	
460-138369-14MS	Matrix Spike	T	Water	8260C	
460-138369-14MSD	Matrix Spike Duplicate	T	Water	8260C	
460-138369-15TB	Trip Blank	T	Water	8260C	
Analysis Batch:460-454365					
LCS 460-454365/3	Lab Control Sample	T	Solid	8260C	
LCSD 460-454365/4	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-454365/7	Method Blank	T	Solid	8260C	
LB3 460-453619/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	8260C	460-453619
460-138369-2	SB-1(10-12')	T	Solid	8260C	460-453597
460-138369-3	SB-14(1-3')	T	Solid	8260C	460-453597
460-138369-4	SB-14(10-12')	T	Solid	8260C	460-453619
460-138369-5	SB-15(1-3')	T	Solid	8260C	460-453619
460-138369-6	SB-15(10-12')	T	Solid	8260C	460-453597
460-138369-8	SB-16(10-12')	T	Solid	8260C	460-453619
Analysis Batch:460-454638					
LCS 460-454638/3	Lab Control Sample	T	Solid	8260C	
LCSD 460-454638/4	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-454638/7	Method Blank	T	Solid	8260C	
460-138369-7	SB-16(1-3')	T	Solid	8260C	460-453597
460-138369-9	SB-17(1-3')	T	Solid	8260C	460-453597
460-138369-10	SB-17(10-12')	T	Solid	8260C	460-453619

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:460-454712					
LCS 460-454712/3	Lab Control Sample	T	Solid	8260C	
LCSD 460-454712/4	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-454712/7	Method Blank	T	Solid	8260C	
460-138369-1	SB-1(1-3')	T	Solid	8260C	460-453619

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 460-453875					
LCS 460-453875/2-A	Lab Control Sample	T	Water	3510C	
LCS 460-453875/3-A	Lab Control Sample	T	Water	3510C	
MB 460-453875/1-A	Method Blank	T	Water	3510C	
460-138254-G-1-C MS	Matrix Spike	D	Water	3510C	
460-138254-H-1-D MSD	Matrix Spike Duplicate	D	Water	3510C	
460-138369-14	GW-15	T	Water	3510C	
Prep Batch: 460-453944					
LCS 460-453944/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-453944/3-A	Lab Control Sample	T	Solid	3546	
MB 460-453944/1-A	Method Blank	T	Solid	3546	
460-137947-A-5-C MS	Matrix Spike	T	Solid	3546	
460-137947-A-5-D MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138369-1	SB-1(1-3')	T	Solid	3546	
460-138369-2	SB-1(10-12')	T	Solid	3546	
460-138369-3	SB-14(1-3')	T	Solid	3546	
460-138369-4	SB-14(10-12')	T	Solid	3546	
460-138369-5	SB-15(1-3')	T	Solid	3546	
460-138369-6	SB-15(10-12')	T	Solid	3546	
460-138369-7	SB-16(1-3')	T	Solid	3546	
460-138369-8	SB-16(10-12')	T	Solid	3546	
460-138369-10	SB-17(10-12')	T	Solid	3546	
Analysis Batch:460-453952					
LCS 460-453875/2-A	Lab Control Sample	T	Water	8270D	460-453875
LCS 460-453875/3-A	Lab Control Sample	T	Water	8270D	460-453875
MB 460-453875/1-A	Method Blank	T	Water	8270D	460-453875
460-138254-G-1-C MS	Matrix Spike	D	Water	8270D	460-453875
460-138254-H-1-D MSD	Matrix Spike Duplicate	D	Water	8270D	460-453875
460-138369-14	GW-15	T	Water	8270D	460-453875
Analysis Batch:460-454959					
LCS 460-453944/2-A	Lab Control Sample	T	Solid	8270D	460-453944
LCS 460-453944/3-A	Lab Control Sample	T	Solid	8270D	460-453944
MB 460-453944/1-A	Method Blank	T	Solid	8270D	460-453944
460-137947-A-5-C MS	Matrix Spike	T	Solid	8270D	460-453944
460-137947-A-5-D MSD	Matrix Spike Duplicate	T	Solid	8270D	460-453944
460-138369-1	SB-1(1-3')	T	Solid	8270D	460-453944
460-138369-3	SB-14(1-3')	T	Solid	8270D	460-453944
460-138369-6	SB-15(10-12')	T	Solid	8270D	460-453944
460-138369-7	SB-16(1-3')	T	Solid	8270D	460-453944
460-138369-10	SB-17(10-12')	T	Solid	8270D	460-453944

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:460-455229					
460-138369-2	SB-1(10-12')	T	Solid	8270D	460-453944
460-138369-4	SB-14(10-12')	T	Solid	8270D	460-453944
460-138369-5	SB-15(1-3')	T	Solid	8270D	460-453944
460-138369-8	SB-16(10-12')	T	Solid	8270D	460-453944
Prep Batch: 460-455782					
LCS 460-455782/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-455782/3-A	Lab Control Sample	T	Solid	3546	
MB 460-455782/1-A	Method Blank	T	Solid	3546	
460-138369-9	SB-17(1-3')	T	Solid	3546	
460-139004-A-6-J MS	Matrix Spike	T	Solid	3546	
460-139004-A-6-K MSD	Matrix Spike Duplicate	T	Solid	3546	
Analysis Batch:460-455794					
LCS 460-455782/2-A	Lab Control Sample	T	Solid	8270D	460-455782
LCS 460-455782/3-A	Lab Control Sample	T	Solid	8270D	460-455782
MB 460-455782/1-A	Method Blank	T	Solid	8270D	460-455782
460-138369-9	SB-17(1-3')	T	Solid	8270D	460-455782
460-139004-A-6-J MS	Matrix Spike	T	Solid	8270D	460-455782
460-139004-A-6-K MSD	Matrix Spike Duplicate	T	Solid	8270D	460-455782

Report Basis
D = Dissolved
T = Total

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Prep Batch: 460-453629					
460-138369-11	SB-1WC	T	Solid	5035	
460-138369-12	SB-15WC	T	Solid	5035	
Analysis Batch:460-453807					
LCS 460-453807/2	Lab Control Sample	T	Solid	8015D	
LCSD 460-453807/3	Lab Control Sample Duplicate	T	Solid	8015D	
MB 460-453807/4	Method Blank	T	Solid	8015D	
460-138369-11	SB-1WC	T	Solid	8015D	460-453629
460-138369-12	SB-15WC	T	Solid	8015D	460-453629
Prep Batch: 460-453871					
460-138369-13	SB-17WC	T	Solid	5035	
Analysis Batch:460-454111					
LCS 460-454111/2	Lab Control Sample	T	Solid	8015D	
LCSD 460-454111/3	Lab Control Sample Duplicate	T	Solid	8015D	
MB 460-454111/4	Method Blank	T	Solid	8015D	
460-138369-13	SB-17WC	T	Solid	8015D	460-453871

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-453727					
LCS 460-453727/2-A	Lab Control Sample	T	Solid	3546	
MB 460-453727/1-A	Method Blank	T	Solid	3546	
180-68692-C-1-A MS	Matrix Spike	T	Solid	3546	
180-68692-C-1-B MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138369-11	SB-1WC	T	Solid	3546	
460-138369-12	SB-15WC	T	Solid	3546	
460-138369-13	SB-17WC	T	Solid	3546	
Analysis Batch:460-453817					
LCS 460-453866/2-A	Lab Control Sample	T	Solid	8082A	460-453866
MB 460-453866/1-A	Method Blank	T	Solid	8082A	460-453866
460-138369-1	SB-1(1-3')	T	Solid	8082A	460-453866
460-138369-2	SB-1(10-12')	T	Solid	8082A	460-453866
460-138369-3	SB-14(1-3')	T	Solid	8082A	460-453866
460-138369-4	SB-14(10-12')	T	Solid	8082A	460-453866
460-138369-5	SB-15(1-3')	T	Solid	8082A	460-453866
460-138369-6	SB-15(10-12')	T	Solid	8082A	460-453866
460-138441-A-6-J MS	Matrix Spike	T	Solid	8082A	460-453866
460-138441-A-6-K MSD	Matrix Spike Duplicate	T	Solid	8082A	460-453866
Analysis Batch:460-453820					
LCS 460-453864/2-A	Lab Control Sample	T	Solid	8081B	460-453864
MB 460-453864/1-A	Method Blank	T	Solid	8081B	460-453864
460-138369-1	SB-1(1-3')	T	Solid	8081B	460-453864
460-138369-2	SB-1(10-12')	T	Solid	8081B	460-453864
460-138369-3	SB-14(1-3')	T	Solid	8081B	460-453864
460-138369-4	SB-14(10-12')	T	Solid	8081B	460-453864
460-138369-5	SB-15(1-3')	T	Solid	8081B	460-453864
460-138369-6	SB-15(10-12')	T	Solid	8081B	460-453864
460-138369-7	SB-16(1-3')	T	Solid	8081B	460-453864
460-138369-8	SB-16(10-12')	T	Solid	8081B	460-453864
460-138369-9	SB-17(1-3')	T	Solid	8081B	460-453864
460-138369-10	SB-17(10-12')	T	Solid	8081B	460-453864
460-138441-A-6-G MS	Matrix Spike	T	Solid	8081B	460-453864
460-138441-A-6-H MSD	Matrix Spike Duplicate	T	Solid	8081B	460-453864

Client: AKRF Inc Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-453864					
LCS 460-453864/2-A	Lab Control Sample	T	Solid	3546	
MB 460-453864/1-A	Method Blank	T	Solid	3546	
460-138369-1	SB-1(1-3')	T	Solid	3546	
460-138369-2	SB-1(10-12')	T	Solid	3546	
460-138369-3	SB-14(1-3')	T	Solid	3546	
460-138369-4	SB-14(10-12')	T	Solid	3546	
460-138369-5	SB-15(1-3')	T	Solid	3546	
460-138369-6	SB-15(10-12')	T	Solid	3546	
460-138369-7	SB-16(1-3')	T	Solid	3546	
460-138369-8	SB-16(10-12')	T	Solid	3546	
460-138369-9	SB-17(1-3')	T	Solid	3546	
460-138369-10	SB-17(10-12')	T	Solid	3546	
460-138441-A-6-G MS	Matrix Spike	T	Solid	3546	
460-138441-A-6-H MSD	Matrix Spike Duplicate	T	Solid	3546	
Prep Batch: 460-453866					
LCS 460-453866/2-A	Lab Control Sample	T	Solid	3546	
MB 460-453866/1-A	Method Blank	T	Solid	3546	
460-138369-1	SB-1(1-3')	T	Solid	3546	
460-138369-2	SB-1(10-12')	T	Solid	3546	
460-138369-3	SB-14(1-3')	T	Solid	3546	
460-138369-4	SB-14(10-12')	T	Solid	3546	
460-138369-5	SB-15(1-3')	T	Solid	3546	
460-138369-6	SB-15(10-12')	T	Solid	3546	
460-138369-7	SB-16(1-3')	T	Solid	3546	
460-138369-8	SB-16(10-12')	T	Solid	3546	
460-138369-9	SB-17(1-3')	T	Solid	3546	
460-138369-10	SB-17(10-12')	T	Solid	3546	
460-138441-A-6-J MS	Matrix Spike	T	Solid	3546	
460-138441-A-6-K MSD	Matrix Spike Duplicate	T	Solid	3546	
Analysis Batch:460-453940					
LCS 460-453727/2-A	Lab Control Sample	T	Solid	8015D	460-453727
MB 460-453727/1-A	Method Blank	T	Solid	8015D	460-453727
180-68692-C-1-A MS	Matrix Spike	T	Solid	8015D	460-453727
180-68692-C-1-B MSD	Matrix Spike Duplicate	T	Solid	8015D	460-453727
460-138369-11	SB-1WC	T	Solid	8015D	460-453727
460-138369-12	SB-15WC	T	Solid	8015D	460-453727
460-138369-13	SB-17WC	T	Solid	8015D	460-453727
Analysis Batch:460-454071					
460-138369-7	SB-16(1-3')	T	Solid	8082A	460-453866
460-138369-8	SB-16(10-12')	T	Solid	8082A	460-453866
460-138369-9	SB-17(1-3')	T	Solid	8082A	460-453866
460-138369-10	SB-17(10-12')	T	Solid	8082A	460-453866

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-454105					
LCS 460-454105/2-A	Lab Control Sample	T	Solid	8151A	
MB 460-454105/1-A	Method Blank	T	Solid	8151A	
460-138369-1	SB-1(1-3')	T	Solid	8151A	
460-138369-1MS	Matrix Spike	T	Solid	8151A	
460-138369-1MSD	Matrix Spike Duplicate	T	Solid	8151A	
460-138369-2	SB-1(10-12')	T	Solid	8151A	
460-138369-3	SB-14(1-3')	T	Solid	8151A	
460-138369-4	SB-14(10-12')	T	Solid	8151A	
460-138369-5	SB-15(1-3')	T	Solid	8151A	
460-138369-6	SB-15(10-12')	T	Solid	8151A	
460-138369-7	SB-16(1-3')	T	Solid	8151A	
460-138369-8	SB-16(10-12')	T	Solid	8151A	
460-138369-9	SB-17(1-3')	T	Solid	8151A	
460-138369-10	SB-17(10-12')	T	Solid	8151A	
Analysis Batch:460-454594					
LCS 460-454105/2-A	Lab Control Sample	T	Solid	8151A	460-454105
MB 460-454105/1-A	Method Blank	T	Solid	8151A	460-454105
460-138369-1	SB-1(1-3')	T	Solid	8151A	460-454105
460-138369-1MS	Matrix Spike	T	Solid	8151A	460-454105
460-138369-1MSD	Matrix Spike Duplicate	T	Solid	8151A	460-454105
460-138369-2	SB-1(10-12')	T	Solid	8151A	460-454105
460-138369-3	SB-14(1-3')	T	Solid	8151A	460-454105
460-138369-4	SB-14(10-12')	T	Solid	8151A	460-454105
460-138369-5	SB-15(1-3')	T	Solid	8151A	460-454105
460-138369-6	SB-15(10-12')	T	Solid	8151A	460-454105
460-138369-7	SB-16(1-3')	T	Solid	8151A	460-454105
460-138369-8	SB-16(10-12')	T	Solid	8151A	460-454105
460-138369-9	SB-17(1-3')	T	Solid	8151A	460-454105
460-138369-10	SB-17(10-12')	T	Solid	8151A	460-454105

Report Basis
T = Total

Client: AKRF Inc Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-453639					
LCSSRM 460-453639/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-453639/1-A ^2	Method Blank	T	Solid	3050B	
460-138369-1	SB-1(1-3')	T	Solid	3050B	
460-138369-2	SB-1(10-12')	T	Solid	3050B	
460-138404-A-2-E DU	Duplicate	T	Solid	3050B	
460-138404-A-2-F MS	Matrix Spike	T	Solid	3050B	
Prep Batch: 460-453640					
LCSSRM 460-453640/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-453640/1-A	Method Blank	T	Solid	3050B	
460-138335-A-1-B DU	Duplicate	T	Solid	3050B	
460-138335-A-1-C MS	Matrix Spike	T	Solid	3050B	
460-138369-3	SB-14(1-3')	T	Solid	3050B	
460-138369-4	SB-14(10-12')	T	Solid	3050B	
460-138369-5	SB-15(1-3')	T	Solid	3050B	
460-138369-6	SB-15(10-12')	T	Solid	3050B	
460-138369-7	SB-16(1-3')	T	Solid	3050B	
460-138369-8	SB-16(10-12')	T	Solid	3050B	
460-138369-9	SB-17(1-3')	T	Solid	3050B	
460-138369-10	SB-17(10-12')	T	Solid	3050B	
Analysis Batch:460-453753					
LCSSRM 460-453639/2-A	LCS-Certified Reference Material	T	Solid	6010C	460-453639
MB 460-453639/1-A ^2	Method Blank	T	Solid	6010C	460-453639
LCSSRM 460-453640/2-A	LCS-Certified Reference Material	T	Solid	6010C	460-453640
MB 460-453640/1-A	Method Blank	T	Solid	6010C	460-453640
460-138335-A-1-B DU	Duplicate	T	Solid	6010C	460-453640
460-138335-A-1-C MS	Matrix Spike	T	Solid	6010C	460-453640
460-138369-1	SB-1(1-3')	T	Solid	6010C	460-453639
460-138369-2	SB-1(10-12')	T	Solid	6010C	460-453639
460-138369-3	SB-14(1-3')	T	Solid	6010C	460-453640
460-138369-4	SB-14(10-12')	T	Solid	6010C	460-453640
460-138369-5	SB-15(1-3')	T	Solid	6010C	460-453640
460-138369-6	SB-15(10-12')	T	Solid	6010C	460-453640
460-138369-7	SB-16(1-3')	T	Solid	6010C	460-453640
460-138369-8	SB-16(10-12')	T	Solid	6010C	460-453640
460-138369-9	SB-17(1-3')	T	Solid	6010C	460-453640
460-138369-10	SB-17(10-12')	T	Solid	6010C	460-453640
460-138404-A-2-E DU	Duplicate	T	Solid	6010C	460-453639
460-138404-A-2-F MS	Matrix Spike	T	Solid	6010C	460-453639

Client: AKRF Inc Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-453914					
LCSSRM 460-453914/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-453914/1-A	Method Blank	T	Solid	7471B	
460-138286-A-7-E DU ^3	Duplicate	T	Solid	7471B	
460-138286-F-7-G MS ^3	Matrix Spike	T	Solid	7471B	
460-138369-1	SB-1(1-3')	T	Solid	7471B	
460-138369-2	SB-1(10-12')	T	Solid	7471B	
460-138369-3	SB-14(1-3')	T	Solid	7471B	
Prep Batch: 460-453920					
LCSSRM 460-453920/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-453920/1-A	Method Blank	T	Solid	7471B	
460-138369-4	SB-14(10-12')	T	Solid	7471B	
460-138369-5	SB-15(1-3')	T	Solid	7471B	
460-138369-6	SB-15(10-12')	T	Solid	7471B	
460-138369-7	SB-16(1-3')	T	Solid	7471B	
460-138369-8	SB-16(10-12')	T	Solid	7471B	
460-138369-9	SB-17(1-3')	T	Solid	7471B	
460-138369-10	SB-17(10-12')	T	Solid	7471B	
460-138402-E-1-C DU	Duplicate	T	Solid	7471B	
460-138402-E-1-D MS	Matrix Spike	T	Solid	7471B	
Prep Batch: 460-453962					
LCS 460-453962/2-A ^2	Lab Control Sample	T	Water	3010A	
MB 460-453962/1-A ^2	Method Blank	T	Water	3010A	
460-138254-E-1-B DU ^2	Duplicate	T	Water	3010A	
460-138254-E-1-C MS ^2	Matrix Spike	T	Water	3010A	
460-138369-14	GW-15	T	Water	3010A	

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:460-454006					
LCSSRM 460-453914/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	460-453914
MB 460-453914/1-A	Method Blank	T	Solid	7471B	460-453914
LCSSRM 460-453920/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	460-453920
MB 460-453920/1-A	Method Blank	T	Solid	7471B	460-453920
460-138286-A-7-E DU ^3	Duplicate	T	Solid	7471B	460-453914
460-138286-F-7-G MS ^3	Matrix Spike	T	Solid	7471B	460-453914
460-138369-1	SB-1(1-3')	T	Solid	7471B	460-453914
460-138369-2	SB-1(10-12')	T	Solid	7471B	460-453914
460-138369-3	SB-14(1-3')	T	Solid	7471B	460-453914
460-138369-4	SB-14(10-12')	T	Solid	7471B	460-453920
460-138369-5	SB-15(1-3')	T	Solid	7471B	460-453920
460-138369-6	SB-15(10-12')	T	Solid	7471B	460-453920
460-138369-7	SB-16(1-3')	T	Solid	7471B	460-453920
460-138369-8	SB-16(10-12')	T	Solid	7471B	460-453920
460-138369-9	SB-17(1-3')	T	Solid	7471B	460-453920
460-138369-10	SB-17(10-12')	T	Solid	7471B	460-453920
460-138402-E-1-C DU	Duplicate	T	Solid	7471B	460-453920
460-138402-E-1-D MS	Matrix Spike	T	Solid	7471B	460-453920
Prep Batch: 460-454026					
LCS 460-454026/2-A	Lab Control Sample	T	Water	7470A	
MB 460-454026/1-A	Method Blank	T	Water	7470A	
460-138196-F-4-C DU	Duplicate	T	Water	7470A	
460-138196-F-4-D MS	Matrix Spike	T	Water	7470A	
460-138369-14	GW-15	T	Water	7470A	
Analysis Batch:460-454088					
LCS 460-453962/2-A ^2	Lab Control Sample	T	Water	6020A	460-453962
MB 460-453962/1-A ^2	Method Blank	T	Water	6020A	460-453962
460-138254-E-1-B DU ^2	Duplicate	T	Water	6020A	460-453962
460-138254-E-1-C MS ^2	Matrix Spike	T	Water	6020A	460-453962
460-138369-14	GW-15	T	Water	6020A	460-453962
Analysis Batch:460-454101					
LCS 460-454026/2-A	Lab Control Sample	T	Water	7470A	460-454026
MB 460-454026/1-A	Method Blank	T	Water	7470A	460-454026
460-138196-F-4-C DU	Duplicate	T	Water	7470A	460-454026
460-138196-F-4-D MS	Matrix Spike	T	Water	7470A	460-454026
460-138369-14	GW-15	T	Water	7470A	460-454026

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 480-371031					
LCSSRM 480-371031/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	
MB 480-371031/1-A	Method Blank	T	Solid	9012B	
460-138228-E-1-C MS	Matrix Spike	T	Solid	9012B	
460-138369-11	SB-1WC	T	Solid	9012B	
440-188976-A-2-F DU	Duplicate	T	Solid	9012B	
Analysis Batch:480-371103					
LCSSRM 480-371031/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	480-371031
MB 480-371031/1-A	Method Blank	T	Solid	9012B	480-371031
460-138228-E-1-C MS	Matrix Spike	T	Solid	9012B	480-371031
460-138369-11	SB-1WC	T	Solid	9012B	480-371031
440-188976-A-2-F DU	Duplicate	T	Solid	9012B	480-371031
Prep Batch: 480-371235					
LCSSRM 480-371235/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	
MB 480-371235/1-A	Method Blank	T	Solid	9012B	
460-138369-12	SB-15WC	T	Solid	9012B	
460-138369-13	SB-17WC	T	Solid	9012B	
460-138369-13MS	Matrix Spike	T	Solid	9012B	
460-138369-13MSD	Matrix Spike Duplicate	T	Solid	9012B	
Analysis Batch:480-371297					
LCSSRM 480-371235/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	480-371235
MB 480-371235/1-A	Method Blank	T	Solid	9012B	480-371235
460-138369-12	SB-15WC	T	Solid	9012B	480-371235
460-138369-13	SB-17WC	T	Solid	9012B	480-371235
460-138369-13MS	Matrix Spike	T	Solid	9012B	480-371235
460-138369-13MSD	Matrix Spike Duplicate	T	Solid	9012B	480-371235
Prep Batch: 460-454251					
LCSI 460-454251/3-A	Lab Control Sample Insoluble	T	Solid	3060A	
LCSSRM 460-454251/2-A	LCS-Certified Reference Material	T	Solid	3060A	
MB 460-454251/1-A	Method Blank	T	Solid	3060A	
460-138292-F-7-E DU	Duplicate	T	Solid	3060A	
460-138292-F-7-G MSI	Matrix Spike Insoluble	T	Solid	3060A	
460-138292-F-7-F MSS	Matrix Spike Soluble	T	Solid	3060A	
460-138369-11	SB-1WC	T	Solid	3060A	
460-138369-12	SB-15WC	T	Solid	3060A	
460-138369-13	SB-17WC	T	Solid	3060A	

Client: AKRF Inc

Job Number: 460-138369-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-454349					
LCSI 460-454251/3-A	Lab Control Sample Insoluble	T	Solid	7196A	460-454251
LCSSRM 460-454251/2-A	LCS-Certified Reference Material	T	Solid	7196A	460-454251
MB 460-454251/1-A	Method Blank	T	Solid	7196A	460-454251
460-138292-F-7-E DU	Duplicate	T	Solid	7196A	460-454251
460-138292-F-7-G MSI	Matrix Spike Insoluble	T	Solid	7196A	460-454251
460-138292-F-7-F MSS	Matrix Spike Soluble	T	Solid	7196A	460-454251
460-138369-11	SB-1WC	T	Solid	7196A	460-454251
460-138369-12	SB-15WC	T	Solid	7196A	460-454251
460-138369-13	SB-17WC	T	Solid	7196A	460-454251
Analysis Batch:460-454553					
460-138369-1	SB-1(1-3')	T	Solid	Moisture	
460-138369-2	SB-1(10-12')	T	Solid	Moisture	
460-138369-3	SB-14(1-3')	T	Solid	Moisture	
460-138369-4	SB-14(10-12')	T	Solid	Moisture	
460-138369-5	SB-15(1-3')	T	Solid	Moisture	
460-138369-6	SB-15(10-12')	T	Solid	Moisture	
460-138369-7	SB-16(1-3')	T	Solid	Moisture	
460-138369-8	SB-16(10-12')	T	Solid	Moisture	
460-138369-9	SB-17(1-3')	T	Solid	Moisture	
460-138369-10	SB-17(10-12')	T	Solid	Moisture	
460-138369-11	SB-1WC	T	Solid	Moisture	
460-138369-12	SB-15WC	T	Solid	Moisture	
460-138369-13	SB-17WC	T	Solid	Moisture	
460-138381-A-2 DU	Duplicate	T	Solid	Moisture	

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138369-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	DBFM %Rec	TOL %Rec
460-138369-1	SB-1(1-3')	111	94	100	97
460-138369-2	SB-1(10-12')	105	114	108	109
460-138369-3	SB-14(1-3')	98	104	103	103
460-138369-4	SB-14(10-12')	104	113	106	106
460-138369-5	SB-15(1-3')	101	108	103	106
460-138369-6	SB-15(10-12')	103	117	109	111
460-138369-7	SB-16(1-3')	111	100	101	98
460-138369-8	SB-16(10-12')	104	115	109	109
460-138369-9	SB-17(1-3')	116	102	105	99
460-138369-10	SB-17(10-12')	108	99	99	98
MB 460-454365/7		88	100	95	96
MB 460-454638/7		101	99	100	98
MB 460-454712/7		109	98	100	100
LB3 460-453619/1-A		104	114	108	110
LCS 460-454365/3		101	109	103	107
LCS 460-454638/3		101	101	100	99
LCS 460-454712/3		104	101	100	100
LCSD 460-454365/4		102	110	108	108
LCSD 460-454638/4		107	109	108	107
LCSD 460-454712/4		106	99	102	99

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
BFB = 4-Bromofluorobenzene	67-126
DBFM = Dibromofluoromethane (Surr)	61-149
TOL = Toluene-d8 (Surr)	73-121

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	DBFM %Rec	TOL %Rec
460-138369-14	GW-15	101	89	102	100
460-138369-15	Trip Blank	102	88	102	101
MB 460-454314/7		103	89	103	100
LCS 460-454314/4		99	87	104	101
460-138369-14 MS	GW-15 MS	101	86	100	102
460-138369-14 MSD	GW-15 MSD	99	87	96	104

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	74-132
BFB = 4-Bromofluorobenzene	77-124
DBFM = Dibromofluoromethane (Surr)	72-131
TOL = Toluene-d8 (Surr)	80-120

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPHL %Rec
460-138369-1	SB-1(1-3')	63	69	70	73	75	92
460-138369-2	SB-1(10-12')	79	64	67	70	73	80
460-138369-3	SB-14(1-3')	16	62	54	67	66	87
460-138369-4	SB-14(10-12')	52	55	53	55	58	73
460-138369-5	SB-15(1-3')	70	61	66	67	70	86
460-138369-6	SB-15(10-12')	62	70	71	74	73	90
460-138369-7	SB-16(1-3')	49	60	61	65	62	75
460-138369-8	SB-16(10-12')	35	63	62	68	70	74
460-138369-9	SB-17(1-3')	91	78	79	82	86	83
460-138369-10	SB-17(10-12')	49	66	67	70	72	95
MB 460-453944/1-A		71	77	81	83	82	94
MB 460-455782/1-A		80	79	80	84	83	91
LCS 460-453944/2-A		91	87	87	91	89	99
LCS 460-453944/3-A		78	81	84	87	84	101
LCS 460-455782/2-A		98	86	87	92	92*	99
LCS 460-455782/3-A		95	88	89	95*	92*	105
460-137947-A-5-C MS		64	64	63	64	67	66
460-139004-A-6-J MS		88	85	62	85	73	99
460-137947-A-5-D MSD		82	77	74	78	77	83
460-139004-A-6-K MSD		87	82	58	88	56	101

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol (Surr)	10-103
FBP = 2-Fluorobiphenyl	38-95
2FP = 2-Fluorophenol (Surr)	25-92
NBZ = Nitrobenzene-d5 (Surr)	37-94
PHL = Phenol-d5 (Surr)	32-91
TPHL = Terphenyl-d14 (Surr)	24-109

Client: AKRF Inc

Job Number: 460-138369-1

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPHL %Rec
460-138369-14	GW-15	98	75	41	86	25	108
MB 460-453875/1-A		97	86	43	94	25	103
LCS 460-453875/2-A		101	89	41	91	24	100
LCS 460-453875/3-A		97	83	40	90	23	100

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol (Surr)	26-139
FBP = 2-Fluorobiphenyl	45-107
2FP = 2-Fluorophenol (Surr)	25-58
NBZ = Nitrobenzene-d5 (Surr)	51-108
PHL = Phenol-d5 (Surr)	14-39
TPHL = Terphenyl-d14 (Surr)	40-148

Client: AKRF Inc

Job Number: 460-138369-1

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water Dissolved

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPHL %Rec
460-138254-G-1-C MS		91	85	38	87	23	98
460-138254-H-1-D MSD		98	79	38	82	23	96

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol (Surr)	26-139
FBP = 2-Fluorobiphenyl	45-107
2FP = 2-Fluorophenol (Surr)	25-58
NBZ = Nitrobenzene-d5 (Surr)	51-108
PHL = Phenol-d5 (Surr)	14-39
TPHL = Terphenyl-d14 (Surr)	40-148

Surrogate Recovery Report

8015D Gasoline Range Organics (GRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TFT1 %Rec
460-138369-11	SB-1WC	107
460-138369-12	SB-15WC	105
460-138369-13	SB-17WC	104
MB 460-453807/4		94
MB 460-454111/4		99
LCS 460-453807/2		98
LCS 460-454111/2		93
LCSD 460-453807/3		94
LCSD 460-454111/3		97

Surrogate	Acceptance Limits
TFT = a,a,a-Trifluorotoluene	80-135

Surrogate Recovery Report

8015D Diesel Range Organics (DRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH %Rec
460-138369-11	SB-1WC	66
460-138369-12	SB-15WC	76
460-138369-13	SB-17WC	63
MB 460-453727/1-A		77
LCS 460-453727/2-A		93
180-68692-C-1-A MS		86
180-68692-C-1-B MSD		68

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	25-132

Surrogate Recovery Report

8081B Organochlorine Pesticides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec	TCX1 %Rec	TCX2 %Rec
460-138369-1	SB-1(1-3')	121	118	118	119
460-138369-2	SB-1(10-12')	121	117	117	120
460-138369-3	SB-14(1-3')	118	111	116	114
460-138369-4	SB-14(10-12')	118	118	117	126
460-138369-5	SB-15(1-3')	122	117	120	123
460-138369-6	SB-15(10-12')	114	110	114	112
460-138369-7	SB-16(1-3')	123	116	116	116
460-138369-8	SB-16(10-12')	109	106	107	107
460-138369-9	SB-17(1-3')	115	111	116	114
460-138369-10	SB-17(10-12')	117	113	115	119
MB 460-453864/1-A		116	111	115	113
LCS 460-453864/2-A		113	109	115	113
460-138441-A-6-G MS		112	103	142	104
460-138441-A-6-H MSD		92	100	90	102

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	50-150
TCX = Tetrachloro-m-xylene	47-150

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec
460-138369-1	SB-1(1-3')	122	115
460-138369-2	SB-1(10-12')	115	112
460-138369-3	SB-14(1-3')	113	102
460-138369-4	SB-14(10-12')	111	105
460-138369-5	SB-15(1-3')	112	107
460-138369-6	SB-15(10-12')	110	111
460-138369-7	SB-16(1-3')	104	99
460-138369-8	SB-16(10-12')	96	92
460-138369-9	SB-17(1-3')	110	102
460-138369-10	SB-17(10-12')	106	100
MB 460-453866/1-A		113	108
LCS 460-453866/2-A		104	100
460-138441-A-6-J MS		123	110
460-138441-A-6-K MSD		133	117

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	35-150

Surrogate Recovery Report

8151A Herbicides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCPAA1 %Rec	DCPAA2 %Rec
460-138369-1	SB-1(1-3')	132	119
460-138369-2	SB-1(10-12')	115	111
460-138369-3	SB-14(1-3')	128	114
460-138369-4	SB-14(10-12')	136	109
460-138369-5	SB-15(1-3')	127	114
460-138369-6	SB-15(10-12')	129	112
460-138369-7	SB-16(1-3')	136	116
460-138369-8	SB-16(10-12')	119	110
460-138369-9	SB-17(1-3')	118	115
460-138369-10	SB-17(10-12')	137	110
MB 460-454105/1-A		121	125
LCS 460-454105/2-A		128	130
460-138369-1 MS	SB-1(1-3') MS	124	130
460-138369-1 MSD	SB-1(1-3') MSD	126	133

Surrogate	Acceptance Limits
DCPAA = 2,4-Dichlorophenylacetic acid	80-141

Neutral Leach or MeOH Extraction Blank - Batch: 460-453619

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-453619/1-A	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	460-453619	Lab File ID:	K71666.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	08/07/2017 0559	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2235				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.000796	J	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138369-1

Neutral Leach or MeOH Extraction Blank - Batch: 460-453619

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-453619/1-A	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	460-453619	Lab File ID:	K71666.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	08/07/2017 0559	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	08/02/2017 2235				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.000219	J	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104	78 - 135
4-Bromofluorobenzene	114	67 - 126
Dibromofluoromethane (Surr)	108	61 - 149
Toluene-d8 (Surr)	110	73 - 121

Method Blank TICs- Batch: 460-453619

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Method Blank - Batch: 460-454314

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 460-454314/7	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59309.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0904	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0904				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.28	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.19	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.34	1.0
1,1,2-Trichloroethane	1.0	U	0.080	1.0
1,1-Dichloroethane	1.0	U	0.24	1.0
1,1-Dichloroethene	1.0	U	0.34	1.0
1,2,3-Trichlorobenzene	1.0	U	0.35	1.0
1,2,4-Trichlorobenzene	1.0	U	0.27	1.0
1,2,4-Trimethylbenzene	1.0	U	0.23	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.23	1.0
1,2-Dichlorobenzene	1.0	U	0.22	1.0
1,2-Dichloroethane	1.0	U	0.25	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3,5-Trimethylbenzene	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.33	1.0
1,4-Dichlorobenzene	1.0	U	0.33	1.0
1,4-Dioxane	50	U	8.7	50
2-Butanone (MEK)	5.0	U	2.2	5.0
2-Hexanone	5.0	U	0.72	5.0
4-Isopropyltoluene	1.0	U	0.26	1.0
4-Methyl-2-pentanone (MIBK)	5.0	U	0.63	5.0
Acetone	5.0	U	1.1	5.0
Benzene	1.0	U	0.090	1.0
Bromoform	1.0	U	0.18	1.0
Bromomethane	1.0	U	0.18	1.0
Carbon disulfide	1.0	U	0.22	1.0
Carbon tetrachloride	1.0	U	0.33	1.0
Chlorobenzene	1.0	U	0.24	1.0
Chlorobromomethane	1.0	U	0.30	1.0
Chlorodibromomethane	1.0	U	0.22	1.0
Chloroethane	1.0	U	0.37	1.0
Chloroform	1.0	U	0.22	1.0
Chloromethane	1.0	U	0.22	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.16	1.0
Cyclohexane	1.0	U	0.26	1.0
Dichlorobromomethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.14	1.0
Ethylbenzene	1.0	U	0.30	1.0
Ethylene Dibromide	1.0	U	0.19	1.0
Isopropylbenzene	1.0	U	0.32	1.0
Methyl acetate	5.0	U	0.58	5.0
Methyl tert-butyl ether	1.0	U	0.13	1.0
Methylcyclohexane	1.0	U	0.22	1.0
Methylene Chloride	1.0	U	0.21	1.0

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-454314

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 460-454314/7	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59309.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0904	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0904				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	1.0	U	0.28	1.0
Naphthalene	1.0	U	0.26	1.0
n-Butylbenzene	1.0	U	0.27	1.0
N-Propylbenzene	1.0	U	0.29	1.0
o-Xylene	1.0	U	0.32	1.0
sec-Butylbenzene	1.0	U	0.31	1.0
Styrene	1.0	U	0.17	1.0
tert-Butylbenzene	1.0	U	0.28	1.0
Tetrachloroethene	1.0	U	0.12	1.0
Toluene	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.18	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.15	1.0
Vinyl chloride	1.0	U	0.060	1.0
Xylenes, Total	2.0	U	0.28	2.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	74 - 132
4-Bromofluorobenzene	89	77 - 124
Dibromofluoromethane (Surr)	103	72 - 131
Toluene-d8 (Surr)	100	80 - 120

Method Blank TICs- Batch: 460-454314

Cas Number	Analyte	RT	Est. Result (ug/	Qual
	Tentatively Identified Compound		None	

Lab Control Sample - Batch: 460-454314

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 460-454314/4	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59306.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0742	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0742				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	20.0	19.2	96	75 - 125	
1,1,2,2-Tetrachloroethane	20.0	22.3	111	74 - 120	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	16.5	83	59 - 150	
1,1,2-Trichloroethane	20.0	20.2	101	78 - 120	
1,1-Dichloroethane	20.0	19.9	99	77 - 123	
1,1-Dichloroethene	20.0	15.9	80	74 - 123	
1,2,3-Trichlorobenzene	20.0	20.8	104	78 - 131	
1,2,4-Trichlorobenzene	20.0	21.4	107	80 - 124	
1,2,4-Trimethylbenzene	20.0	22.0	110	78 - 122	
1,2-Dibromo-3-Chloropropane	20.0	21.4	107	55 - 134	
1,2-Dichlorobenzene	20.0	20.8	104	80 - 120	
1,2-Dichloroethane	20.0	18.0	90	76 - 121	
1,2-Dichloropropane	20.0	20.4	102	77 - 123	
1,3,5-Trimethylbenzene	20.0	22.7	113	80 - 120	
1,3-Dichlorobenzene	20.0	20.4	102	80 - 120	
1,4-Dichlorobenzene	20.0	19.9	99	80 - 120	
1,4-Dioxane	400	582	145	10 - 150	
2-Butanone (MEK)	100	95.2	95	64 - 120	
2-Hexanone	100	106	106	71 - 125	
4-Isopropyltoluene	20.0	21.8	109	75 - 122	
4-Methyl-2-pentanone (MIBK)	100	111	111	78 - 124	
Acetone	100	66.5	67	39 - 150	
Benzene	20.0	21.0	105	77 - 121	
Bromoform	20.0	17.2	86	53 - 120	
Bromomethane	20.0	11.9	59	10 - 150	
Carbon disulfide	20.0	17.3	87	69 - 133	
Carbon tetrachloride	20.0	15.7	79	70 - 132	
Chlorobenzene	20.0	20.1	101	80 - 120	
Chlorobromomethane	20.0	16.8	84	77 - 127	
Chlorodibromomethane	20.0	16.9	85	73 - 120	
Chloroethane	20.0	18.0	90	52 - 150	
Chloroform	20.0	20.5	103	80 - 120	
Chloromethane	20.0	17.1	86	56 - 131	
cis-1,2-Dichloroethene	20.0	18.8	94	80 - 120	
cis-1,3-Dichloropropene	20.0	17.9	89	77 - 120	
Cyclohexane	20.0	20.2	101	56 - 150	
Dichlorobromomethane	20.0	18.8	94	76 - 120	
Dichlorodifluoromethane	20.0	14.1	71	50 - 131	
Ethylbenzene	20.0	19.6	98	80 - 120	
Ethylene Dibromide	20.0	18.7	93	80 - 120	
Isopropylbenzene	20.0	21.5	107	80 - 123	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-454314

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 460-454314/4	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59306.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 0742	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 0742				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Methyl acetate	100	102	102	66 - 144	
Methyl tert-butyl ether	20.0	18.2	91	79 - 122	
Methylcyclohexane	20.0	19.7	98	61 - 145	
Methylene Chloride	20.0	19.1	96	77 - 123	
m-Xylene & p-Xylene	20.0	20.2	101	80 - 120	
Naphthalene	20.0	23.1	116	70 - 150	
n-Butylbenzene	20.0	23.2	116	72 - 133	
N-Propylbenzene	20.0	22.1	110	80 - 123	
o-Xylene	20.0	20.0	100	80 - 120	
sec-Butylbenzene	20.0	22.5	113	75 - 128	
Styrene	20.0	21.2	106	80 - 120	
tert-Butylbenzene	20.0	20.5	102	79 - 120	
Tetrachloroethene	20.0	17.5	87	78 - 122	
Toluene	20.0	20.4	102	80 - 120	
trans-1,2-Dichloroethene	20.0	19.0	95	79 - 120	
trans-1,3-Dichloropropene	20.0	16.5	82	76 - 120	
Trichloroethene	20.0	20.8	104	77 - 120	
Trichlorofluoromethane	20.0	16.8	84	71 - 143	
Vinyl chloride	20.0	17.1	86	62 - 138	
Xylenes, Total	40.0	40.1	100	80 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99	74 - 132
4-Bromofluorobenzene	87	77 - 124
Dibromofluoromethane (Surr)	104	72 - 131
Toluene-d8 (Surr)	101	80 - 120

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454314

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	460-138369-14	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59317.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 1244			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 1244				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138369-14	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59318.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 1310			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 1310				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroethane	95	93	75 - 125	2	30		
1,1,2,2-Tetrachloroethane	107	110	74 - 120	3	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	68	65	59 - 150	4	30		
1,1,2-Trichloroethane	99	100	78 - 120	1	30		
1,1-Dichloroethane	97	97	77 - 123	1	30		
1,1-Dichloroethene	79	82	74 - 123	3	30		
1,2,3-Trichlorobenzene	94	99	78 - 131	5	30		
1,2,4-Trichlorobenzene	94	104	80 - 124	11	30		
1,2,4-Trimethylbenzene	115	115	78 - 122	0	30		
1,2-Dibromo-3-Chloropropane	103	105	55 - 134	2	30		
1,2-Dichlorobenzene	101	103	80 - 120	2	30		
1,2-Dichloroethane	86	86	76 - 121	0	30		
1,2-Dichloropropane	96	98	77 - 123	2	30		
1,3,5-Trimethylbenzene	113	115	80 - 120	2	30		
1,3-Dichlorobenzene	97	100	80 - 120	3	30		
1,4-Dichlorobenzene	96	99	80 - 120	3	30		
1,4-Dioxane	95	143	10 - 150	41	30		*
2-Butanone (MEK)	87	95	64 - 120	9	30		
2-Hexanone	98	110	71 - 125	12	30		
4-Isopropyltoluene	105	108	75 - 122	4	30		
4-Methyl-2-pentanone (MIBK)	102	112	78 - 124	9	30		
Acetone	58	68	39 - 150	15	30		
Benzene	104	107	77 - 121	3	30		
Bromoform	83	82	53 - 120	1	30		
Bromomethane	45	52	10 - 150	14	30		
Carbon disulfide	84	86	69 - 133	2	30		
Carbon tetrachloride	94	82	70 - 132	14	30		
Chlorobenzene	98	100	80 - 120	2	30		
Chlorobromomethane	91	87	77 - 127	5	30		
Chlorodibromomethane	91	91	73 - 120	0	30		
Chloroethane	87	86	52 - 150	2	30		
Chloroform	98	95	80 - 120	3	30		

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454314

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	460-138369-14	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59317.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 1244			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 1244				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138369-14	Analysis Batch:	460-454314	Instrument ID:	CVOAMS8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J59318.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/06/2017 1310			Final Weight/Volume:	5 mL
Prep Date:	08/06/2017 1310				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chloromethane	77	78	56 - 131	1	30		
cis-1,2-Dichloroethene	94	93	80 - 120	1	30		
cis-1,3-Dichloropropene	98	97	77 - 120	0	30		
Cyclohexane	85	79	56 - 150	7	30		
Dichlorobromomethane	94	93	76 - 120	2	30		
Dichlorodifluoromethane	41	40	50 - 131	3	30	*	*
Ethylbenzene	97	101	80 - 120	4	30		
Ethylene Dibromide	99	98	80 - 120	1	30		
Isopropylbenzene	104	107	80 - 123	4	30		
Methyl acetate	95	95	66 - 144	1	30		
Methyl tert-butyl ether	97	87	79 - 122	11	30		
Methylcyclohexane	75	73	61 - 145	2	30		
Methylene Chloride	91	92	77 - 123	1	30		
m-Xylene & p-Xylene	111	104	80 - 120	7	30		
Naphthalene	111	113	70 - 150	1	30		
n-Butylbenzene	109	114	72 - 133	4	30		
N-Propylbenzene	109	112	80 - 123	3	30		
o-Xylene	101	101	80 - 120	0	30		
sec-Butylbenzene	108	111	75 - 128	2	30		
Styrene	102	103	80 - 120	0	30		
tert-Butylbenzene	104	106	79 - 120	2	30		
Tetrachloroethene	88	92	78 - 122	4	30		
Toluene	106	107	80 - 120	1	30		
trans-1,2-Dichloroethene	95	97	79 - 120	3	30		
trans-1,3-Dichloropropene	94	92	76 - 120	1	30		
Trichloroethene	100	101	77 - 120	1	30		
Trichlorofluoromethane	70	70	71 - 143	0	30	*	*
Vinyl chloride	84	85	62 - 138	2	30		
Xylenes, Total	106	103	80 - 120	4	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	99	74 - 132

Client: AKRF Inc

Job Number: 460-138369-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	86	87	77 - 124
Dibromofluoromethane (Surr)	100	96	72 - 131
Toluene-d8 (Surr)	102	104	80 - 120

Method Blank - Batch: 460-454365

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454365/7	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71656.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 0203	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.0010	U	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-454365

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454365/7	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71656.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 0203	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88	78 - 135
4-Bromofluorobenzene	100	67 - 126
Dibromofluoromethane (Surr)	95	61 - 149
Toluene-d8 (Surr)	96	73 - 121

Method Blank TICs- Batch: 460-454365

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454365

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454365/3	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71652.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 0028	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454365/4	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71653.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 0052	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	98	95	80 - 125	4	30		
1,1,2,2-Tetrachloroethane	89	87	72 - 131	2	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	97	94	78 - 132	3	30		
1,1,2-Trichloroethane	99	91	76 - 124	8	30		
1,1-Dichloroethane	108	105	80 - 124	3	30		
1,1-Dichloroethene	100	100	79 - 132	0	30		
1,2,3-Trichlorobenzene	96	93	75 - 123	3	30		
1,2,4-Trichlorobenzene	91	90	74 - 124	1	30		
1,2,4-Trimethylbenzene	87	85	77 - 123	3	30		
1,2-Dibromo-3-Chloropropane	102	104	65 - 129	2	30		
1,2-Dichlorobenzene	94	94	80 - 121	1	30		
1,2-Dichloroethane	92	89	68 - 120	3	30		
1,2-Dichloropropane	108	104	77 - 124	4	30		
1,3,5-Trimethylbenzene	87	85	76 - 126	2	30		
1,3-Dichlorobenzene	86	87	79 - 124	1	30		
1,4-Dichlorobenzene	88	86	79 - 121	2	30		
1,4-Dioxane	110	117	67 - 150	6	30		
2-Butanone (MEK)	82	82	61 - 140	0	30		
2-Hexanone	89	84	78 - 120	7	30		
4-Isopropyltoluene	88	86	79 - 125	3	30		
4-Methyl-2-pentanone (MIBK)	91	87	80 - 120	4	30		
Acetone	79	78	75 - 120	1	30		
Benzene	104	102	75 - 127	2	30		
Bromoform	91	86	19 - 150	5	30		
Bromomethane	88	93	59 - 136	6	30		
Carbon disulfide	99	95	74 - 130	4	30		
Carbon tetrachloride	92	88	77 - 138	5	30		
Chlorobenzene	97	90	80 - 120	7	30		
Chlorobromomethane	91	93	80 - 125	2	30		
Chlorodibromomethane	89	86	67 - 143	4	30		
Chloroethane	90	94	50 - 139	5	30		
Chloroform	95	92	80 - 122	3	30		
Chloromethane	112	117	66 - 128	4	30		
cis-1,2-Dichloroethene	95	91	80 - 123	4	30		
cis-1,3-Dichloropropene	100	94	75 - 124	6	30		

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454365

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454365/3	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71652.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 0028	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454365/4	Analysis Batch:	460-454365	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71653.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 0052	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	98	93	67 - 135	5	30		
Dichlorobromomethane	87	83	76 - 129	5	30		
Dichlorodifluoromethane	112	112	72 - 127	1	30		
Ethylbenzene	93	88	79 - 124	6	30		
Ethylene Dibromide	94	90	80 - 122	5	30		
Isopropylbenzene	98	93	80 - 125	4	30		
Methyl acetate	124	123	73 - 123	1	30	*	
Methyl tert-butyl ether	100	98	80 - 120	2	30		
Methylcyclohexane	96	91	71 - 137	5	30		
Methylene Chloride	97	95	79 - 128	2	30		
m-Xylene & p-Xylene	96	92	79 - 121	4	30		
Naphthalene	94	96	76 - 120	2	30		
n-Butylbenzene	89	87	75 - 131	2	30		
N-Propylbenzene	91	88	75 - 132	4	30		
o-Xylene	97	91	79 - 123	7	30		
sec-Butylbenzene	87	86	78 - 130	2	30		
Styrene	97	92	78 - 123	6	30		
tert-Butylbenzene	88	85	77 - 123	3	30		
Tetrachloroethene	96	94	73 - 130	2	30		
Toluene	96	92	75 - 122	5	30		
trans-1,2-Dichloroethene	91	90	80 - 129	0	30		
trans-1,3-Dichloropropene	94	89	72 - 121	5	30		
Trichloroethene	94	92	79 - 122	3	30		
Trichlorofluoromethane	103	109	68 - 136	5	30		
Vinyl chloride	110	117	70 - 134	6	30		
Xylenes, Total	96	91	79 - 122	6	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	102	78 - 135
4-Bromofluorobenzene	109	110	67 - 126
Dibromofluoromethane (Surr)	103	108	61 - 149
Toluene-d8 (Surr)	107	108	73 - 121

Method Blank - Batch: 460-454638

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454638/7	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57380.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 2006	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.0010	U	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-454638

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454638/7	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57380.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 2006	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	78 - 135
4-Bromofluorobenzene	99	67 - 126
Dibromofluoromethane (Surr)	100	61 - 149
Toluene-d8 (Surr)	98	73 - 121

Method Blank TICs- Batch: 460-454638

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454638

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454638/3	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57376.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 1822	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454638/4	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57377.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 1845	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	114	109	80 - 125	4	30		
1,1,2,2-Tetrachloroethane	97	97	72 - 131	0	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	117	117	78 - 132	0	30		
1,1,2-Trichloroethane	98	96	76 - 124	2	30		
1,1-Dichloroethane	110	106	80 - 124	3	30		
1,1-Dichloroethene	114	111	79 - 132	3	30		
1,2,3-Trichlorobenzene	98	96	75 - 123	2	30		
1,2,4-Trichlorobenzene	103	102	74 - 124	1	30		
1,2,4-Trimethylbenzene	112	109	77 - 123	3	30		
1,2-Dibromo-3-Chloropropane	82	84	65 - 129	3	30		
1,2-Dichlorobenzene	104	101	80 - 121	3	30		
1,2-Dichloroethane	104	99	68 - 120	5	30		
1,2-Dichloropropane	105	99	77 - 124	6	30		
1,3,5-Trimethylbenzene	112	108	76 - 126	4	30		
1,3-Dichlorobenzene	106	103	79 - 124	3	30		
1,4-Dichlorobenzene	105	103	79 - 121	2	30		
1,4-Dioxane	108	101	67 - 150	7	30		
2-Butanone (MEK)	97	92	61 - 140	5	30		
2-Hexanone	102	98	78 - 120	3	30		
4-Isopropyltoluene	116	113	79 - 125	3	30		
4-Methyl-2-pentanone (MIBK)	106	101	80 - 120	4	30		
Acetone	96	94	75 - 120	2	30		
Benzene	105	100	75 - 127	5	30		
Bromoform	84	79	19 - 150	6	30		
Bromomethane	115	108	59 - 136	6	30		
Carbon disulfide	116	111	74 - 130	4	30		
Carbon tetrachloride	112	106	77 - 138	5	30		
Chlorobenzene	105	100	80 - 120	5	30		
Chlorobromomethane	99	98	80 - 125	1	30		
Chlorodibromomethane	90	87	67 - 143	4	30		
Chloroethane	124	115	50 - 139	8	30		
Chloroform	104	102	80 - 122	2	30		
Chloromethane	110	102	66 - 128	7	30		
cis-1,2-Dichloroethene	103	100	80 - 123	3	30		
cis-1,3-Dichloropropene	101	96	75 - 124	5	30		

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454638

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454638/3	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57376.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 1822	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454638/4	Analysis Batch:	460-454638	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57377.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/07/2017 1845	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	120	115	67 - 135	5	30		
Dichlorobromomethane	97	94	76 - 129	3	30		
Dichlorodifluoromethane	105	106	72 - 127	0	30		
Ethylbenzene	113	106	79 - 124	7	30		
Ethylene Dibromide	96	92	80 - 122	4	30		
Isopropylbenzene	114	110	80 - 125	4	30		
Methyl acetate	102	99	73 - 123	3	30		
Methyl tert-butyl ether	103	98	80 - 120	5	30		
Methylcyclohexane	120	114	71 - 137	5	30		
Methylene Chloride	95	92	79 - 128	3	30		
m-Xylene & p-Xylene	107	105	79 - 121	3	30		
Naphthalene	97	96	76 - 120	1	30		
n-Butylbenzene	121	117	75 - 131	4	30		
N-Propylbenzene	115	112	75 - 132	3	30		
o-Xylene	110	104	79 - 123	5	30		
sec-Butylbenzene	118	114	78 - 130	3	30		
Styrene	108	104	78 - 123	4	30		
tert-Butylbenzene	108	104	77 - 123	4	30		
Tetrachloroethene	110	106	73 - 130	4	30		
Toluene	107	102	75 - 122	4	30		
trans-1,2-Dichloroethene	112	109	80 - 129	3	30		
trans-1,3-Dichloropropene	96	92	72 - 121	5	30		
Trichloroethene	109	104	79 - 122	5	30		
Trichlorofluoromethane	111	114	68 - 136	3	30		
Vinyl chloride	118	108	70 - 134	9	30		
Xylenes, Total	108	104	79 - 122	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	107	78 - 135
4-Bromofluorobenzene	101	109	67 - 126
Dibromofluoromethane (Surr)	100	108	61 - 149
Toluene-d8 (Surr)	99	107	73 - 121

Method Blank - Batch: 460-454712

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454712/7	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 0752	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.000456	J	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-454712

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454712/7	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 0752	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109	78 - 135
4-Bromofluorobenzene	98	67 - 126
Dibromofluoromethane (Surr)	100	61 - 149
Toluene-d8 (Surr)	100	73 - 121

Method Blank TICs- Batch: 460-454712

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454712

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454712/3	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57405.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 0602	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454712/4	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57406.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 0624	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	112	108	80 - 125	4	30		
1,1,2,2-Tetrachloroethane	101	99	72 - 131	2	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	121	116	78 - 132	4	30		
1,1,2-Trichloroethane	99	99	76 - 124	1	30		
1,1-Dichloroethane	111	107	80 - 124	3	30		
1,1-Dichloroethene	113	106	79 - 132	6	30		
1,2,3-Trichlorobenzene	94	94	75 - 123	0	30		
1,2,4-Trichlorobenzene	100	98	74 - 124	2	30		
1,2,4-Trimethylbenzene	112	108	77 - 123	4	30		
1,2-Dibromo-3-Chloropropane	79	79	65 - 129	1	30		
1,2-Dichlorobenzene	103	98	80 - 121	4	30		
1,2-Dichloroethane	106	102	68 - 120	4	30		
1,2-Dichloropropane	105	101	77 - 124	4	30		
1,3,5-Trimethylbenzene	109	105	76 - 126	4	30		
1,3-Dichlorobenzene	105	100	79 - 124	5	30		
1,4-Dichlorobenzene	104	100	79 - 121	4	30		
1,4-Dioxane	105	97	67 - 150	8	30		
2-Butanone (MEK)	91	90	61 - 140	2	30		
2-Hexanone	102	97	78 - 120	5	30		
4-Isopropyltoluene	114	110	79 - 125	4	30		
4-Methyl-2-pentanone (MIBK)	105	97	80 - 120	7	30		
Acetone	103	97	75 - 120	5	30		
Benzene	104	102	75 - 127	2	30		
Bromoform	72	67	19 - 150	7	30		
Bromomethane	117	104	59 - 136	12	30		
Carbon disulfide	113	110	74 - 130	2	30		
Carbon tetrachloride	103	98	77 - 138	4	30		
Chlorobenzene	103	98	80 - 120	5	30		
Chlorobromomethane	100	95	80 - 125	4	30		
Chlorodibromomethane	83	81	67 - 143	3	30		
Chloroethane	103	88	50 - 139	16	30		
Chloroform	107	101	80 - 122	5	30		
Chloromethane	117	105	66 - 128	11	30		
cis-1,2-Dichloroethene	103	98	80 - 123	5	30		
cis-1,3-Dichloropropene	97	94	75 - 124	3	30		

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454712

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454712/3	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57405.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 0602	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454712/4	Analysis Batch:	460-454712	Instrument ID:	CVOAMS11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N57406.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 0624	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	122	119	67 - 135	3	30		
Dichlorobromomethane	93	90	76 - 129	4	30		
Dichlorodifluoromethane	110	97	72 - 127	12	30		
Ethylbenzene	111	105	79 - 124	5	30		
Ethylene Dibromide	96	92	80 - 122	5	30		
Isopropylbenzene	113	107	80 - 125	6	30		
Methyl acetate	109	97	73 - 123	11	30		
Methyl tert-butyl ether	102	100	80 - 120	2	30		
Methylcyclohexane	118	113	71 - 137	4	30		
Methylene Chloride	96	94	79 - 128	2	30		
m-Xylene & p-Xylene	106	99	79 - 121	6	30		
Naphthalene	97	96	76 - 120	1	30		
n-Butylbenzene	123	117	75 - 131	5	30		
N-Propylbenzene	116	111	75 - 132	5	30		
o-Xylene	107	100	79 - 123	7	30		
sec-Butylbenzene	117	112	78 - 130	4	30		
Styrene	107	99	78 - 123	8	30		
tert-Butylbenzene	104	103	77 - 123	1	30		
Tetrachloroethene	108	102	73 - 130	5	30		
Toluene	105	103	75 - 122	2	30		
trans-1,2-Dichloroethene	110	107	80 - 129	3	30		
trans-1,3-Dichloropropene	92	92	72 - 121	1	30		
Trichloroethene	107	102	79 - 122	5	30		
Trichlorofluoromethane	120	108	68 - 136	11	30		
Vinyl chloride	118	110	70 - 134	7	30		
Xylenes, Total	106	100	79 - 122	6	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104	106	78 - 135
4-Bromofluorobenzene	101	99	67 - 126
Dibromofluoromethane (Surr)	100	102	61 - 149
Toluene-d8 (Surr)	100	99	73 - 121

Method Blank - Batch: 460-453875

Method: 8270D
Preparation: 3510C

Lab Sample ID:	MB 460-453875/1-A	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210812.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1110	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	10	U	0.63	10
1,2,4,5-Tetrachlorobenzene	10	U	0.43	10
2,2'-oxybis[1-chloropropane]	10	U	0.93	10
2,3,4,6-Tetrachlorophenol	10	U	0.69	10
2,4,5-Trichlorophenol	10	U	0.49	10
2,4,6-Trichlorophenol	10	U	0.53	10
2,4-Dichlorophenol	10	U	0.63	10
2,4-Dimethylphenol	10	U	0.91	10
2,4-Dinitrophenol	20	U	2.4	20
2,4-Dinitrotoluene	2.0	U	1.0	2.0
2,6-Dinitrotoluene	2.0	U	0.88	2.0
2-Chloronaphthalene	10	U	0.61	10
2-Chlorophenol	10	U	0.74	10
2-Methylnaphthalene	10	U	0.88	10
2-Methylphenol	10	U	1.3	10
2-Nitroaniline	10	U	0.65	10
2-Nitrophenol	10	U	0.59	10
3,3'-Dichlorobenzidine	10	U	1.0	10
3-Nitroaniline	10	U	0.82	10
4,6-Dinitro-2-methylphenol	20	U	2.0	20
4-Bromophenyl phenyl ether	10	U	1.0	10
4-Chloro-3-methylphenol	10	U	0.76	10
4-Chloroaniline	10	U	0.73	10
4-Chlorophenyl phenyl ether	10	U	0.96	10
4-Methylphenol	10	U	0.87	10
4-Nitroaniline	10	U	0.48	10
4-Nitrophenol	20	U	4.7	20
Acenaphthene	10	U	0.88	10
Acenaphthylene	10	U	0.65	10
Acetophenone	10	U	1.0	10
Anthracene	10	U	0.57	10
Atrazine	2.0	U	0.77	2.0
Benzaldehyde	10	U	0.86	10
Benzo[a]anthracene	1.0	U	0.55	1.0
Benzo[a]pyrene	1.0	U	0.16	1.0
Benzo[b]fluoranthene	1.0	U	0.44	1.0
Benzo[g,h,i]perylene	10	U	0.75	10
Benzo[k]fluoranthene	1.0	U	0.18	1.0
Bis(2-chloroethoxy)methane	10	U	0.69	10
Bis(2-chloroethyl)ether	1.0	U	0.12	1.0
Bis(2-ethylhexyl) phthalate	2.0	U	0.72	2.0
Butyl benzyl phthalate	10	U	0.60	10
Caprolactam	10	U	1.1	10
Carbazole	10	U	0.85	10
Chrysene	2.0	U	0.67	2.0

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453875

Method: 8270D
Preparation: 3510C

Lab Sample ID:	MB 460-453875/1-A	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210812.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1110	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	1.0	U	0.090	1.0
Dibenzofuran	10	U	0.85	10
Diethyl phthalate	10	U	1.0	10
Dimethyl phthalate	10	U	0.98	10
Di-n-butyl phthalate	10	U	0.82	10
Di-n-octyl phthalate	10	U	0.69	10
Fluoranthene	10	U	0.72	10
Fluorene	10	U	0.80	10
Hexachlorobenzene	1.0	U	0.47	1.0
Hexachlorobutadiene	1.0	U	0.76	1.0
Hexachlorocyclopentadiene	10	U	0.61	10
Hexachloroethane	1.0	U	0.090	1.0
Indeno[1,2,3-cd]pyrene	1.0	U	0.21	1.0
Isophorone	10	U	0.67	10
Naphthalene	10	U	0.80	10
Nitrobenzene	1.0	U	0.49	1.0
N-Nitrosodi-n-propylamine	1.0	U	0.83	1.0
N-Nitrosodiphenylamine	10	U	0.74	10
Pentachlorophenol	20	U	2.2	20
Phenanthrene	10	U	0.65	10
Phenol	10	U	0.41	10
Pyrene	10	U	0.83	10

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	97	26 - 139
2-Fluorobiphenyl	86	45 - 107
2-Fluorophenol (Surr)	43	25 - 58
Nitrobenzene-d5 (Surr)	94	51 - 108
Phenol-d5 (Surr)	25	14 - 39
Terphenyl-d14 (Surr)	103	40 - 148

Method Blank TICs- Batch: 460-453875

Cas Number	Analyte	RT	Est. Result (ug/	Qual
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453875

Method: 8270D
Preparation: 3510C

Lab Sample ID:	LCS 460-453875/2-A	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210813.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1130	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	80.0	71.9	90	54 - 108	
1,2,4,5-Tetrachlorobenzene	80.0	68.3	85	46 - 105	
2,2'-oxybis[1-chloropropane]	80.0	72.9	91	50 - 108	
2,3,4,6-Tetrachlorophenol	80.0	78.7	98	57 - 122	
2,4,5-Trichlorophenol	80.0	74.2	93	59 - 117	
2,4,6-Trichlorophenol	80.0	78.4	98	62 - 120	
2,4-Dichlorophenol	80.0	69.9	87	62 - 102	
2,4-Dimethylphenol	80.0	67.9	85	61 - 95	
2,4-Dinitrophenol	160	118	74	45 - 125	
2,4-Dinitrotoluene	80.0	88.2	110	70 - 123	
2,6-Dinitrotoluene	80.0	84.5	106	68 - 121	
2-Chloronaphthalene	80.0	71.5	89	54 - 105	
2-Chlorophenol	80.0	62.8	78	54 - 92	
2-Methylnaphthalene	80.0	65.8	82	47 - 104	
2-Methylphenol	80.0	50.6	63	43 - 80	
2-Nitroaniline	80.0	72.2	90	46 - 124	
2-Nitrophenol	80.0	75.5	94	58 - 109	
3,3'-Dichlorobenzidine	80.0	85.3	107	68 - 123	
3-Nitroaniline	80.0	70.7	88	60 - 117	
4,6-Dinitro-2-methylphenol	160	185	116	59 - 132	
4-Bromophenyl phenyl ether	80.0	80.5	101	57 - 126	
4-Chloro-3-methylphenol	80.0	62.7	78	58 - 98	
4-Chloroaniline	80.0	62.2	78	51 - 108	
4-Chlorophenyl phenyl ether	80.0	77.0	96	60 - 114	
4-Methylphenol	80.0	43.2	54	34 - 78	
4-Nitroaniline	80.0	80.7	101	48 - 135	
4-Nitrophenol	160	44.3	28	11 - 47	
Acenaphthene	80.0	74.9	94	58 - 107	
Acenaphthylene	80.0	77.3	97	61 - 106	
Acetophenone	80.0	75.6	95	54 - 115	
Anthracene	80.0	82.4	103	70 - 118	
Benzo[a]anthracene	80.0	88.6	111	73 - 119	
Benzo[a]pyrene	80.0	93.9	117	76 - 125	
Benzo[b]fluoranthene	80.0	89.2	111	78 - 123	
Benzo[g,h,i]perylene	80.0	91.4	114	63 - 133	
Benzo[k]fluoranthene	80.0	91.4	114	71 - 126	
Bis(2-chloroethoxy)methane	80.0	75.8	95	67 - 104	
Bis(2-chloroethyl)ether	80.0	75.8	95	63 - 106	
Bis(2-ethylhexyl) phthalate	80.0	93.5	117	63 - 135	
Butyl benzyl phthalate	80.0	90.8	114	66 - 129	
Carbazole	80.0	85.9	107	68 - 121	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453875

Method: 8270D
Preparation: 3510C

Lab Sample ID:	LCS 460-453875/2-A	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210813.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1130	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	80.0	85.9	107	73 - 121	
Dibenz(a,h)anthracene	80.0	89.3	112	59 - 136	
Dibenzofuran	80.0	76.2	95	67 - 108	
Diethyl phthalate	80.0	81.0	101	61 - 129	
Dimethyl phthalate	80.0	79.5	99	65 - 121	
Di-n-butyl phthalate	80.0	92.1	115	64 - 130	
Di-n-octyl phthalate	80.0	95.9	120	64 - 131	
Fluoranthene	80.0	89.7	112	66 - 123	
Fluorene	80.0	77.9	97	67 - 112	
Hexachlorobenzene	80.0	85.4	107	63 - 125	
Hexachlorobutadiene	80.0	56.1	70	34 - 99	
Hexachlorocyclopentadiene	80.0	55.6	70	18 - 99	
Hexachloroethane	80.0	52.2	65	39 - 92	
Indeno[1,2,3-cd]pyrene	80.0	98.8	123	57 - 142	
Isophorone	80.0	75.1	94	55 - 105	
Naphthalene	80.0	64.0	80	51 - 98	
Nitrobenzene	80.0	70.9	89	56 - 106	
N-Nitrosodi-n-propylamine	80.0	75.4	94	48 - 118	
N-Nitrosodiphenylamine	80.0	82.1	103	69 - 118	
Pentachlorophenol	160	162	101	54 - 120	
Phenanthrene	80.0	82.1	103	70 - 117	
Phenol	80.0	21.0	26	16 - 43	
Pyrene	80.0	79.1	99	63 - 129	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	101	26 - 139
2-Fluorobiphenyl	89	45 - 107
2-Fluorophenol (Surr)	41	25 - 58
Nitrobenzene-d5 (Surr)	91	51 - 108
Phenol-d5 (Surr)	24	14 - 39
Terphenyl-d14 (Surr)	100	40 - 148

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453875

Method: 8270D
Preparation: 3510C

Lab Sample ID:	LCS 460-453875/3-A	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210814.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1150	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	160	203	127	38 - 146	E
Benzaldehyde	160	152	95	46 - 111	
Caprolactam	160	30.9	19	10 - 43	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	97	26 - 139
2-Fluorobiphenyl	83	45 - 107
2-Fluorophenol (Surr)	40	25 - 58
Nitrobenzene-d5 (Surr)	90	51 - 108
Phenol-d5 (Surr)	23	14 - 39
Terphenyl-d14 (Surr)	100	40 - 148

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453875

Method: 8270D
Preparation: 3510C
Dissolved

MS Lab Sample ID:	460-138254-G-1-C MS	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210817.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1250			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138254-H-1-D MSD	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210818.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1310			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	88	82	54 - 108	6	30		
1,2,4,5-Tetrachlorobenzene	85	79	46 - 105	6	30		
2,2'-oxybis[1-chloropropane]	84	78	50 - 108	8	30		
2,3,4,6-Tetrachlorophenol	92	91	57 - 122	1	30		
2,4,5-Trichlorophenol	88	85	59 - 117	4	30		
2,4,6-Trichlorophenol	91	88	62 - 120	3	30		
2,4-Dichlorophenol	83	79	62 - 102	5	30		
2,4-Dimethylphenol	80	76	61 - 95	6	30		
2,4-Dinitrophenol	86	89	45 - 125	4	30		
2,4-Dinitrotoluene	101	105	70 - 123	4	30		
2,6-Dinitrotoluene	102	99	68 - 121	3	30		
2-Chloronaphthalene	88	83	54 - 105	7	30		
2-Chlorophenol	71	68	54 - 92	3	30		
2-Methylnaphthalene	78	74	47 - 104	5	30		
2-Methylphenol	59	57	43 - 80	3	30		
2-Nitroaniline	87	86	46 - 124	1	30		
2-Nitrophenol	90	85	58 - 109	6	30		
3,3'-Dichlorobenzidine	80	79	68 - 123	2	30		
3-Nitroaniline	82	82	60 - 117	0	30		
4,6-Dinitro-2-methylphenol	114	115	59 - 132	1	30		
4-Bromophenyl phenyl ether	101	95	57 - 126	6	30		
4-Chloro-3-methylphenol	76	74	58 - 98	3	30		
4-Chloroaniline	81	72	51 - 108	12	30		
4-Chlorophenyl phenyl ether	90	88	60 - 114	2	30		
4-Methylphenol	51	50	34 - 78	2	30		
4-Nitroaniline	90	95	48 - 135	6	30		
4-Nitrophenol	25	27	11 - 47	6	30		
Acenaphthene	91	87	58 - 107	5	30		
Acenaphthylene	92	89	61 - 106	4	30		
Acetophenone	87	82	54 - 115	6	30		
Anthracene	100	97	70 - 118	3	30		
Atrazine	120	118	38 - 146	2	30		

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453875

Method: 8270D
Preparation: 3510C
Dissolved

MS Lab Sample ID:	460-138254-G-1-C MS	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210817.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1250			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138254-H-1-D MSD	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210818.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1310			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	88	83	46 - 111	6	30		
Benzo[a]anthracene	111	109	73 - 119	2	30		
Benzo[a]pyrene	117	116	76 - 125	1	30		
Benzo[b]fluoranthene	114	109	78 - 123	5	30		
Benzo[g,h,i]perylene	111	108	63 - 133	3	30		
Benzo[k]fluoranthene	112	111	71 - 126	1	30		
Bis(2-chloroethoxy)methane	92	83	67 - 104	11	30		
Bis(2-chloroethyl)ether	86	82	63 - 106	5	30		
Bis(2-ethylhexyl) phthalate	119	111	63 - 135	7	30		
Butyl benzyl phthalate	114	111	66 - 129	3	30		
Caprolactam	19	19	10 - 43	0	30		
Carbazole	102	104	68 - 121	2	30		
Chrysene	105	104	73 - 121	1	30		
Dibenz(a,h)anthracene	103	106	59 - 136	3	30		
Dibenzofuran	91	89	67 - 108	2	30		
Diethyl phthalate	95	95	61 - 129	0	30		
Dimethyl phthalate	94	91	65 - 121	3	30		
Di-n-butyl phthalate	111	108	64 - 130	3	30		
Di-n-octyl phthalate	125	119	64 - 131	5	30		
Fluoranthene	104	105	66 - 123	1	30		
Fluorene	91	90	67 - 112	1	30		
Hexachlorobenzene	107	101	63 - 125	5	30		
Hexachlorobutadiene	70	65	34 - 99	7	30		
Hexachlorocyclopentadiene	72	65	18 - 99	11	30		
Hexachloroethane	63	59	39 - 92	6	30		
Indeno[1,2,3-cd]pyrene	125	120	57 - 142	4	30		
Isophorone	91	84	55 - 105	8	30		
Naphthalene	79	73	51 - 98	8	30		
Nitrobenzene	87	79	56 - 106	10	30		
N-Nitrosodi-n-propylamine	86	79	48 - 118	9	30		
N-Nitrosodiphenylamine	102	95	69 - 118	7	30		
Pentachlorophenol	98	103	54 - 120	5	30		

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453875

Method: 8270D
Preparation: 3510C
Dissolved

MS Lab Sample ID:	460-138254-G-1-C MS	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210817.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1250			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138254-H-1-D MSD	Analysis Batch:	460-453952	Instrument ID:	CBNAMS14
Client Matrix:	Water	Prep Batch:	460-453875	Lab File ID:	N1210818.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/04/2017 1310			Final Weight/Volume:	2 mL
Prep Date:	08/03/2017 2214			Injection Volume:	5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	99	97	70 - 117	2	30		
Phenol	25	25	16 - 43	0	30		
Pyrene	105	104	63 - 129	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	91	98	26 - 139
2-Fluorobiphenyl	85	79	45 - 107
2-Fluorophenol (Surr)	38	38	25 - 58
Nitrobenzene-d5 (Surr)	87	82	51 - 108
Phenol-d5 (Surr)	23	23	14 - 39
Terphenyl-d14 (Surr)	98	96	40 - 148

Method Blank - Batch: 460-453944

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-453944/1-A	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19539.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 0305	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453944

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-453944/1-A	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19539.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 0305	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	71	10 - 103
2-Fluorobiphenyl	77	38 - 95
2-Fluorophenol (Surr)	81	25 - 92
Nitrobenzene-d5 (Surr)	83	37 - 94
Phenol-d5 (Surr)	82	32 - 91
Terphenyl-d14 (Surr)	94	24 - 109

Method Blank TICs- Batch: 460-453944

Cas Number	Analyte	RT	Est. Result (mg	Qual
124-18-5	n-Decane	4.39	0.0142	J
	Tentatively Identified Compound		None	

Lab Control Sample - Batch: 460-453944

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453944/2-A	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19536.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 0200	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	2.99	90	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	3.07	92	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.76	83	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	2.86	86	60 - 114	
2,4,5-Trichlorophenol	3.33	2.79	84	60 - 106	
2,4,6-Trichlorophenol	3.33	3.03	91	62 - 110	
2,4-Dichlorophenol	3.33	2.82	85	61 - 103	
2,4-Dimethylphenol	3.33	2.87	86	63 - 101	
2,4-Dinitrophenol	6.67	6.04	91	56 - 122	
2,4-Dinitrotoluene	3.33	2.90	87	66 - 122	
2,6-Dinitrotoluene	3.33	3.09	93	70 - 114	
2-Chloronaphthalene	3.33	3.00	90	63 - 107	
2-Chlorophenol	3.33	2.84	85	62 - 97	
2-Methylnaphthalene	3.33	2.75	83	65 - 104	
2-Methylphenol	3.33	2.81	84	61 - 103	
2-Nitroaniline	3.33	3.06	92	57 - 114	
2-Nitrophenol	3.33	3.19	96	65 - 104	
3,3'-Dichlorobenzidine	3.33	2.29	69	18 - 88	
3-Nitroaniline	3.33	2.54	76	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	6.87	103	67 - 120	
4-Bromophenyl phenyl ether	3.33	3.12	94	59 - 122	
4-Chloro-3-methylphenol	3.33	2.68	80	62 - 111	
4-Chloroaniline	3.33	2.13	64	18 - 94	
4-Chlorophenyl phenyl ether	3.33	2.78	83	66 - 110	
4-Methylphenol	3.33	2.82	85	61 - 105	
4-Nitroaniline	3.33	3.05	92	49 - 118	
4-Nitrophenol	6.67	5.41	81	43 - 141	
Acenaphthene	3.33	2.79	84	62 - 108	
Acenaphthylene	3.33	2.99	90	67 - 107	
Acetophenone	3.33	2.81	84	60 - 109	
Anthracene	3.33	3.08	92	69 - 111	
Benzo[a]anthracene	3.33	3.10	93	68 - 110	
Benzo[a]pyrene	3.33	3.35	100	72 - 115	
Benzo[b]fluoranthene	3.33	3.51	105	69 - 119	
Benzo[g,h,i]perylene	3.33	2.88	86	54 - 128	
Benzo[k]fluoranthene	3.33	3.20	96	70 - 115	
Bis(2-chloroethoxy)methane	3.33	2.82	85	65 - 106	
Bis(2-chloroethyl)ether	3.33	2.91	87	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	2.70	81	63 - 125	
Butyl benzyl phthalate	3.33	2.89	87	65 - 125	
Carbazole	3.33	3.04	91	66 - 115	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453944

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453944/2-A	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19536.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 0200	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	2.99	90	70 - 111	
Dibenz(a,h)anthracene	3.33	2.95	89	60 - 130	
Dibenzofuran	3.33	2.91	87	67 - 107	
Diethyl phthalate	3.33	2.67	80	66 - 117	
Dimethyl phthalate	3.33	2.82	85	68 - 112	
Di-n-butyl phthalate	3.33	2.63	79	67 - 119	
Di-n-octyl phthalate	3.33	3.00	90	57 - 138	
Fluoranthene	3.33	2.71	81	64 - 114	
Fluorene	3.33	2.85	86	66 - 110	
Hexachlorobenzene	3.33	3.07	92	57 - 128	
Hexachlorobutadiene	3.33	2.88	86	60 - 108	
Hexachlorocyclopentadiene	3.33	3.44	103	50 - 129	
Hexachloroethane	3.33	2.79	84	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	3.47	104	53 - 137	
Isophorone	3.33	2.84	85	68 - 111	
Naphthalene	3.33	2.86	86	65 - 102	
Nitrobenzene	3.33	3.03	91	66 - 108	
N-Nitrosodi-n-propylamine	3.33	2.85	86	63 - 117	
N-Nitrosodiphenylamine	3.33	3.17	95	65 - 114	
Pentachlorophenol	6.67	5.17	78	56 - 116	
Phenanthrene	3.33	3.01	90	68 - 111	
Phenol	3.33	2.93	88	58 - 103	
Pyrene	3.33	3.31	99	64 - 121	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	91	10 - 103
2-Fluorobiphenyl	87	38 - 95
2-Fluorophenol (Surr)	87	25 - 92
Nitrobenzene-d5 (Surr)	91	37 - 94
Phenol-d5 (Surr)	89	32 - 91
Terphenyl-d14 (Surr)	99	24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453944

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-453944/3-A	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19537.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 0222	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	5.96	89	62 - 137	
Benzaldehyde	6.67	5.75	86	52 - 113	
Caprolactam	6.67	5.39	81	53 - 148	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	78	10 - 103
2-Fluorobiphenyl	81	38 - 95
2-Fluorophenol (Surr)	84	25 - 92
Nitrobenzene-d5 (Surr)	87	37 - 94
Phenol-d5 (Surr)	84	32 - 91
Terphenyl-d14 (Surr)	101	24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453944

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-137947-A-5-C MS	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19546.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0124 g
Analysis Date:	08/09/2017 0536			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-137947-A-5-D MSD	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19547.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0346 g
Analysis Date:	08/09/2017 0558			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	65	79	64 - 108	20	30		
1,2,4,5-Tetrachlorobenzene	65	79	57 - 112	20	30		
2,2'-oxybis[1-chloropropane]	59	70	39 - 122	16	30		
2,3,4,6-Tetrachlorophenol	56	73	60 - 114	25	30	*	
2,4,5-Trichlorophenol	65	78	60 - 106	17	30		
2,4,6-Trichlorophenol	66	82	62 - 110	21	30		
2,4-Dichlorophenol	63	75	61 - 103	17	30		
2,4-Dimethylphenol	65	77	63 - 101	17	30		
2,4-Dinitrophenol	21	45	56 - 122	74	30	*	*
2,4-Dinitrotoluene	71	86	66 - 122	19	30		
2,6-Dinitrotoluene	84	103	70 - 114	20	30		
2-Chloronaphthalene	65	79	63 - 107	20	30		
2-Chlorophenol	63	73	62 - 97	15	30		
2-Methylnaphthalene	60	71	65 - 104	18	30	*	
2-Methylphenol	64	74	61 - 103	14	30		
2-Nitroaniline	113	133	57 - 114	17	30		*
2-Nitrophenol	65	80	65 - 104	20	30		
3,3'-Dichlorobenzidine	66	83	18 - 88	23	30		
3-Nitroaniline	74	90	30 - 94	20	30		
4,6-Dinitro-2-methylphenol	51	79	67 - 120	44	30	*	*
4-Bromophenyl phenyl ether	63	78	59 - 122	21	30		
4-Chloro-3-methylphenol	63	77	62 - 111	20	30		
4-Chloroaniline	54	66	18 - 94	20	30		
4-Chlorophenyl phenyl ether	62	77	66 - 110	22	30	*	
4-Methylphenol	66	76	61 - 105	14	30		
4-Nitroaniline	75	90	49 - 118	18	30		
4-Nitrophenol	66	85	43 - 141	25	30		
Acenaphthene	61	75	62 - 108	20	30	*	
Acenaphthylene	67	82	67 - 107	20	30		
Acetophenone	63	75	60 - 109	17	30		
Anthracene	69	81	69 - 111	16	30		
Atrazine	74	92	62 - 137	21	30		

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453944

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-137947-A-5-C MS	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19546.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0124 g
Analysis Date:	08/09/2017 0536			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-137947-A-5-D MSD	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19547.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0346 g
Analysis Date:	08/09/2017 0558			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	60	71	52 - 113	16	30		
Benzo[a]anthracene	70	84	68 - 110	18	30		
Benzo[a]pyrene	76	93	72 - 115	19	30		
Benzo[b]fluoranthene	76	93	69 - 119	20	30		
Benzo[g,h,i]perylene	72	90	54 - 128	21	30		
Benzo[k]fluoranthene	72	85	70 - 115	17	30		
Bis(2-chloroethoxy)methane	63	76	65 - 106	18	30	*	
Bis(2-chloroethyl)ether	63	75	64 - 105	17	30	*	
Bis(2-ethylhexyl) phthalate	63	76	63 - 125	19	30		
Butyl benzyl phthalate	63	76	65 - 125	18	30	*	
Caprolactam	63	79	53 - 148	23	30		
Carbazole	74	88	66 - 115	17	30		
Chrysene	68	81	70 - 111	16	30	*	
Dibenz(a,h)anthracene	72	88	60 - 130	20	30		
Dibenzofuran	64	78	67 - 107	19	30	*	
Diethyl phthalate	66	82	66 - 117	21	30		
Dimethyl phthalate	69	84	68 - 112	20	30		
Di-n-butyl phthalate	65	78	67 - 119	19	30	*	
Di-n-octyl phthalate	64	80	57 - 138	23	30		
Fluoranthene	72	81	64 - 114	12	30		
Fluorene	63	78	66 - 110	20	30	*	
Hexachlorobenzene	64	77	57 - 128	19	30		
Hexachlorobutadiene	57	70	60 - 108	21	30	*	
Hexachlorocyclopentadiene	66	82	50 - 129	21	30		
Hexachloroethane	55	66	63 - 99	18	30	*	
Indeno[1,2,3-cd]pyrene	88	106	53 - 137	18	30		
Isophorone	64	77	68 - 111	18	30	*	
Naphthalene	61	73	65 - 102	19	30	*	
Nitrobenzene	64	77	66 - 108	17	30	*	
N-Nitrosodi-n-propylamine	65	75	63 - 117	15	30		
N-Nitrosodiphenylamine	69	84	65 - 114	19	30		
Pentachlorophenol	42	59	56 - 116	33	30	*	*

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453944

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-137947-A-5-C MS	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19546.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0124 g
Analysis Date:	08/09/2017 0536			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-137947-A-5-D MSD	Analysis Batch:	460-454959	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-453944	Lab File ID:	L19547.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0346 g
Analysis Date:	08/09/2017 0558			Final Weight/Volume:	1 mL
Prep Date:	08/04/2017 0738			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	71	82	68 - 111	14	30		
Phenol	65	77	58 - 103	16	30		
Pyrene	69	81	64 - 121	16	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	64	82	10 - 103
2-Fluorobiphenyl	64	77	38 - 95
2-Fluorophenol (Surr)	63	74	25 - 92
Nitrobenzene-d5 (Surr)	64	78	37 - 94
Phenol-d5 (Surr)	67	77	32 - 91
Terphenyl-d14 (Surr)	66	83	24 - 109

Method Blank - Batch: 460-455782

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-455782/1-A	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19727.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/12/2017 0446	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-455782

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-455782/1-A	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19727.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/12/2017 0446	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	80	10 - 103
2-Fluorobiphenyl	79	38 - 95
2-Fluorophenol (Surr)	80	25 - 92
Nitrobenzene-d5 (Surr)	84	37 - 94
Phenol-d5 (Surr)	83	32 - 91
Terphenyl-d14 (Surr)	91	24 - 109

Method Blank TICs- Batch: 460-455782

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Aldol condensation product	2.86	8.51	A J

Lab Control Sample - Batch: 460-455782

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-455782/2-A	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19728.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/12/2017 0508	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	3.09	93	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	3.11	93	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.88	86	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	3.22	96	60 - 114	
2,4,5-Trichlorophenol	3.33	3.00	90	60 - 106	
2,4,6-Trichlorophenol	3.33	3.26	98	62 - 110	
2,4-Dichlorophenol	3.33	3.07	92	61 - 103	
2,4-Dimethylphenol	3.33	3.09	93	63 - 101	
2,4-Dinitrophenol	6.67	7.40	111	56 - 122	
2,4-Dinitrotoluene	3.33	3.20	96	66 - 122	
2,6-Dinitrotoluene	3.33	3.39	102	70 - 114	
2-Chloronaphthalene	3.33	3.11	93	63 - 107	
2-Chlorophenol	3.33	2.99	90	62 - 97	
2-Methylnaphthalene	3.33	2.97	89	65 - 104	
2-Methylphenol	3.33	2.99	90	61 - 103	
2-Nitroaniline	3.33	3.37	101	57 - 114	
2-Nitrophenol	3.33	3.38	101	65 - 104	
3,3'-Dichlorobenzidine	3.33	1.76	53	18 - 88	
3-Nitroaniline	3.33	2.49	75	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	7.64	115	67 - 120	
4-Bromophenyl phenyl ether	3.33	3.14	94	59 - 122	
4-Chloro-3-methylphenol	3.33	3.06	92	62 - 111	
4-Chloroaniline	3.33	2.00	60	18 - 94	
4-Chlorophenyl phenyl ether	3.33	2.98	89	66 - 110	
4-Methylphenol	3.33	3.20	96	61 - 105	
4-Nitroaniline	3.33	3.36	101	49 - 118	
4-Nitrophenol	6.67	6.94	104	43 - 141	
Acenaphthene	3.33	2.91	87	62 - 108	
Acenaphthylene	3.33	3.17	95	67 - 107	
Acetophenone	3.33	3.01	90	60 - 109	
Anthracene	3.33	3.18	95	69 - 111	
Benzo[a]anthracene	3.33	3.29	99	68 - 110	
Benzo[a]pyrene	3.33	3.56	107	72 - 115	
Benzo[b]fluoranthene	3.33	3.63	109	69 - 119	
Benzo[g,h,i]perylene	3.33	2.77	83	54 - 128	
Benzo[k]fluoranthene	3.33	3.57	107	70 - 115	
Bis(2-chloroethoxy)methane	3.33	3.03	91	65 - 106	
Bis(2-chloroethyl)ether	3.33	3.02	90	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	2.80	84	63 - 125	
Butyl benzyl phthalate	3.33	3.08	92	65 - 125	
Carbazole	3.33	3.32	100	66 - 115	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-455782

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-455782/2-A	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19728.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/12/2017 0508	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	3.15	94	70 - 111	
Dibenz(a,h)anthracene	3.33	2.84	85	60 - 130	
Dibenzofuran	3.33	3.09	93	67 - 107	
Diethyl phthalate	3.33	2.91	87	66 - 117	
Dimethyl phthalate	3.33	3.03	91	68 - 112	
Di-n-butyl phthalate	3.33	2.90	87	67 - 119	
Di-n-octyl phthalate	3.33	3.23	97	57 - 138	
Fluoranthene	3.33	3.02	90	64 - 114	
Fluorene	3.33	3.03	91	66 - 110	
Hexachlorobenzene	3.33	3.24	97	57 - 128	
Hexachlorobutadiene	3.33	2.88	87	60 - 108	
Hexachlorocyclopentadiene	3.33	3.49	105	50 - 129	
Hexachloroethane	3.33	2.86	86	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	3.32	100	53 - 137	
Isophorone	3.33	3.04	91	68 - 111	
Naphthalene	3.33	3.00	90	65 - 102	
Nitrobenzene	3.33	3.15	95	66 - 108	
N-Nitrosodi-n-propylamine	3.33	3.06	92	63 - 117	
N-Nitrosodiphenylamine	3.33	3.19	96	65 - 114	
Pentachlorophenol	6.67	5.89	88	56 - 116	
Phenanthrene	3.33	3.15	94	68 - 111	
Phenol	3.33	3.28	98	58 - 103	
Pyrene	3.33	3.39	102	64 - 121	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	98		10 - 103
2-Fluorobiphenyl	86		38 - 95
2-Fluorophenol (Surr)	87		25 - 92
Nitrobenzene-d5 (Surr)	92		37 - 94
Phenol-d5 (Surr)	92	*	32 - 91
Terphenyl-d14 (Surr)	99		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-455782

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-455782/3-A	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19729.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/12/2017 0529	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	6.47	97	62 - 137	
Benzaldehyde	6.67	6.15	92	52 - 113	
Caprolactam	6.67	6.69	100	53 - 148	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	95		10 - 103
2-Fluorobiphenyl	88		38 - 95
2-Fluorophenol (Surr)	89		25 - 92
Nitrobenzene-d5 (Surr)	95	*	37 - 94
Phenol-d5 (Surr)	92	*	32 - 91
Terphenyl-d14 (Surr)	105		24 - 109

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-455782

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-139004-A-6-J MS	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19734.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0128 g
Analysis Date:	08/12/2017 0719			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-139004-A-6-K MSD	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19735.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0133 g
Analysis Date:	08/12/2017 0740			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	84	85	64 - 108	1	30		
1,2,4,5-Tetrachlorobenzene	86	83	57 - 112	3	30		
2,2'-oxybis[1-chloropropane]	73	78	39 - 122	6	30		
2,3,4,6-Tetrachlorophenol	78	87	60 - 114	11	30		
2,4,5-Trichlorophenol	74	82	60 - 106	10	30		
2,4,6-Trichlorophenol	85	87	62 - 110	3	30		
2,4-Dichlorophenol	71	82	61 - 103	14	30		
2,4-Dimethylphenol	73	81	63 - 101	11	30		
2,4-Dinitrophenol	58	96	56 - 122	49	30		*
2,4-Dinitrotoluene	85	91	66 - 122	6	30		
2,6-Dinitrotoluene	88	96	70 - 114	9	30		
2-Chloronaphthalene	84	85	63 - 107	1	30		
2-Chlorophenol	56	55	62 - 97	3	30	*	*
2-Methylnaphthalene	75	80	65 - 104	7	30		
2-Methylphenol	66	81	61 - 103	20	30		
2-Nitroaniline	73	74	57 - 114	1	30		
2-Nitrophenol	83	92	65 - 104	10	30		
3,3'-Dichlorobenzidine	53	74	18 - 88	33	30		*
3-Nitroaniline	71	85	30 - 94	19	30		
4,6-Dinitro-2-methylphenol	96	105	67 - 120	9	30		
4-Bromophenyl phenyl ether	86	87	59 - 122	2	30		
4-Chloro-3-methylphenol	71	83	62 - 111	16	30		
4-Chloroaniline	67	74	18 - 94	9	30		
4-Chlorophenyl phenyl ether	78	81	66 - 110	4	30		
4-Methylphenol	6	86	61 - 105	171	30	J *	*
4-Nitroaniline	79	94	49 - 118	16	30		
4-Nitrophenol	82	89	43 - 141	8	30		
Acenaphthene	75	78	62 - 108	4	30		
Acenaphthylene	84	87	67 - 107	3	30		
Acetophenone	69	80	60 - 109	16	30		
Anthracene	84	87	69 - 111	3	30		
Atrazine	80	81	62 - 137	1	30		

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-455782

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-139004-A-6-J MS	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19734.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0128 g
Analysis Date:	08/12/2017 0719			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-139004-A-6-K MSD	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19735.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0133 g
Analysis Date:	08/12/2017 0740			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	77	85	52 - 113	9	30		
Benzo[a]anthracene	85	89	68 - 110	5	30		
Benzo[a]pyrene	94	96	72 - 115	3	30		
Benzo[b]fluoranthene	92	99	69 - 119	7	30		
Benzo[g,h,i]perylene	87	91	54 - 128	4	30		
Benzo[k]fluoranthene	87	90	70 - 115	3	30		
Bis(2-chloroethoxy)methane	76	83	65 - 106	9	30		
Bis(2-chloroethyl)ether	92	116	64 - 105	23	30		*
Bis(2-ethylhexyl) phthalate	79	83	63 - 125	5	30		
Butyl benzyl phthalate	85	90	65 - 125	5	30		
Caprolactam	82	94	53 - 148	14	30		
Carbazole	83	87	66 - 115	5	30		
Chrysene	81	84	70 - 111	3	30		
Dibenz(a,h)anthracene	83	89	60 - 130	6	30		
Dibenzofuran	81	85	67 - 107	5	30		
Diethyl phthalate	81	80	66 - 117	1	30		
Dimethyl phthalate	81	77	68 - 112	5	30		
Di-n-butyl phthalate	79	80	67 - 119	2	30		
Di-n-octyl phthalate	85	91	57 - 138	7	30		
Fluoranthene	74	77	64 - 114	3	30		
Fluorene	80	83	66 - 110	4	30		
Hexachlorobenzene	84	88	57 - 128	4	30		
Hexachlorobutadiene	81	78	60 - 108	5	30		
Hexachlorocyclopentadiene	0	0	50 - 129	NC	30	U *	U *
Hexachloroethane	69	69	63 - 99	0	30		
Indeno[1,2,3-cd]pyrene	103	103	53 - 137	0	30		
Isophorone	76	84	68 - 111	10	30		
Naphthalene	78	81	65 - 102	4	30		
Nitrobenzene	81	86	66 - 108	6	30		
N-Nitrosodi-n-propylamine	75	85	63 - 117	14	30		
N-Nitrosodiphenylamine	88	85	65 - 114	3	30		
Pentachlorophenol	72	76	56 - 116	5	30		

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-455782

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-139004-A-6-J MS	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19734.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0128 g
Analysis Date:	08/12/2017 0719			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-139004-A-6-K MSD	Analysis Batch:	460-455794	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-455782	Lab File ID:	L19735.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0133 g
Analysis Date:	08/12/2017 0740			Final Weight/Volume:	1 mL
Prep Date:	08/11/2017 2221			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	84	85	68 - 111	1	30		
Phenol	76	57	58 - 103	28	30		*
Pyrene	94	98	64 - 121	4	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	88	87	10 - 103
2-Fluorobiphenyl	85	82	38 - 95
2-Fluorophenol (Surr)	62	58	25 - 92
Nitrobenzene-d5 (Surr)	85	88	37 - 94
Phenol-d5 (Surr)	73	56	32 - 91
Terphenyl-d14 (Surr)	99	101	24 - 109

Method Blank - Batch: 460-453807 **Method: 8015D**
Preparation: N/A

Lab Sample ID:	MB 460-453807/4	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107421.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1635	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL	RL
GRO	2.5	U	2.5	2.5

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	94	80 - 135

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-453807 **Method: 8015D**
Preparation: N/A

LCS Lab Sample ID:	LCS 460-453807/2	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107419.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1541	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 460-453807/3	Analysis Batch:	460-453807	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107420.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/03/2017 1608	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
GRO	98	94	80 - 120	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	98	94	80 - 135

Method Blank - Batch: 460-454111 **Method: 8015D**
Preparation: N/A

Lab Sample ID:	MB 460-454111/4	Analysis Batch:	460-454111	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107458.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/04/2017 2008	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL	RL
GRO	2.5	U	2.5	2.5

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	99	80 - 135

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454111 **Method: 8015D**
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454111/2	Analysis Batch:	460-454111	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107456.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/04/2017 1912	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 460-454111/3	Analysis Batch:	460-454111	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107457.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/04/2017 1940	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
GRO	95	97	80 - 120	3	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	93	97	80 - 135

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453727

Method: 8015D
Preparation: 3546

Lab Sample ID:	MB 460-453727/1-A	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010397.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/04/2017 0837	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
#2 Diesel Fuel	6.7	U	1.1	6.7
C10-C44	8.7	U	1.1	8.7

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	77	25 - 132

Lab Control Sample - Batch: 460-453727

Method: 8015D
Preparation: 3546

Lab Sample ID:	LCS 460-453727/2-A	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010398.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/04/2017 0849	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C44	133	100	75	68 - 133	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	93	25 - 132

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453727

Method: 8015D
Preparation: 3546

MS Lab Sample ID:	180-68692-C-1-A MS	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010405.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0199 g
Analysis Date:	08/04/2017 1014			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	180-68692-C-1-B MSD	Analysis Batch:	460-453940	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-453727	Lab File ID:	3F010406.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0021 g
Analysis Date:	08/04/2017 1026			Final Weight/Volume:	1 mL
Prep Date:	08/03/2017 1000			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C44	63	59	68 - 133	7	30	*	*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	86	68	25 - 132

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453864

Method: 8081B
Preparation: 3546

Lab Sample ID:	MB 460-453864/1-A	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911608.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0755	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.0067	U	0.0011	0.0067
4,4'-DDE	0.0067	U	0.00079	0.0067
4,4'-DDT	0.0067	U	0.0012	0.0067
Aldrin	0.0067	U	0.0010	0.0067
alpha-BHC	0.0020	U	0.00068	0.0020
beta-BHC	0.0020	U	0.00075	0.0020
Chlordane (technical)	0.067	U	0.016	0.067
delta-BHC	0.0020	U	0.00041	0.0020
Dieldrin	0.0020	U	0.00087	0.0020
Endosulfan I	0.0067	U	0.0010	0.0067
Endosulfan II	0.0067	U	0.0017	0.0067
Endosulfan sulfate	0.0067	U	0.00084	0.0067
Endrin	0.0067	U	0.00096	0.0067
Endrin aldehyde	0.0067	U	0.0016	0.0067
Endrin ketone	0.0067	U	0.0013	0.0067
gamma-BHC (Lindane)	0.0020	U	0.00062	0.0020
Heptachlor	0.0067	U	0.00079	0.0067
Heptachlor epoxide	0.0067	U	0.0010	0.0067
Methoxychlor	0.0067	U	0.0015	0.0067
Toxaphene	0.067	U	0.024	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	116	50 - 150
Tetrachloro-m-xylene	115	47 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	111	50 - 150
Tetrachloro-m-xylene	113	47 - 150

Lab Control Sample - Batch: 460-453864

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-453864/2-A	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911609.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0808	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.145	109	64 - 129	
4,4'-DDE	0.133	0.152	114	65 - 129	
4,4'-DDT	0.133	0.140	105	59 - 124	
Aldrin	0.133	0.155	116	66 - 127	
alpha-BHC	0.133	0.162	121	69 - 131	
beta-BHC	0.133	0.155	116	69 - 127	
delta-BHC	0.133	0.156	117	64 - 129	
Dieldrin	0.133	0.154	116	65 - 128	
Endosulfan I	0.133	0.156	117	66 - 126	
Endosulfan II	0.133	0.151	113	64 - 124	
Endosulfan sulfate	0.133	0.145	109	62 - 123	
Endrin	0.133	0.142	107	58 - 126	
Endrin aldehyde	0.133	0.156	117	69 - 131	
Endrin ketone	0.133	0.159	119	62 - 125	
gamma-BHC (Lindane)	0.133	0.157	118	67 - 126	
Heptachlor	0.133	0.149	112	63 - 125	
Heptachlor epoxide	0.133	0.151	113	64 - 125	
Methoxychlor	0.133	0.135	101	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	113	50 - 150
Tetrachloro-m-xylene	115	47 - 150

Lab Control Sample - Batch: 460-453864

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-453864/2-A	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911609.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0808	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.143	107	64 - 129	
4,4'-DDE	0.133	0.140	105	65 - 129	
4,4'-DDT	0.133	0.136	102	59 - 124	
Aldrin	0.133	0.154	116	66 - 127	
alpha-BHC	0.133	0.157	118	69 - 131	
beta-BHC	0.133	0.149	112	69 - 127	

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453864

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-453864/2-A	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911609.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0808	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
delta-BHC	0.133	0.149	112	64 - 129	
Dieldrin	0.133	0.148	111	65 - 128	
Endosulfan I	0.133	0.149	112	66 - 126	
Endosulfan II	0.133	0.144	108	64 - 124	
Endosulfan sulfate	0.133	0.143	107	62 - 123	
Endrin	0.133	0.142	106	58 - 126	
Endrin aldehyde	0.133	0.150	113	69 - 131	
Endrin ketone	0.133	0.155	116	62 - 125	
gamma-BHC (Lindane)	0.133	0.153	115	67 - 126	
Heptachlor	0.133	0.149	112	63 - 125	
Heptachlor epoxide	0.133	0.147	110	64 - 125	
Methoxychlor	0.133	0.134	100	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	109	50 - 150
Tetrachloro-m-xylene	113	47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453864

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-138441-A-6-G MS	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911610.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0011 g
Analysis Date:	08/04/2017 0821			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138441-A-6-H MSD	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911611.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0302 g
Analysis Date:	08/04/2017 0834			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	116	99	64 - 129	15	30		
4,4'-DDE	108	102	65 - 129	6	30		
4,4'-DDT	107	95	59 - 124	13	30		
Aldrin	113	102	66 - 127	10	30		
alpha-BHC	118	106	69 - 131	11	30		
beta-BHC	112	99	69 - 127	13	30		
delta-BHC	116	102	64 - 129	13	30		
Dieldrin	109	102	65 - 128	6	30		
Endosulfan I	109	103	66 - 126	6	30		
Endosulfan II	113	94	64 - 124	18	30		
Endosulfan sulfate	107	97	62 - 123	10	30		
Endrin	107	94	58 - 126	13	30		
Endrin aldehyde	115	98	69 - 131	16	30		
Endrin ketone	115	106	62 - 125	8	30		
gamma-BHC (Lindane)	115	103	67 - 126	12	30		
Heptachlor	108	99	63 - 125	9	30		
Heptachlor epoxide	107	100	64 - 125	8	30		
Methoxychlor	110	95	56 - 123	15	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	112	100	50 - 150
Tetrachloro-m-xylene	142	102	47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453864

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-138441-A-6-G MS	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911610.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0011 g
Analysis Date:	08/04/2017 0821			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138441-A-6-H MSD	Analysis Batch:	460-453820	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-453864	Lab File ID:	5F911611.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0302 g
Analysis Date:	08/04/2017 0834			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2112			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	106	91	64 - 129	15	30		
4,4'-DDE	106	86	65 - 129	21	30		
4,4'-DDT	99	85	59 - 124	16	30		
Aldrin	107	90	66 - 127	17	30		
alpha-BHC	111	94	69 - 131	16	30		
beta-BHC	105	89	69 - 127	16	30		
delta-BHC	106	92	64 - 129	14	30		
Dieldrin	106	87	65 - 128	20	30		
Endosulfan I	107	87	66 - 126	22	30		
Endosulfan II	99	90	64 - 124	10	30		
Endosulfan sulfate	102	84	62 - 123	20	30		
Endrin	99	85	58 - 126	16	30		
Endrin aldehyde	102	90	69 - 131	13	30		
Endrin ketone	111	90	62 - 125	21	30		
gamma-BHC (Lindane)	108	92	67 - 126	16	30		
Heptachlor	104	86	63 - 125	18	30		
Heptachlor epoxide	105	86	64 - 125	19	30		
Methoxychlor	100	83	56 - 123	18	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	103	92	50 - 150
Tetrachloro-m-xylene	104	90	47 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453866

Method: 8082A
Preparation: 3546

Lab Sample ID:	MB 460-453866/1-A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346769.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0744	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	0.067	U	0.0089	0.067
Aroclor 1221	0.067	U	0.0089	0.067
Aroclor 1232	0.067	U	0.0089	0.067
Aroclor 1242	0.067	U	0.0089	0.067
Aroclor 1248	0.067	U	0.0089	0.067
Aroclor 1254	0.067	U	0.0092	0.067
Aroclor 1260	0.067	U	0.0092	0.067
Aroclor 1268	0.067	U	0.0092	0.067
Aroclor-1262	0.067	U	0.0092	0.067
Polychlorinated biphenyls, Total	0.067	U	0.0092	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	113	35 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	108	35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453866

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-453866/2-A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346770.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0759	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.370	111	77 - 150	
Aroclor 1260	0.333	0.372	112	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	104	35 - 150

Lab Control Sample - Batch: 460-453866

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-453866/2-A	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346770.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/04/2017 0759	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.368	110	77 - 150	
Aroclor 1260	0.333	0.360	108	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	100	35 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453866

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-138441-A-6-J MS	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346771.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0032 g
Analysis Date:	08/04/2017 0814			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138441-A-6-K MSD	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346772.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0144 g
Analysis Date:	08/04/2017 0828			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	131	142	77 - 150	8	30		
Aroclor 1260	128	138	79 - 150	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	123	133	35 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-453866

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-138441-A-6-J MS	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346771.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0032 g
Analysis Date:	08/04/2017 0814			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138441-A-6-K MSD	Analysis Batch:	460-453817	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-453866	Lab File ID:	T1346772.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0144 g
Analysis Date:	08/04/2017 0828			Final Weight/Volume:	10 mL
Prep Date:	08/03/2017 2117			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	125	130	77 - 150	4	30		
Aroclor 1260	122	127	79 - 150	4	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	110	117	35 - 150

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-454105

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 460-454105/1-A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146834.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/07/2017 1441	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	0.017	U	0.0078	0.017
2,4-D	0.017	U	0.0078	0.017
Silvex (2,4,5-TP)	0.017	U	0.011	0.017

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	125	80 - 141

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	121	80 - 141

Lab Control Sample - Batch: 460-454105

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-454105/2-A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146835.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/07/2017 1456	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.0971	117	53 - 134	
2,4-D	0.333	0.331	99	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.113	136	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	130	80 - 141

Lab Control Sample - Batch: 460-454105

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-454105/2-A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146835.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/07/2017 1456	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.0913	110	53 - 134	
2,4-D	0.333	0.299	90	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.106	127	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	128	80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454105

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138369-1	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146836.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0411 g
Analysis Date:	08/07/2017 1510			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138369-1	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146837.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0309 g
Analysis Date:	08/07/2017 1525			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	116	115	53 - 134	1	30		
2,4-D	98	105	39 - 119	7	30		E
Silvex (2,4,5-TP)	141	144	58 - 150	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	130	133	80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454105

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138369-1	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146836.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0411 g
Analysis Date:	08/07/2017 1510			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138369-1	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146837.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0309 g
Analysis Date:	08/07/2017 1525			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	105	108	53 - 134	3	30		
2,4-D	86	89	39 - 119	4	30		
Silvex (2,4,5-TP)	128	129	58 - 150	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	124	126	80 - 141

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453639

Method: 6010C
Preparation: 3050B

Lab Sample ID:	MB 460-453639/1-A ^2	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453639	Lab File ID:	453639.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	08/03/2017 1051	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0148				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.24	2.0
Arsenic	1.5	U	0.37	1.5
Barium	20.0	U	1.6	20.0
Beryllium	0.20	U	0.023	0.20
Cadmium	0.40	U	0.060	0.40
Chromium	1.0	U	0.28	1.0
Cobalt	5.0	U	0.57	5.0
Copper	2.5	U	0.57	2.5
Lead	1.0	U	0.30	1.0
Manganese	1.5	U	0.16	1.5
Nickel	4.0	U	0.38	4.0
Selenium	2.0	U	0.61	2.0
Silver	1.0	U	0.15	1.0
Thallium	2.0	U	0.59	2.0
Vanadium	5.0	U	0.60	5.0
Zinc	3.0	U	0.26	3.0

Client: AKRF Inc

Job Number: 460-138369-1

LCS-Certified Reference Material - Batch: 460-453639

Method: 6010C
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-453639/2-A	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453639	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	08/03/2017 1055	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0148				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	65.1	46.86	72.0	0.2 - 212.0	
Arsenic	147	137.1	93.2	83.0 - 117.0	
Barium	314	310.4	98.9	82.2 - 117.8	
Beryllium	53.4	53.39	100	82.8 - 117.2	
Cadmium	193	196.3	101.7	82.4 - 117.6	
Chromium	82.6	79.37	96.1	81.8 - 118.2	
Cobalt	81.3	85.75	105.5	83.4 - 116.6	
Copper	171	162.3	94.9	83.6 - 116.4	
Lead	92.3	87.86	95.2	82.8 - 117.0	
Manganese	222	212.5	95.7	82.0 - 118.0	
Nickel	137	145.9	106.5	82.5 - 118.2	
Selenium	187	180.4	96.5	79.1 - 121.4	
Silver	40.7	37.61	92.4	79.6 - 120.4	
Thallium	153	162.0	105.9	81.0 - 119.0	
Vanadium	86.6	86.22	99.6	77.6 - 122.4	
Zinc	189	198.4	105.0	79.9 - 120.1	

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike - Batch: 460-453639

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138404-A-2-F MS	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453639	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.05 g
Analysis Date:	08/03/2017 1110	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0148				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	4.3	U	53.0	25.66	48	75 - 125	N
Arsenic	3.9		212	201.8	93	75 - 125	
Barium	37.6	J	212	242.8	97	75 - 125	
Beryllium	0.35	J	5.30	5.36	95	75 - 125	
Cadmium	0.86	U	5.30	5.11	96	75 - 125	
Chromium	21.2		21.2	39.09	84	75 - 125	
Cobalt	6.5	J	53.0	60.36	102	75 - 125	
Copper	14.7		26.5	39.30	93	75 - 125	
Lead	13.4		53.0	60.12	88	75 - 125	
Manganese	273		53.0	330.5	108	75 - 125	4
Nickel	18.8		53.0	72.52	101	75 - 125	
Selenium	4.3	U	212	199.4	94	75 - 125	
Silver	2.2	U	5.30	5.14	97	75 - 125	
Thallium	4.3	U	212	222.7	105	75 - 125	
Vanadium	21.9		53.0	73.54	98	75 - 125	
Zinc	26.1		53.0	76.29	95	75 - 125	

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-453639

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138404-A-2-E DU	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453639	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.05 g
Analysis Date:	08/03/2017 1058	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0148				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	4.3	U	4.2	NC	20	U
Arsenic	3.9		3.75	3	20	
Barium	37.6	J	37.08	1	20	J
Beryllium	0.35	J	0.357	1	20	J
Cadmium	0.86	U	0.85	NC	20	U
Chromium	21.2		21.08	0.6	20	
Cobalt	6.5	J	6.43	2	20	J
Copper	14.7		14.62	0.8	20	
Lead	13.4		13.32	0.9	20	
Manganese	273		270.6	1	20	
Nickel	18.8		18.55	1	20	
Selenium	4.3	U	4.2	NC	20	U
Silver	2.2	U	2.1	NC	20	U
Thallium	4.3	U	4.2	NC	20	U
Vanadium	21.9		21.70	0.7	20	
Zinc	26.1		25.64	2	20	

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	MB 460-453640/1-A	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	08/03/2017 1313	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.24	2.0
Arsenic	1.5	U	0.37	1.5
Barium	20.0	U	1.6	20.0
Beryllium	0.20	U	0.023	0.20
Cadmium	0.40	U	0.060	0.40
Chromium	1.0	U	0.28	1.0
Cobalt	5.0	U	0.57	5.0
Copper	2.5	U	0.57	2.5
Lead	1.0	U	0.30	1.0
Manganese	1.5	U	0.16	1.5
Nickel	4.0	U	0.38	4.0
Selenium	2.0	U	0.61	2.0
Silver	1.0	U	0.15	1.0
Thallium	2.0	U	0.59	2.0
Vanadium	5.0	U	0.60	5.0
Zinc	3.0	U	0.26	3.0

Client: AKRF Inc

Job Number: 460-138369-1

LCS-Certified Reference Material - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-453640/2-A	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	08/03/2017 1317	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	65.1	46.98	72.2	0.2 - 212.0	
Arsenic	147	124.6	84.8	83.0 - 117.0	
Barium	314	280.4	89.3	82.2 - 117.8	
Beryllium	53.4	48.57	91.0	82.8 - 117.2	
Cadmium	193	181.1	93.8	82.4 - 117.6	
Chromium	82.6	74.53	90.2	81.8 - 118.2	
Cobalt	81.3	80.04	98.4	83.4 - 116.6	
Copper	171	154.7	90.5	83.6 - 116.4	
Lead	92.3	82.22	89.1	82.8 - 117.0	
Manganese	222	205.5	92.6	82.0 - 118.0	
Nickel	137	136.6	99.7	82.5 - 118.2	
Selenium	187	164.7	88.1	79.1 - 121.4	
Silver	40.7	34.88	85.7	79.6 - 120.4	
Thallium	153	151.3	98.9	81.0 - 119.0	
Vanadium	86.6	79.75	92.1	77.6 - 122.4	
Zinc	189	185.1	98.0	79.9 - 120.1	

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138335-A-1-C MS	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.04 g
Analysis Date:	08/03/2017 1333	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	4.3	U	53.8	20.73	39	75 - 125	N
Arsenic	3.3	U	215	185.2	86	75 - 125	
Barium	100		215	286.0	86	75 - 125	
Beryllium	1.1		5.38	5.94	90	75 - 125	
Cadmium	0.87	U	5.38	4.65	86	75 - 125	
Chromium	38.0		21.5	56.83	87	75 - 125	
Cobalt	16.6		53.8	65.47	91	75 - 125	
Copper	24.4		26.9	42.17	66	75 - 125	N
Lead	9.3		53.8	62.48	99	75 - 125	
Manganese	751		53.8	726.4	-45	75 - 125	4
Nickel	28.7		53.8	74.34	85	75 - 125	
Selenium	4.3	U	215	188.1	87	75 - 125	
Silver	2.2	U	5.38	4.68	87	75 - 125	
Thallium	4.3	U	215	202.4	94	75 - 125	
Vanadium	70.0		53.8	122.7	98	75 - 125	
Zinc	57.2		53.8	100.9	81	75 - 125	

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-453640

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138335-A-1-B DU	Analysis Batch:	460-453753	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453640	Lab File ID:	453639.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	08/03/2017 1321	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 0205				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	4.3	U	4.3	NC	20	U
Arsenic	3.3	U	3.3	NC	20	U
Barium	100		101.1	0.9	20	
Beryllium	1.1		1.13	4	20	
Cadmium	0.87	U	0.87	NC	20	U
Chromium	38.0		38.34	0.8	20	
Cobalt	16.6		16.65	0.4	20	
Copper	24.4		24.64	0.9	20	
Lead	9.3		9.42	1	20	
Manganese	751		753.3	0.3	20	
Nickel	28.7		29.03	1	20	
Selenium	4.3	U	4.3	NC	20	U
Silver	2.2	U	2.2	NC	20	U
Thallium	4.3	U	4.3	NC	20	U
Vanadium	70.0		70.52	0.8	20	
Zinc	57.2		57.52	0.5	20	

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-453962

Method: 6020A
Preparation: 3010A

Lab Sample ID:	MB 460-453962/1-A ^2	Analysis Batch:	460-454088	Instrument ID:	ICPMS3
Client Matrix:	Water	Prep Batch:	460-453962	Lab File ID:	140SMPL.d
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/04/2017 1803	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0839				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.62	2.0
Arsenic	2.0	U	0.64	2.0
Barium	4.0	U	1.2	4.0
Beryllium	0.80	U	0.24	0.80
Cadmium	2.0	U	0.71	2.0
Chromium	4.0	U	1.3	4.0
Cobalt	4.0	U	1.3	4.0
Copper	4.0	U	1.4	4.0
Lead	1.2	U	0.38	1.2
Manganese	8.0	U	2.5	8.0
Nickel	4.0	U	1.4	4.0
Selenium	10.0	U	0.73	10.0
Silver	2.0	U	1.3	2.0
Thallium	0.80	U	0.26	0.80
Vanadium	4.0	U	1.9	4.0
Zinc	16.0	U	7.0	16.0

Client: AKRF Inc

Job Number: 460-138369-1

Lab Control Sample - Batch: 460-453962

Method: 6020A
Preparation: 3010A

Lab Sample ID:	LCS 460-453962/2-A ^2	Analysis Batch:	460-454088	Instrument ID:	ICPMS3
Client Matrix:	Water	Prep Batch:	460-453962	Lab File ID:	141SMPL.d
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/04/2017 1806	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0839				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	25.0	25.13	101	80 - 120	
Arsenic	50.0	52.69	105	80 - 120	
Barium	50.0	50.44	101	80 - 120	
Beryllium	25.0	23.49	94	80 - 120	
Cadmium	25.0	25.44	102	80 - 120	
Chromium	50.0	51.21	102	80 - 120	
Cobalt	25.0	25.89	104	80 - 120	
Copper	50.0	50.53	101	80 - 120	
Lead	25.0	25.57	102	80 - 120	
Manganese	250	251.8	101	80 - 120	
Nickel	50.0	51.14	102	80 - 120	
Selenium	50.0	52.95	106	80 - 120	
Silver	25.0	26.67	107	80 - 120	
Thallium	20.0	20.21	101	80 - 120	
Vanadium	50.0	50.98	102	80 - 120	
Zinc	250	245.2	98	80 - 120	

Client: AKRF Inc

Job Number: 460-138369-1

Matrix Spike - Batch: 460-453962

Method: 6020A
Preparation: 3010A

Lab Sample ID:	460-138254-E-1-C MS ^2	Analysis Batch:	460-454088	Instrument ID:	ICPMS3
Client Matrix:	Water	Prep Batch:	460-453962	Lab File ID:	143SMPL.d
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/04/2017 1810	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0839				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	2.0	U	25.0	23.97	96	75 - 125	
Arsenic	2.0	U	50.0	47.34	95	75 - 125	
Barium	37.3		50.0	87.48	100	75 - 125	
Beryllium	0.80	U	25.0	22.01	88	75 - 125	
Cadmium	2.0	U	25.0	24.46	98	75 - 125	
Chromium	4.0	U	50.0	49.23	98	75 - 125	
Cobalt	4.0	U	25.0	24.83	99	75 - 125	
Copper	2.3	J	50.0	48.95	93	75 - 125	
Lead	1.2	U	25.0	24.77	99	75 - 125	
Manganese	195		250	441.6	98	75 - 125	
Nickel	4.0	U	50.0	49.41	99	75 - 125	
Selenium	10.0	U	50.0	49.13	98	75 - 125	
Silver	2.0	U	25.0	26.14	105	75 - 125	
Thallium	0.80	U	20.0	19.44	97	75 - 125	
Vanadium	4.0	U	50.0	48.20	96	75 - 125	
Zinc	16.0	U	250	237.7	95	75 - 125	

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-453962

Method: 6020A
Preparation: 3010A

Lab Sample ID:	460-138254-E-1-B DU ^2	Analysis Batch:	460-454088	Instrument ID:	ICPMS3
Client Matrix:	Water	Prep Batch:	460-453962	Lab File ID:	144SMPL.d
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/04/2017 1813	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0839				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	2.0	U	2.0	NC	20	U
Arsenic	2.0	U	2.0	NC	20	U
Barium	37.3		37.96	2	20	
Beryllium	0.80	U	0.80	NC	20	U
Cadmium	2.0	U	2.0	NC	20	U
Chromium	4.0	U	4.0	NC	20	U
Cobalt	4.0	U	4.0	NC	20	U
Copper	2.3	J	4.0	NC	20	U
Lead	1.2	U	1.2	NC	20	U
Manganese	195		200.7	3	20	
Nickel	4.0	U	4.0	NC	20	U
Selenium	10.0	U	10.0	NC	20	U
Silver	2.0	U	2.0	NC	20	U
Thallium	0.80	U	0.80	NC	20	U
Vanadium	4.0	U	4.0	NC	20	U
Zinc	16.0	U	16.0	NC	20	U

Method Blank - Batch: 460-454026

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MB 460-454026/1-A	Analysis Batch:	460-454101	Instrument ID:	LEEMAN6
Client Matrix:	Water	Prep Batch:	460-454026	Lab File ID:	454026hg1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/04/2017 1430	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/04/2017 1218				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.20	U	0.17	0.20

Lab Control Sample - Batch: 460-454026

Method: 7470A
Preparation: 7470A

Lab Sample ID:	LCS 460-454026/2-A	Analysis Batch:	460-454101	Instrument ID:	LEEMAN6
Client Matrix:	Water	Prep Batch:	460-454026	Lab File ID:	454026hg1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/04/2017 1431	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/04/2017 1218				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	1.00	0.868	87	80 - 120	

Matrix Spike - Batch: 460-454026

Method: 7470A
Preparation: 7470A

Lab Sample ID:	460-138196-F-4-D MS	Analysis Batch:	460-454101	Instrument ID:	LEEMAN6
Client Matrix:	Water	Prep Batch:	460-454026	Lab File ID:	454026hg1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/04/2017 1437	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/04/2017 1218				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.20	U	1.00	0.852	85	80 - 120	

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-454026

Method: 7470A
Preparation: 7470A

Lab Sample ID:	460-138196-F-4-C DU	Analysis Batch:	460-454101	Instrument ID:	LEEMAN6
Client Matrix:	Water	Prep Batch:	460-454026	Lab File ID:	454026hg1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/04/2017 1435	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/04/2017 1218				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.20	U	0.20	NC	20	U

Method Blank - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-453914/1-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0904	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-453914/2-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 0906	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	12.96	72.8	66.9 - 133.1	

Matrix Spike - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138286-F-7-G MS ^3	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	3.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1141	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	1.0	0.0816	0.848	-181	75 - 125	4

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-453914

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138286-A-7-E DU ^3	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453914	Lab File ID:	453913HG1.CSV
Dilution:	3.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1139	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0423				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	1.0	1.03	3	20	

Method Blank - Batch: 460-453920

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-453920/1-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 1025	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-453920

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-453920/2-A	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/04/2017 1027	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	16.72	93.9	66.9 - 133.1	

Matrix Spike - Batch: 460-453920

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138402-E-1-D MS	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1032	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.018	U	0.0869	0.107	123	75 - 125	

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-453920

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138402-E-1-C DU	Analysis Batch:	460-454006	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-453920	Lab File ID:	453913HG1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	08/04/2017 1031	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/04/2017 0455				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.018	U	0.0150	NC	20	J

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	MB 460-454251/1-A	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium, hexavalent	2.0	U	0.40	2.0

Lab Control Sample Insoluble - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	LCSI 460-454251/3-A	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	708	686.7	97	80 - 120	

LCS-Certified Reference Material - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	LCSSRM 460-454251/2-A	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	16.8	15.53	92.6	84.1 - 114.3	

Matrix Spike Soluble - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138292-F-7-F MSS	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	2.3	U	45.2	41.85	93	75 - 125	

Matrix Spike Insoluble - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138292-F-7-G MSI	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	2.3	U	800	740.2	93	75 - 125	

Duplicate - Batch: 460-454251

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138292-F-7-E DU	Analysis Batch:	460-454349	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454251	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/06/2017 1021	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/05/2017 1744				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chromium, hexavalent	2.3	U	2.3	NC	20	U

Client: AKRF Inc

Job Number: 460-138369-1

Method Blank - Batch: 480-371031

Method: 9012B
Preparation: 9012B

Lab Sample ID:	MB 480-371031/1-A	Analysis Batch:	480-371103	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371031	Lab File ID:	OM_8-8-2017_01-50-29
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.5253 g
Analysis Date:	08/08/2017 1354	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 1034				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.95	U	0.46	0.95

LCS-Certified Reference Material - Batch: 480-371031

Method: 9012B
Preparation: 9012B

Lab Sample ID:	LCSSRM 480-371031/2-A	Analysis Batch:	480-371103	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371031	Lab File ID:	OM_8-8-2017_01-50-29
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	.5245 g
Analysis Date:	08/08/2017 1355	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 1034				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	86.4	84.84	98.2	29.1 - 119.2	

Matrix Spike - Batch: 480-371031

Method: 9012B
Preparation: 9012B

Lab Sample ID:	460-138228-E-1-C MS	Analysis Batch:	480-371103	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371031	Lab File ID:	OM_8-8-2017_01-50-29
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.5085 g
Analysis Date:	08/08/2017 1405	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 1034				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	1.8	11.5	14.17	108	85 - 115	

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 480-371031

Method: 9012B
Preparation: 9012B

Lab Sample ID:	440-188976-A-2-F DU	Analysis Batch:	480-371103	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371031	Lab File ID:	OM_8-8-2017_01-50-29
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.5450 g
Analysis Date:	08/08/2017 1401	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 1034				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Cyanide, Total	44.0	38.26	14	15	

Method Blank - Batch: 480-371235

Method: 9012B
Preparation: 9012B

Lab Sample ID:	MB 480-371235/1-A	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5152 g
Analysis Date:	08/09/2017 1237	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.97	U	0.47	0.97

LCS-Certified Reference Material - Batch: 480-371235

Method: 9012B
Preparation: 9012B

Lab Sample ID:	LCSSRM 480-371235/2-A	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5181 g
Analysis Date:	08/09/2017 1238	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	86.4	75.08	86.9	29.1 - 119.2	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-371235

Method: 9012B
Preparation: 9012B

MS Lab Sample ID:	460-138369-13	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5090 g
Analysis Date:	08/09/2017 1241			Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

MSD Lab Sample ID:	460-138369-13	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5077 g
Analysis Date:	08/09/2017 1243			Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cyanide, Total	87	86	85 - 115	1	15		

Client: AKRF Inc

Job Number: 460-138369-1

Duplicate - Batch: 460-454553

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-138381-A-2 DU	Analysis Batch:	460-454553	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/07/2017 1241	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	15.0	14.7	2	20	
Percent Solids	85.0	85.3	0.4	20	

New Durham Road
n, New Jersey 08917
e: (732) 549-3900 Fax: (732) 549-3679

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THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / A

480-138369 Chain of Custody

Page 1 of 2

Name (for report and invoice) Rebecca Kinal	Samplers Name (Printed) Jacob mewkew	Site/Project Identification St. John's Villa phase II
Company AMRF, INC.	P O # 8925	State (Location of site): NJ ☐ NY ☒ Other
Address 140 Parkside S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP ☐
City NY State NY	Rush Charges Authorized for: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No: 138369
Phone 914-922-0362 Fax		

Analysis Requested (please circle or write below and complete list)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	SVOC + TICs	Pest.	Herb.	PCBs	TAL metals	Sample Numbers
SB-1 (1-3)'	8/1/17	855	Soil	6	X	X	X	X	X	X	1
SB-1 (10-12')		910			X	X	X	X	X	X	2
SB-14 (1-3')		1020			X	X	X	X	X	X	3
SB-14 (10-12')		1030			X	X	X	X	X	X	4
SB-15 (1-3')		1055			X	X	X	X	X	X	5
SB-15 (10-12')		1055			X	X	X	X	X	X	6
SB-16 (1-3')		1200			X	X	X	X	X	X	7
SB-16 (10-12')		1235			X	X	X	X	X	X	8
SB-17 (1-3')		1345			X	X	X	X	X	X	9
SB-17 (10-12')		1350			X	X	X	X	X	X	10
Preservation Used: 1 = Ice, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH				Soil:	1	1	1	1	1	1	
6 = Other _____, 7 = Other _____				Water:							

Special Instructions CAT. A, TCL+CP-51 Table 3

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Jacob Mewkew	AMRF	8/2/17 1000	1)	TA
2)	TA	8/2/17 1300	2)	TA Edison
3)			3)	8/2/17
4)			4)	1300

SHORT HOLD

Laboratory Certifications: New Jersey (...urk (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (...

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Rebecca Kinal	Samplers Name (Printed): Jacob Menken	Site/Project Identification: St. Johns Villa Phase II
Company: AKRF	P.O.#: 89215	State (Location of site): NJ ☐ NY ☒ Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: NY State: NY	Rush (Charges Authorized For): 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY: Project No:
Phone: 914-925-2362 Fax:		Job No: 138369

Sample Identification	Date	Time	Matrix	No. of Cont.	Cyanide	DRO/GRO TPH	Hex. chrom.	VOC	SVOC	TAL metals	Filtered for metals					Sample Numbers
SB-1 WC	8/1/17	900	Soil	3	X	X	X									11
SB-15 WC	↓	1100	↓	↓	X	X	X									12
SB-19 WC	↓	1340	↓	↓	X	X	X									13
GW-15	↓	1435	Water	6				X	X	X						14
Trip Blank			↓	2	X			X								15

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____ — Soil / Water: 1 | 1 | 1

Special Instructions: CAT. A, TCL+CP-51 Table 3 : Soil | TCL+CP-51 + Select TAL Metals | Water Metals Filtered (Yes/No)? YES

Relinquished by	Company	Date / Time	Received by	Company
1) Jacob Menken	AKRF	8/2/17 1000	1)	T-A
2)	T-A	8/2/17 1300	2)	T-A Edison
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL-0018 (0715)

08/14/2017

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 138369

Number of Coolers: 1 IR Gun #: 8

Cooler Temperatures

	Raw	Corrected		Raw	Corrected		Raw	Corrected
Cooler #1:	1.9 °C	1.9 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
14				22											

(If pH adjustments are required record the information below:

Sample No(s). adjusted: NA

Preservative Name/Conc.: NA Volume of Preservative used (ml): NA

Lot # of Preservative(s): NA Expiration Date: NA

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: WJM Date: 8/2/17

08/14/2017

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Haas, Melissa	Carrier Tracking No(s):	COC No: 460-49073.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: melissa.haas@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-138369-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 8/9/2017			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 46023897			
Project Name: St John Villa; #89215	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wastewater, Sludge, Groundwater, Drinking Water, Air=A)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-1WC (460-138369-11)	8/1/17	09:00 Eastern		Solid			X	1	
SB-15WC (460-138369-12)	8/1/17	11:00 Eastern		Solid			X	1	
SB-17WC (460-138369-13)	8/1/17	13:40 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/3/17 1800	NEA		8/4/17 0930	TA Buf.
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 2.6°C

08/14/2017

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138369-1

Login Number: 138369
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.9°C, IR #8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	See NCM
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	See NCM
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138369-1

Login Number: 138369
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 08/04/17 03:12 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6 #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

Job Number: 460-138465-1

Job Description: St John Villa; #89215

For:
AKRF Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Attention: Becky Kinal

Approved for release.
Allison L Bennett
Project Manager I
8/14/2017 1:11 PM

Designee for
Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
08/14/2017

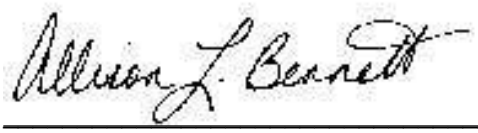
The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

Job Number: 460-138465-1

Job Description: St John Villa; #89215

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Allison L Bennett
Project Manager I
8/14/2017 1:11 PM

Designee for
Melissa Haas

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CASE NARRATIVE

Client: AKRF Inc

Project: St John Villa; #89215

Report Number: 460-138465-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 8/3/2017 12:11 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. #1 - Quantity is 8 on COC but received 5 containers. #2 - Quantity is 5 on COC, but received 8 containers. Cyanide, hexavalent chromium, DRO, and GRO are checked for #1 but the addtional volume was received for #2, so tests were placed on hold for both samples; #11-14 - Sampels are not checked on the COC.

Per client instructions, the additional sample volume belongs to sample -1 as indicated on the COC.

Containers were received without labels, only on the plastic bags they were grouped in.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C. The samples were prepared on 08/03/2017 and analyzed on 08/08/2017 and 08/09/2017.

The continuing calibration verification (CCV) analyzed in batch 454954 was outside the method criteria for the following analytes: Bromoform and Dichlorobromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 454778 was outside the method criteria for the following analyte: Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 454778 recovered outside control limits for the following analytes: Carbon tetrachloride and Methylcyclohexane. LCSD recovery and %RPD were outside control limits for Dichlorodifluoromethane. These analytes were not detected in the associated samples; therefore, the data have been reported.

Methylene Chloride was detected in method blank MB 460-454778/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride was detected in method blank MB 460-454954/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride was detected in method blank LB3 460-453860/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/05/2017 and analyzed on 08/09/2017, 08/10/2017 and 08/11/2017.

The continuing calibration verification (CCV) analyzed in batch 460-455506 was outside the method criteria for the following analyte(s): Indeno[1,2,3-cd]pyrene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 460-455247 was outside the method criteria for the following analyte(s): 2,4-Dinitrophenol and Di-n-octyl phthalate. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The following laboratory control sample (LCS) associated with batch 460-454194 contained one acid and one base surrogates outside acceptance limits:(LCS 460-454194/2-A). The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

2-Fluorobiphenyl, 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria low for SB-18(3-5')MSD (460-138465-2MSD).

Several analytes failed the recovery criteria low for the MS of sample SB-18(3-5')MS (460-138465-2) in batch 460-455086.

Several analytes failed the recovery criteria low for the MSD of sample SB-18(3-5')MSD (460-138465-2) in batch 460-455086. Several analytes exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS

Sample SB-18(0-2') (460-138465-1) was analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015D - GRO. The samples were prepared on 08/03/2017 and analyzed on 08/09/2017.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS

Sample SB-18(0-2') (460-138465-1) was analyzed for diesel range organics in accordance with EPA SW-846 Method 8015D - DRO. The samples were prepared on 08/07/2017 and analyzed on 08/08/2017.

C10-C44 failed the recovery criteria low for the MS of sample 460-138411-9 in batch 460-454764.

C10-C44 failed the recovery criteria low for the MSD of sample 460-138411-9 in batch 460-454764. C10-C44 exceeded the RPD limit.

Refer to the QC report for details.

No other difficulties were encountered during the DRO analysis.

All other quality control parameters were within the acceptance limits.

PESTICIDES
Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081B. The samples were prepared on 08/04/2017 and analyzed on 08/05/2017.

4,4'-DDT failed the recovery criteria high for the MSD of sample SB-18(0-2')MSD (460-138465-1) in batch 460-454193.

Refer to the QC report for details.

No other difficulties were encountered during the Pesticides analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS
Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/04/2017 and analyzed on 08/05/2017.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

CHLORINATED HERBICIDES
Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 08/04/2017 and 08/05/2017 and analyzed on 08/07/2017 and 08/08/2017.

No difficulties were encountered during the herbicides analysis.

All other quality control parameters were within the acceptance limits.

METALS
Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for metals in accordance with EPA SW-846 Methods 6010C. The samples were prepared on 08/03/2017 and analyzed on 08/04/2017.

Antimony and Zinc failed the recovery criteria low for the MS of sample 460-138430-1 in batch 460-454076.

Antimony failed the recovery criteria low for the MS of sample 460-138495-3 in batch 460-454076. Chromium failed the recovery criteria high.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SB-18(0-2') (460-138465-1)[4X], SB-18(3-5') (460-138465-2)[4X], SB-19(0-2') (460-138465-3)[4X], SB-19(3-5') (460-138465-4)[4X], SB-5(1-3') (460-138465-5)[4X], SB-5(10-12') (460-138465-6)[4X], SB-10(1-3') (460-138465-7)[4X], SB-10(10-12') (460-138465-8)[4X], SB-11(1-3') (460-138465-9)[4X], SB-11(10-12') (460-138465-10)[4X], SB-12(1-3') (460-138465-11)[4X], SB-12(10-12') (460-138465-12)[4X], SB-13(1-3') (460-138465-13)[4X] and SB-13(10-12') (460-138465-14)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

MERCURY
Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9),

SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 08/08/2017.

Mercury failed the recovery criteria high for the MS of sample 460-138699-17 in batch 460-454799.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No other difficulties were encountered during the Hg analysis.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Sample SB-18(0-2') (460-138465-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were prepared on 08/08/2017 and analyzed on 08/09/2017.

No difficulties were encountered during the hexchrome Cr6 analysis.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Sample SB-18(0-2') (460-138465-1) was analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared and analyzed on 08/09/2017.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE

Samples SB-18(0-2') (460-138465-1), SB-18(3-5') (460-138465-2), SB-19(0-2') (460-138465-3), SB-19(3-5') (460-138465-4), SB-5(1-3') (460-138465-5), SB-5(10-12') (460-138465-6), SB-10(1-3') (460-138465-7), SB-10(10-12') (460-138465-8), SB-11(1-3') (460-138465-9), SB-11(10-12') (460-138465-10), SB-12(1-3') (460-138465-11), SB-12(10-12') (460-138465-12), SB-13(1-3') (460-138465-13) and SB-13(10-12') (460-138465-14) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 08/07/2017.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-1	**SB-18(0-2')**					
Acetone		0.037		0.0069	mg/Kg	8260C
Methylene Chloride		0.00057	J B	0.0014	mg/Kg	8260C
Acenaphthene		0.020	J	0.37	mg/Kg	8270D
Anthracene		0.040	J	0.37	mg/Kg	8270D
Benzo[a]anthracene		0.24		0.037	mg/Kg	8270D
Benzo[a]pyrene		0.19		0.037	mg/Kg	8270D
Benzo[b]fluoranthene		0.34		0.037	mg/Kg	8270D
Benzo[g,h,i]perylene		0.23	J	0.37	mg/Kg	8270D
Benzo[k]fluoranthene		0.17		0.037	mg/Kg	8270D
Bis(2-ethylhexyl) phthalate		0.080	J	0.37	mg/Kg	8270D
Carbazole		0.029	J	0.37	mg/Kg	8270D
Chrysene		0.33	J	0.37	mg/Kg	8270D
Dibenz(a,h)anthracene		0.054		0.037	mg/Kg	8270D
Dibenzofuran		0.011	J	0.37	mg/Kg	8270D
Di-n-butyl phthalate		0.026	J	0.37	mg/Kg	8270D
Fluoranthene		0.52		0.37	mg/Kg	8270D
Fluorene		0.024	J	0.37	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.22		0.037	mg/Kg	8270D
Phenanthrene		0.37		0.37	mg/Kg	8270D
Pyrene		0.58		0.37	mg/Kg	8270D
#2 Diesel Fuel		15		7.6	mg/Kg	8015D
C10-C44		34		9.9	mg/Kg	8015D
4,4'-DDE		0.0058	J	0.0076	mg/Kg	8081B
4,4'-DDT		0.0073	J	0.0076	mg/Kg	8081B
Arsenic		7.1		2.7	mg/Kg	6010C
Barium		64.5		35.8	mg/Kg	6010C
Beryllium		0.54		0.36	mg/Kg	6010C
Chromium		25.0		1.8	mg/Kg	6010C
Cobalt		6.9	J	8.9	mg/Kg	6010C
Copper		29.5		4.5	mg/Kg	6010C
Lead		63.3		1.8	mg/Kg	6010C
Manganese		268		2.7	mg/Kg	6010C
Nickel		36.0		7.2	mg/Kg	6010C
Selenium		1.8	J	3.6	mg/Kg	6010C
Vanadium		41.5		8.9	mg/Kg	6010C
Zinc		69.2		5.4	mg/Kg	6010C
Mercury		0.074		0.017	mg/Kg	7471B
Percent Moisture		11.9		1.0	%	Moisture
Percent Solids		88.1		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-2	**SB-18(3-5')**					
Methylene Chloride		0.00037	J B	0.00098	mg/Kg	8260C
Acetophenone		0.0095	J	0.38	mg/Kg	8270D
Benzo[a]pyrene		0.016	J	0.038	mg/Kg	8270D
Benzo[b]fluoranthene		0.044		0.038	mg/Kg	8270D
Chrysene		0.039	J	0.38	mg/Kg	8270D
Fluoranthene		0.082	J	0.38	mg/Kg	8270D
Isophorone		0.28		0.15	mg/Kg	8270D
Phenanthrene		0.068	J	0.38	mg/Kg	8270D
Pyrene		0.050	J	0.38	mg/Kg	8270D
4,4'-DDT		0.0027	J	0.0077	mg/Kg	8081B
Arsenic		5.9		2.5	mg/Kg	6010C
Barium		67.6		33.7	mg/Kg	6010C
Beryllium		0.58		0.34	mg/Kg	6010C
Chromium		23.0		1.7	mg/Kg	6010C
Cobalt		6.7	J	8.4	mg/Kg	6010C
Copper		30.1		4.2	mg/Kg	6010C
Lead		35.3		1.7	mg/Kg	6010C
Manganese		239		2.5	mg/Kg	6010C
Nickel		32.3		6.7	mg/Kg	6010C
Selenium		1.4	J	3.4	mg/Kg	6010C
Vanadium		26.2		8.4	mg/Kg	6010C
Zinc		50.5		5.1	mg/Kg	6010C
Mercury		0.037		0.019	mg/Kg	7471B
Percent Moisture		13.3		1.0	%	Moisture
Percent Solids		86.7		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-3	**SB-19(0-2')**					
2-Butanone (MEK)		0.0014	J	0.0057	mg/Kg	8260C
Acetone		0.036		0.0057	mg/Kg	8260C
Methylene Chloride		0.00062	J B	0.0011	mg/Kg	8260C
Acenaphthene		0.021	J	0.37	mg/Kg	8270D
Acenaphthylene		0.020	J	0.37	mg/Kg	8270D
Anthracene		0.085	J	0.37	mg/Kg	8270D
Benzo[a]anthracene		0.51		0.037	mg/Kg	8270D
Benzo[a]pyrene		0.59		0.037	mg/Kg	8270D
Benzo[b]fluoranthene		1.0		0.037	mg/Kg	8270D
Benzo[g,h,i]perylene		0.25	J	0.37	mg/Kg	8270D
Benzo[k]fluoranthene		0.35		0.037	mg/Kg	8270D
Bis(2-ethylhexyl) phthalate		0.18	J	0.37	mg/Kg	8270D
Carbazole		0.043	J	0.37	mg/Kg	8270D
Chrysene		0.61		0.37	mg/Kg	8270D
Dibenz(a,h)anthracene		0.11		0.037	mg/Kg	8270D
Dibenzofuran		0.012	J	0.37	mg/Kg	8270D
Fluoranthene		1.0		0.37	mg/Kg	8270D
Fluorene		0.026	J	0.37	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.43		0.037	mg/Kg	8270D
Naphthalene		0.017	J	0.37	mg/Kg	8270D
Phenanthrene		0.41		0.37	mg/Kg	8270D
Phenol		0.028	J	0.37	mg/Kg	8270D
Pyrene		0.71		0.37	mg/Kg	8270D
4,4'-DDE		0.0069	J	0.0075	mg/Kg	8081B
Chlordane (technical)		0.13		0.075	mg/Kg	8081B
Arsenic		3.2		2.6	mg/Kg	6010C
Barium		61.0		35.2	mg/Kg	6010C
Beryllium		0.35		0.35	mg/Kg	6010C
Cadmium		0.13	J	0.70	mg/Kg	6010C
Chromium		16.3		1.8	mg/Kg	6010C
Cobalt		5.9	J	8.8	mg/Kg	6010C
Copper		33.8		4.4	mg/Kg	6010C
Lead		81.9		1.8	mg/Kg	6010C
Manganese		272		2.6	mg/Kg	6010C
Nickel		33.5		7.0	mg/Kg	6010C
Selenium		1.2	J	3.5	mg/Kg	6010C
Vanadium		19.5		8.8	mg/Kg	6010C
Zinc		113		5.3	mg/Kg	6010C
Mercury		0.32		0.019	mg/Kg	7471B
Percent Moisture		10.5		1.0	%	Moisture
Percent Solids		89.5		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-4	**SB-19(3-5')**					
2-Methylnaphthalene		0.0087	J	0.38	mg/Kg	8270D
Acenaphthene		0.026	J	0.38	mg/Kg	8270D
Acenaphthylene		0.023	J	0.38	mg/Kg	8270D
Acetophenone		0.012	J	0.38	mg/Kg	8270D
Anthracene		0.10	J	0.38	mg/Kg	8270D
Benzaldehyde		0.040	J	0.38	mg/Kg	8270D
Benzo[a]anthracene		0.64		0.038	mg/Kg	8270D
Benzo[a]pyrene		0.72		0.038	mg/Kg	8270D
Benzo[b]fluoranthene		1.2		0.038	mg/Kg	8270D
Benzo[g,h,i]perylene		0.30	J	0.38	mg/Kg	8270D
Benzo[k]fluoranthene		0.47		0.038	mg/Kg	8270D
Bis(2-ethylhexyl) phthalate		0.32	J	0.38	mg/Kg	8270D
Carbazole		0.048	J	0.38	mg/Kg	8270D
Chrysene		0.75		0.38	mg/Kg	8270D
Dibenz(a,h)anthracene		0.12		0.038	mg/Kg	8270D
Dibenzofuran		0.015	J	0.38	mg/Kg	8270D
Fluoranthene		1.2		0.38	mg/Kg	8270D
Fluorene		0.030	J	0.38	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.49		0.038	mg/Kg	8270D
Naphthalene		0.014	J	0.38	mg/Kg	8270D
Phenanthrene		0.46		0.38	mg/Kg	8270D
Phenol		0.067	J	0.38	mg/Kg	8270D
Pyrene		0.81		0.38	mg/Kg	8270D
Chlordane (technical)		0.21		0.077	mg/Kg	8081B
Arsenic		4.9		2.7	mg/Kg	6010C
Barium		75.0		35.8	mg/Kg	6010C
Beryllium		0.37		0.36	mg/Kg	6010C
Cadmium		0.33	J	0.72	mg/Kg	6010C
Chromium		18.8		1.8	mg/Kg	6010C
Cobalt		8.1	J	8.9	mg/Kg	6010C
Copper		49.4		4.5	mg/Kg	6010C
Lead		144		1.8	mg/Kg	6010C
Manganese		368		2.7	mg/Kg	6010C
Nickel		49.6		7.2	mg/Kg	6010C
Selenium		1.1	J	3.6	mg/Kg	6010C
Vanadium		24.6		8.9	mg/Kg	6010C
Zinc		204		5.4	mg/Kg	6010C
Mercury		0.27		0.019	mg/Kg	7471B
Percent Moisture		13.4		1.0	%	Moisture
Percent Solids		86.6		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-5	**SB-5(1-3')**					
2-Methylnaphthalene		0.021	J	0.39	mg/Kg	8270D
Naphthalene		0.036	J	0.39	mg/Kg	8270D
Phenanthrene		0.028	J	0.39	mg/Kg	8270D
Arsenic		5.9		2.7	mg/Kg	6010C
Barium		81.9		36.0	mg/Kg	6010C
Beryllium		0.48		0.36	mg/Kg	6010C
Chromium		17.0		1.8	mg/Kg	6010C
Cobalt		8.1	J	9.0	mg/Kg	6010C
Copper		49.9		4.5	mg/Kg	6010C
Lead		87.7		1.8	mg/Kg	6010C
Manganese		444		2.7	mg/Kg	6010C
Nickel		37.2		7.2	mg/Kg	6010C
Vanadium		23.9		9.0	mg/Kg	6010C
Zinc		113		5.4	mg/Kg	6010C
Mercury		0.015	J	0.018	mg/Kg	7471B
Percent Moisture		15.1		1.0	%	Moisture
Percent Solids		84.9		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-6	**SB-5(10-12')**					
Methylene Chloride		0.00061	J B	0.0012	mg/Kg	8260C
Acenaphthene		0.021	J	0.38	mg/Kg	8270D
Anthracene		0.078	J	0.38	mg/Kg	8270D
Benzo[a]anthracene		0.42		0.038	mg/Kg	8270D
Benzo[a]pyrene		0.45		0.038	mg/Kg	8270D
Benzo[b]fluoranthene		0.76		0.038	mg/Kg	8270D
Benzo[g,h,i]perylene		0.21	J	0.38	mg/Kg	8270D
Benzo[k]fluoranthene		0.30		0.038	mg/Kg	8270D
Carbazole		0.12	J	0.38	mg/Kg	8270D
Chrysene		0.52		0.38	mg/Kg	8270D
Dibenzofuran		0.022	J	0.38	mg/Kg	8270D
Fluoranthene		1.4		0.38	mg/Kg	8270D
Fluorene		0.020	J	0.38	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.33		0.038	mg/Kg	8270D
Isophorone		0.023	J	0.15	mg/Kg	8270D
Phenanthrene		0.66		0.38	mg/Kg	8270D
Pyrene		0.90		0.38	mg/Kg	8270D
Arsenic		4.8		2.7	mg/Kg	6010C
Barium		40.4		36.6	mg/Kg	6010C
Beryllium		0.67		0.37	mg/Kg	6010C
Chromium		19.4		1.8	mg/Kg	6010C
Cobalt		5.5	J	9.1	mg/Kg	6010C
Copper		42.2		4.6	mg/Kg	6010C
Lead		8.3		1.8	mg/Kg	6010C
Manganese		234		2.7	mg/Kg	6010C
Nickel		24.9		7.3	mg/Kg	6010C
Vanadium		23.0		9.1	mg/Kg	6010C
Zinc		33.0		5.5	mg/Kg	6010C
Percent Moisture		13.2		1.0	%	Moisture
Percent Solids		86.8		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-7	**SB-10(1-3')**					
Methylene Chloride		0.00037	J B	0.0010	mg/Kg	8260C
Arsenic		1.7	J	2.7	mg/Kg	6010C
Barium		35.6		35.6	mg/Kg	6010C
Beryllium		0.33	J	0.36	mg/Kg	6010C
Chromium		13.1		1.8	mg/Kg	6010C
Cobalt		11.9		8.9	mg/Kg	6010C
Copper		12.1		4.5	mg/Kg	6010C
Lead		14.7		1.8	mg/Kg	6010C
Manganese		373		2.7	mg/Kg	6010C
Nickel		67.9		7.1	mg/Kg	6010C
Vanadium		13.1		8.9	mg/Kg	6010C
Zinc		26.7		5.3	mg/Kg	6010C
Percent Moisture		8.0		1.0	%	Moisture
Percent Solids		92.0		1.0	%	Moisture
460-138465-8	**SB-10(10-12')**					
Methylene Chloride		0.00034	J B	0.00098	mg/Kg	8260C
Benzo[a]pyrene		0.022	J	0.037	mg/Kg	8270D
Benzo[b]fluoranthene		0.033	J	0.037	mg/Kg	8270D
Bis(2-ethylhexyl) phthalate		0.016	J	0.37	mg/Kg	8270D
Chrysene		0.031	J	0.37	mg/Kg	8270D
Fluoranthene		0.050	J	0.37	mg/Kg	8270D
Phenanthrene		0.025	J	0.37	mg/Kg	8270D
Pyrene		0.044	J	0.37	mg/Kg	8270D
Arsenic		3.0		2.5	mg/Kg	6010C
Barium		43.0		33.6	mg/Kg	6010C
Beryllium		0.36		0.34	mg/Kg	6010C
Chromium		14.7		1.7	mg/Kg	6010C
Cobalt		6.9	J	8.4	mg/Kg	6010C
Copper		21.0		4.2	mg/Kg	6010C
Lead		64.0		1.7	mg/Kg	6010C
Manganese		273		2.5	mg/Kg	6010C
Nickel		53.6		6.7	mg/Kg	6010C
Vanadium		17.8		8.4	mg/Kg	6010C
Zinc		51.5		5.0	mg/Kg	6010C
Mercury		0.048		0.018	mg/Kg	7471B
Percent Moisture		10.6		1.0	%	Moisture
Percent Solids		89.4		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-9	**SB-11(1-3')**					
Methylene Chloride		0.00031	J B	0.00090	mg/Kg	8260C
Benzo[a]anthracene		0.042		0.036	mg/Kg	8270D
Benzo[a]pyrene		0.034	J	0.036	mg/Kg	8270D
Benzo[b]fluoranthene		0.051		0.036	mg/Kg	8270D
Benzo[g,h,i]perylene		0.026	J	0.36	mg/Kg	8270D
Bis(2-ethylhexyl) phthalate		0.029	J	0.36	mg/Kg	8270D
Chrysene		0.037	J	0.36	mg/Kg	8270D
Fluoranthene		0.065	J	0.36	mg/Kg	8270D
Isophorone		0.034	J	0.15	mg/Kg	8270D
Phenanthrene		0.035	J	0.36	mg/Kg	8270D
Pyrene		0.065	J	0.36	mg/Kg	8270D
Heptachlor epoxide		0.0026	J	0.0073	mg/Kg	8081B
Arsenic		2.5	J	2.6	mg/Kg	6010C
Barium		46.6		34.2	mg/Kg	6010C
Beryllium		0.36		0.34	mg/Kg	6010C
Chromium		16.3		1.7	mg/Kg	6010C
Cobalt		7.2	J	8.6	mg/Kg	6010C
Copper		22.8		4.3	mg/Kg	6010C
Lead		104		1.7	mg/Kg	6010C
Manganese		236		2.6	mg/Kg	6010C
Nickel		62.3		6.8	mg/Kg	6010C
Selenium		1.0	J	3.4	mg/Kg	6010C
Vanadium		17.8		8.6	mg/Kg	6010C
Zinc		48.2		5.1	mg/Kg	6010C
Mercury		0.073		0.018	mg/Kg	7471B
Percent Moisture		8.7		1.0	%	Moisture
Percent Solids		91.3		1.0	%	Moisture
460-138465-10	**SB-11(10-12')**					
Methylene Chloride		0.0011	J B	0.0012	mg/Kg	8260C
Arsenic		0.78	J	2.5	mg/Kg	6010C
Barium		18.4	J	32.7	mg/Kg	6010C
Beryllium		0.22	J	0.33	mg/Kg	6010C
Chromium		13.4		1.6	mg/Kg	6010C
Cobalt		4.6	J	8.2	mg/Kg	6010C
Copper		10.5		4.1	mg/Kg	6010C
Lead		4.2		1.6	mg/Kg	6010C
Manganese		197		2.5	mg/Kg	6010C
Nickel		34.3		6.5	mg/Kg	6010C
Vanadium		13.2		8.2	mg/Kg	6010C
Zinc		17.9		4.9	mg/Kg	6010C
Percent Moisture		6.6		1.0	%	Moisture
Percent Solids		93.4		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-11	**SB-12(1-3')**					
Methylene Chloride		0.00066	J B	0.00095	mg/Kg	8260C
Benzo[a]anthracene		0.092		0.036	mg/Kg	8270D
Benzo[a]pyrene		0.10		0.036	mg/Kg	8270D
Benzo[b]fluoranthene		0.16		0.036	mg/Kg	8270D
Benzo[g,h,i]perylene		0.041	J	0.36	mg/Kg	8270D
Benzo[k]fluoranthene		0.056		0.036	mg/Kg	8270D
Bis(2-ethylhexyl) phthalate		0.082	J	0.36	mg/Kg	8270D
Chrysene		0.093	J	0.36	mg/Kg	8270D
Fluoranthene		0.17	J	0.36	mg/Kg	8270D
Indeno[1,2,3-cd]pyrene		0.10		0.036	mg/Kg	8270D
Phenanthrene		0.082	J	0.36	mg/Kg	8270D
Pyrene		0.14	J	0.36	mg/Kg	8270D
4,4'-DDT		0.024		0.0074	mg/Kg	8081B
Chlordane (technical)		0.22		0.074	mg/Kg	8081B
Heptachlor epoxide		0.0085		0.0074	mg/Kg	8081B
Arsenic		2.0	J	2.5	mg/Kg	6010C
Barium		33.5		32.8	mg/Kg	6010C
Beryllium		0.31	J	0.33	mg/Kg	6010C
Chromium		13.0		1.6	mg/Kg	6010C
Cobalt		6.5	J	8.2	mg/Kg	6010C
Copper		21.7		4.1	mg/Kg	6010C
Lead		23.4		1.6	mg/Kg	6010C
Manganese		267		2.5	mg/Kg	6010C
Nickel		52.5		6.6	mg/Kg	6010C
Selenium		1.1	J	3.3	mg/Kg	6010C
Vanadium		14.9		8.2	mg/Kg	6010C
Zinc		36.4		4.9	mg/Kg	6010C
Mercury		0.049		0.017	mg/Kg	7471B
Percent Moisture		9.1		1.0	%	Moisture
Percent Solids		90.9		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-12	**SB-12(10-12')**					
Acetone		0.0041	J	0.0045	mg/Kg	8260C
Methylene Chloride		0.00051	J B	0.00091	mg/Kg	8260C
Arsenic		2.7		2.6	mg/Kg	6010C
Barium		32.2	J	34.3	mg/Kg	6010C
Beryllium		0.47		0.34	mg/Kg	6010C
Chromium		20.2		1.7	mg/Kg	6010C
Cobalt		8.4	J	8.6	mg/Kg	6010C
Copper		11.0		4.3	mg/Kg	6010C
Lead		7.0		1.7	mg/Kg	6010C
Manganese		264		2.6	mg/Kg	6010C
Nickel		43.9		6.9	mg/Kg	6010C
Vanadium		26.9		8.6	mg/Kg	6010C
Zinc		32.9		5.1	mg/Kg	6010C
Percent Moisture		12.9		1.0	%	Moisture
Percent Solids		87.1		1.0	%	Moisture
460-138465-13	**SB-13(1-3')**					
Methylene Chloride		0.00056	J B	0.0010	mg/Kg	8260C
Arsenic		1.7	J	2.4	mg/Kg	6010C
Barium		22.5	J	31.6	mg/Kg	6010C
Beryllium		0.37		0.32	mg/Kg	6010C
Chromium		9.7		1.6	mg/Kg	6010C
Cobalt		6.1	J	7.9	mg/Kg	6010C
Copper		12.3		3.9	mg/Kg	6010C
Lead		5.0		1.6	mg/Kg	6010C
Manganese		225		2.4	mg/Kg	6010C
Nickel		50.1		6.3	mg/Kg	6010C
Vanadium		17.0		7.9	mg/Kg	6010C
Zinc		18.7		4.7	mg/Kg	6010C
Percent Moisture		5.4		1.0	%	Moisture
Percent Solids		94.6		1.0	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-138465-14	**SB-13(10-12')**					
Methylene Chloride		0.00062	J B	0.0011	mg/Kg	8260C
Benzo[a]pyrene		0.032	J	0.034	mg/Kg	8270D
Benzo[k]fluoranthene		0.042		0.034	mg/Kg	8270D
Chrysene		0.029	J	0.34	mg/Kg	8270D
Fluoranthene		0.037	J	0.34	mg/Kg	8270D
Phenanthrene		0.017	J	0.34	mg/Kg	8270D
Pyrene		0.028	J	0.34	mg/Kg	8270D
Arsenic		1.1	J	2.4	mg/Kg	6010C
Barium		19.1	J	31.7	mg/Kg	6010C
Beryllium		0.17	J	0.32	mg/Kg	6010C
Chromium		8.7		1.6	mg/Kg	6010C
Cobalt		4.4	J	7.9	mg/Kg	6010C
Copper		9.1		4.0	mg/Kg	6010C
Lead		2.2		1.6	mg/Kg	6010C
Manganese		242		2.4	mg/Kg	6010C
Nickel		11.2		6.3	mg/Kg	6010C
Vanadium		15.0		7.9	mg/Kg	6010C
Zinc		15.3		4.8	mg/Kg	6010C
Percent Moisture		4.4		1.0	%	Moisture
Percent Solids		95.6		1.0	%	Moisture

METHOD SUMMARY

Client: AKRF Inc

Job Number: 460-138465-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Closed System Purge and Trap	TAL EDI		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270D	
Microwave Extraction	TAL EDI		SW846 3546
Gasoline Range Organics (GRO) (GC)	TAL EDI	SW846 8015D	
Closed System Purge and Trap	TAL EDI		SW846 5035
Diesel Range Organics (DRO) (GC)	TAL EDI	SW846 8015D	
Microwave Extraction	TAL EDI		SW846 3546
Organochlorine Pesticides (GC)	TAL EDI	SW846 8081B	
Microwave Extraction	TAL EDI		SW846 3546
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082A	
Microwave Extraction	TAL EDI		SW846 3546
Herbicides (GC)	TAL EDI	SW846 8151A	
Extraction (Herbicides)	TAL EDI		SW846 8151A
Metals (ICP)	TAL EDI	SW846 6010C	
Preparation, Metals	TAL EDI		SW846 3050B
Mercury (CVAA)	TAL EDI	SW846 7471B	
Preparation, Mercury	TAL EDI		SW846 7471B
Chromium, Hexavalent	TAL EDI	SW846 7196A	
Alkaline Digestion (Chromium, Hexavalent)	TAL EDI		SW846 3060A
Percent Moisture	TAL EDI	EPA Moisture	
Cyanide, Total andor Amenable	TAL BUF	SW846 9012B	
Cyanide, Total and/or Amenable, Distillation	TAL BUF		SW846 9012B

Lab References:

TAL BUF = TestAmerica Buffalo

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: AKRF Inc

Job Number: 460-138465-1

Method	Analyst	Analyst ID
SW846 8260C	Boykin, Kenneth	KLB
SW846 8260C	Martinez, Eddie	EMM
SW846 8270D	Acierno, Mark	MVA
SW846 8270D	Crocco, Michael	MMC
SW846 8270D	Manlangit, Ferdie	FAM
SW846 8270D	Zhao, Chunxin	CAZ
SW846 8015D	Martinez, Eddie	EMM
SW846 8015D	Nimer, Diaa	DAN
SW846 8081B	Kapoor, Sita	SAK
SW846 8082A	Patel, Jignesh	JHP
SW846 8151A	Kapoor, Sita	SAK
SW846 6010C	Huang, Yixin	YZH
SW846 7471B	Staib, Thomas	TJS
SW846 7196A	Pierre, Philippe X	PXP
SW846 9012B	Leader, Michael D	MDL
EPA Moisture	Callahan, Rory W	RWC

SAMPLE SUMMARY

Client: AKRF Inc

Job Number: 460-138465-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-138465-1	SB-18(0-2')	Solid	08/02/2017 1025	08/03/2017 1211
460-138465-2	SB-18(3-5')	Solid	08/02/2017 1025	08/03/2017 1211
460-138465-3	SB-19(0-2')	Solid	08/02/2017 1055	08/03/2017 1211
460-138465-4	SB-19(3-5')	Solid	08/02/2017 1055	08/03/2017 1211
460-138465-5	SB-5(1-3')	Solid	08/02/2017 1540	08/03/2017 1211
460-138465-6	SB-5(10-12')	Solid	08/02/2017 1545	08/03/2017 1211
460-138465-7	SB-10(1-3')	Solid	08/02/2017 1305	08/03/2017 1211
460-138465-8	SB-10(10-12')	Solid	08/02/2017 1310	08/03/2017 1211
460-138465-9	SB-11(1-3')	Solid	08/02/2017 1242	08/03/2017 1211
460-138465-10	SB-11(10-12')	Solid	08/02/2017 1245	08/03/2017 1211
460-138465-11	SB-12(1-3')	Solid	08/02/2017 1145	08/03/2017 1211
460-138465-12	SB-12(10-12')	Solid	08/02/2017 1155	08/03/2017 1211
460-138465-13	SB-13(1-3')	Solid	08/02/2017 1615	08/03/2017 1211
460-138465-14	SB-13(10-12')	Solid	08/02/2017 1650	08/03/2017 1211

SAMPLE RESULTS

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 | Date Sampled: 08/02/2017 1025
Client Matrix: Solid | % Moisture: 11.9 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71748.D
Dilution:	1.0			Initial Weight/Volume:	4.12 g
Analysis Date:	08/08/2017 1734			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2038				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0014	U	0.00032	0.0014
1,1,2,2-Tetrachloroethane		0.0014	U	0.00029	0.0014
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0014	U	0.00041	0.0014
1,1,2-Trichloroethane		0.0014	U	0.00025	0.0014
1,1-Dichloroethane		0.0014	U	0.00028	0.0014
1,1-Dichloroethene		0.0014	U	0.00031	0.0014
1,2,3-Trichlorobenzene		0.0014	U	0.00025	0.0014
1,2,4-Trichlorobenzene		0.0014	U	0.00013	0.0014
1,2,4-Trimethylbenzene		0.0014	U	0.00013	0.0014
1,2-Dibromo-3-Chloropropane		0.0014	U	0.00063	0.0014
1,2-Dichlorobenzene		0.0014	U	0.00020	0.0014
1,2-Dichloroethane		0.0014	U	0.00041	0.0014
1,2-Dichloropropane		0.0014	U	0.00058	0.0014
1,3,5-Trimethylbenzene		0.0014	U	0.00016	0.0014
1,3-Dichlorobenzene		0.0014	U	0.00022	0.0014
1,4-Dichlorobenzene		0.0014	U	0.00014	0.0014
1,4-Dioxane		0.028	U	0.013	0.028
2-Butanone (MEK)		0.0069	U	0.0015	0.0069
2-Hexanone		0.0069	U	0.0011	0.0069
4-Isopropyltoluene		0.0014	U	0.00014	0.0014
4-Methyl-2-pentanone (MIBK)		0.0069	U	0.00091	0.0069
Acetone		0.037		0.0052	0.0069
Benzene		0.0014	U	0.00036	0.0014
Bromoform		0.0014	U	0.00059	0.0014
Bromomethane		0.0014	U	0.00065	0.0014
Carbon disulfide		0.0014	U	0.00037	0.0014
Carbon tetrachloride		0.0014	U *	0.00025	0.0014
Chlorobenzene		0.0014	U	0.00024	0.0014
Chlorobromomethane		0.0014	U	0.00039	0.0014
Chlorodibromomethane		0.0014	U	0.00027	0.0014
Chloroethane		0.0014	U	0.00072	0.0014
Chloroform		0.0014	U	0.00044	0.0014
Chloromethane		0.0014	U	0.00060	0.0014
cis-1,2-Dichloroethene		0.0014	U	0.00021	0.0014
cis-1,3-Dichloropropene		0.0014	U	0.00038	0.0014
Cyclohexane		0.0014	U	0.00030	0.0014
Dichlorobromomethane		0.0014	U	0.00035	0.0014
Dichlorodifluoromethane		0.0014	U *	0.00047	0.0014
Ethylbenzene		0.0014	U	0.00027	0.0014
Ethylene Dibromide		0.0014	U	0.00025	0.0014
Isopropylbenzene		0.0014	U	0.00017	0.0014
Methyl acetate		0.0069	U	0.0059	0.0069
Methyl tert-butyl ether		0.0014	U	0.00017	0.0014
Methylcyclohexane		0.0014	U *	0.00022	0.0014
Methylene Chloride		0.00057	J B	0.00022	0.0014
m-Xylene & p-Xylene		0.0014	U	0.00024	0.0014

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71748.D
Dilution:	1.0			Initial Weight/Volume:	4.12 g
Analysis Date:	08/08/2017 1734			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2038				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0014	U	0.00026	0.0014
n-Butylbenzene		0.0014	U	0.00020	0.0014
N-Propylbenzene		0.0014	U	0.00024	0.0014
o-Xylene		0.0014	U	0.00013	0.0014
sec-Butylbenzene		0.0014	U	0.00012	0.0014
Styrene		0.0014	U	0.00017	0.0014
tert-Butylbenzene		0.0014	U	0.00017	0.0014
Tetrachloroethene		0.0014	U	0.00020	0.0014
Toluene		0.0014	U	0.00086	0.0014
trans-1,2-Dichloroethene		0.0014	U	0.00034	0.0014
trans-1,3-Dichloropropene		0.0014	U	0.00037	0.0014
Trichloroethene		0.0014	U	0.00020	0.0014
Trichlorofluoromethane		0.0014	U	0.00056	0.0014
Vinyl chloride		0.0014	U	0.00075	0.0014
Xylenes, Total		0.0028	U	0.00035	0.0028

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		78 - 135
4-Bromofluorobenzene	94		67 - 126
Dibromofluoromethane (Surr)	104		61 - 149
Toluene-d8 (Surr)	109		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71748.D
Dilution:	1.0			Initial Weight/Volume:	4.12 g
Analysis Date:	08/08/2017 1734			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2038				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.011	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-18(3-5')**

Lab Sample ID: 460-138465-2 | Date Sampled: 08/02/2017 1025
Client Matrix: Solid | % Moisture: 13.3 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71749.D
Dilution:	1.0			Initial Weight/Volume:	5.91 g
Analysis Date:	08/08/2017 1757			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2039				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00098	U	0.00023	0.00098
1,1,2,2-Tetrachloroethane		0.00098	U	0.00021	0.00098
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00098	U	0.00029	0.00098
1,1,2-Trichloroethane		0.00098	U	0.00017	0.00098
1,1-Dichloroethane		0.00098	U	0.00020	0.00098
1,1-Dichloroethene		0.00098	U	0.00022	0.00098
1,2,3-Trichlorobenzene		0.00098	U	0.00018	0.00098
1,2,4-Trichlorobenzene		0.00098	U	0.000090	0.00098
1,2,4-Trimethylbenzene		0.00098	U	0.000092	0.00098
1,2-Dibromo-3-Chloropropane		0.00098	U	0.00045	0.00098
1,2-Dichlorobenzene		0.00098	U	0.00014	0.00098
1,2-Dichloroethane		0.00098	U	0.00029	0.00098
1,2-Dichloropropane		0.00098	U	0.00041	0.00098
1,3,5-Trimethylbenzene		0.00098	U	0.00011	0.00098
1,3-Dichlorobenzene		0.00098	U	0.00016	0.00098
1,4-Dichlorobenzene		0.00098	U	0.000098	0.00098
1,4-Dioxane		0.020	U	0.0090	0.020
2-Butanone (MEK)		0.0049	U	0.0011	0.0049
2-Hexanone		0.0049	U	0.00076	0.0049
4-Isopropyltoluene		0.00098	U	0.000096	0.00098
4-Methyl-2-pentanone (MIBK)		0.0049	U	0.00065	0.0049
Acetone		0.0049	U	0.0037	0.0049
Benzene		0.00098	U	0.00025	0.00098
Bromoform		0.00098	U	0.00041	0.00098
Bromomethane		0.00098	U	0.00046	0.00098
Carbon disulfide		0.00098	U	0.00026	0.00098
Carbon tetrachloride		0.00098	U *	0.00018	0.00098
Chlorobenzene		0.00098	U	0.00017	0.00098
Chlorobromomethane		0.00098	U	0.00027	0.00098
Chlorodibromomethane		0.00098	U	0.00019	0.00098
Chloroethane		0.00098	U	0.00051	0.00098
Chloroform		0.00098	U	0.00031	0.00098
Chloromethane		0.00098	U	0.00042	0.00098
cis-1,2-Dichloroethene		0.00098	U	0.00015	0.00098
cis-1,3-Dichloropropene		0.00098	U	0.00027	0.00098
Cyclohexane		0.00098	U	0.00022	0.00098
Dichlorobromomethane		0.00098	U	0.00025	0.00098
Dichlorodifluoromethane		0.00098	U *	0.00033	0.00098
Ethylbenzene		0.00098	U	0.00019	0.00098
Ethylene Dibromide		0.00098	U	0.00018	0.00098
Isopropylbenzene		0.00098	U	0.00012	0.00098
Methyl acetate		0.0049	U	0.0042	0.0049
Methyl tert-butyl ether		0.00098	U	0.00012	0.00098
Methylcyclohexane		0.00098	U *	0.00016	0.00098
Methylene Chloride		0.00037	J B	0.00016	0.00098
m-Xylene & p-Xylene		0.00098	U	0.00017	0.00098

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-18(3-5')**

Lab Sample ID: 460-138465-2 | Date Sampled: 08/02/2017 1025
Client Matrix: Solid | % Moisture: 13.3 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71749.D
Dilution:	1.0			Initial Weight/Volume:	5.91 g
Analysis Date:	08/08/2017 1757			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2039				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00098	U	0.00019	0.00098
n-Butylbenzene		0.00098	U	0.00014	0.00098
N-Propylbenzene		0.00098	U	0.00017	0.00098
o-Xylene		0.00098	U	0.000093	0.00098
sec-Butylbenzene		0.00098	U	0.000086	0.00098
Styrene		0.00098	U	0.00012	0.00098
tert-Butylbenzene		0.00098	U	0.00012	0.00098
Tetrachloroethene		0.00098	U	0.00014	0.00098
Toluene		0.00098	U	0.00061	0.00098
trans-1,2-Dichloroethene		0.00098	U	0.00024	0.00098
trans-1,3-Dichloropropene		0.00098	U	0.00026	0.00098
Trichloroethene		0.00098	U	0.00014	0.00098
Trichlorofluoromethane		0.00098	U	0.00040	0.00098
Vinyl chloride		0.00098	U	0.00053	0.00098
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		78 - 135
4-Bromofluorobenzene	92		67 - 126
Dibromofluoromethane (Surr)	102		61 - 149
Toluene-d8 (Surr)	106		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(3-5')**

Lab Sample ID: 460-138465-2
Client Matrix: Solid
% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71749.D
Dilution:	1.0			Initial Weight/Volume:	5.91 g
Analysis Date:	08/08/2017 1757			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2039				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.0073	J N

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3 Date Sampled: 08/02/2017 1055
Client Matrix: Solid % Moisture: 10.5 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71786.D
Dilution:	1.0			Initial Weight/Volume:	4.89 g
Analysis Date:	08/09/2017 0947			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2040				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00027	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00034	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00024	0.0011
1,1-Dichloroethene		0.0011	U	0.00026	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00021	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00011	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00011	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00053	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00034	0.0011
1,2-Dichloropropane		0.0011	U	0.00048	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.023	U	0.010	0.023
2-Butanone (MEK)		0.0014	J	0.0013	0.0057
2-Hexanone		0.0057	U	0.00089	0.0057
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0057	U	0.00076	0.0057
Acetone		0.036		0.0043	0.0057
Benzene		0.0011	U	0.00029	0.0011
Bromoform		0.0011	U	0.00049	0.0011
Bromomethane		0.0011	U	0.00054	0.0011
Carbon disulfide		0.0011	U	0.00030	0.0011
Carbon tetrachloride		0.0011	U	0.00021	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00032	0.0011
Chlorodibromomethane		0.0011	U	0.00022	0.0011
Chloroethane		0.0011	U	0.00060	0.0011
Chloroform		0.0011	U	0.00036	0.0011
Chloromethane		0.0011	U	0.00050	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00031	0.0011
Cyclohexane		0.0011	U	0.00025	0.0011
Dichlorobromomethane		0.0011	U	0.00029	0.0011
Dichlorodifluoromethane		0.0011	U	0.00039	0.0011
Ethylbenzene		0.0011	U	0.00023	0.0011
Ethylene Dibromide		0.0011	U	0.00021	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0057	U	0.0049	0.0057
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U	0.00018	0.0011
Methylene Chloride		0.00062	J B	0.00019	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00020	0.0011

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71786.D
Dilution:	1.0			Initial Weight/Volume:	4.89 g
Analysis Date:	08/09/2017 0947			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2040				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00022	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00020	0.0011
o-Xylene		0.0011	U	0.00011	0.0011
sec-Butylbenzene		0.0011	U	0.00010	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00071	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00028	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00046	0.0011
Vinyl chloride		0.0011	U	0.00062	0.0011
Xylenes, Total		0.0023	U	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		78 - 135
4-Bromofluorobenzene	93		67 - 126
Dibromofluoromethane (Surr)	104		61 - 149
Toluene-d8 (Surr)	111		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71786.D
Dilution:	1.0			Initial Weight/Volume:	4.89 g
Analysis Date:	08/09/2017 0947			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2040				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.73	0.014	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-19(3-5')**

Lab Sample ID: 460-138465-4 | Date Sampled: 08/02/2017 1055
Client Matrix: Solid | % Moisture: 13.4 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71751.D
Dilution:	1.0			Initial Weight/Volume:	3.76 g
Analysis Date:	08/08/2017 1847			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2040				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0015	U	0.00036	0.0015
1,1,2,2-Tetrachloroethane		0.0015	U	0.00033	0.0015
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0015	U	0.00046	0.0015
1,1,2-Trichloroethane		0.0015	U	0.00027	0.0015
1,1-Dichloroethane		0.0015	U	0.00032	0.0015
1,1-Dichloroethene		0.0015	U	0.00035	0.0015
1,2,3-Trichlorobenzene		0.0015	U	0.00028	0.0015
1,2,4-Trichlorobenzene		0.0015	U	0.00014	0.0015
1,2,4-Trimethylbenzene		0.0015	U	0.00014	0.0015
1,2-Dibromo-3-Chloropropane		0.0015	U	0.00071	0.0015
1,2-Dichlorobenzene		0.0015	U	0.00022	0.0015
1,2-Dichloroethane		0.0015	U	0.00045	0.0015
1,2-Dichloropropane		0.0015	U	0.00065	0.0015
1,3,5-Trimethylbenzene		0.0015	U	0.00018	0.0015
1,3-Dichlorobenzene		0.0015	U	0.00024	0.0015
1,4-Dichlorobenzene		0.0015	U	0.00015	0.0015
1,4-Dioxane		0.031	U	0.014	0.031
2-Butanone (MEK)		0.0077	U	0.0017	0.0077
2-Hexanone		0.0077	U	0.0012	0.0077
4-Isopropyltoluene		0.0015	U	0.00015	0.0015
4-Methyl-2-pentanone (MIBK)		0.0077	U	0.0010	0.0077
Acetone		0.0077	U	0.0058	0.0077
Benzene		0.0015	U	0.00040	0.0015
Bromoform		0.0015	U	0.00065	0.0015
Bromomethane		0.0015	U	0.00073	0.0015
Carbon disulfide		0.0015	U	0.00041	0.0015
Carbon tetrachloride		0.0015	U *	0.00028	0.0015
Chlorobenzene		0.0015	U	0.00027	0.0015
Chlorobromomethane		0.0015	U	0.00043	0.0015
Chlorodibromomethane		0.0015	U	0.00030	0.0015
Chloroethane		0.0015	U	0.00080	0.0015
Chloroform		0.0015	U	0.00049	0.0015
Chloromethane		0.0015	U	0.00067	0.0015
cis-1,2-Dichloroethene		0.0015	U	0.00023	0.0015
cis-1,3-Dichloropropene		0.0015	U	0.00042	0.0015
Cyclohexane		0.0015	U	0.00034	0.0015
Dichlorobromomethane		0.0015	U	0.00039	0.0015
Dichlorodifluoromethane		0.0015	U *	0.00052	0.0015
Ethylbenzene		0.0015	U	0.00031	0.0015
Ethylene Dibromide		0.0015	U	0.00028	0.0015
Isopropylbenzene		0.0015	U	0.00019	0.0015
Methyl acetate		0.0077	U	0.0066	0.0077
Methyl tert-butyl ether		0.0015	U	0.00019	0.0015
Methylcyclohexane		0.0015	U *	0.00025	0.0015
Methylene Chloride		0.0015	U	0.00025	0.0015
m-Xylene & p-Xylene		0.0015	U	0.00027	0.0015

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4 | Date Sampled: 08/02/2017 1055
Client Matrix: Solid | % Moisture: 13.4 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71751.D
Dilution:	1.0			Initial Weight/Volume:	3.76 g
Analysis Date:	08/08/2017 1847			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2040				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0015	U	0.00029	0.0015
n-Butylbenzene		0.0015	U	0.00022	0.0015
N-Propylbenzene		0.0015	U	0.00027	0.0015
o-Xylene		0.0015	U	0.00015	0.0015
sec-Butylbenzene		0.0015	U	0.00014	0.0015
Styrene		0.0015	U	0.00019	0.0015
tert-Butylbenzene		0.0015	U	0.00019	0.0015
Tetrachloroethene		0.0015	U	0.00022	0.0015
Toluene		0.0015	U	0.00096	0.0015
trans-1,2-Dichloroethene		0.0015	U	0.00038	0.0015
trans-1,3-Dichloropropene		0.0015	U	0.00041	0.0015
Trichloroethene		0.0015	U	0.00022	0.0015
Trichlorofluoromethane		0.0015	U	0.00062	0.0015
Vinyl chloride		0.0015	U	0.00084	0.0015
Xylenes, Total		0.0031	U	0.00039	0.0031

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		78 - 135
4-Bromofluorobenzene	84		67 - 126
Dibromofluoromethane (Surr)	97		61 - 149
Toluene-d8 (Surr)	100		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71751.D
Dilution:	1.0			Initial Weight/Volume:	3.76 g
Analysis Date:	08/08/2017 1847			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2040				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.011	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-5(1-3')**

Lab Sample ID: 460-138465-5 | Date Sampled: 08/02/2017 1540
Client Matrix: Solid | % Moisture: 15.1 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71752.D
Dilution:	1.0			Initial Weight/Volume:	5.99 g
Analysis Date:	08/08/2017 1910			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2041				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00098	U	0.00023	0.00098
1,1,2,2-Tetrachloroethane		0.00098	U	0.00021	0.00098
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00098	U	0.00030	0.00098
1,1,2-Trichloroethane		0.00098	U	0.00018	0.00098
1,1-Dichloroethane		0.00098	U	0.00020	0.00098
1,1-Dichloroethene		0.00098	U	0.00022	0.00098
1,2,3-Trichlorobenzene		0.00098	U	0.00018	0.00098
1,2,4-Trichlorobenzene		0.00098	U	0.000090	0.00098
1,2,4-Trimethylbenzene		0.00098	U	0.000092	0.00098
1,2-Dibromo-3-Chloropropane		0.00098	U	0.00045	0.00098
1,2-Dichlorobenzene		0.00098	U	0.00014	0.00098
1,2-Dichloroethane		0.00098	U	0.00029	0.00098
1,2-Dichloropropane		0.00098	U	0.00042	0.00098
1,3,5-Trimethylbenzene		0.00098	U	0.00011	0.00098
1,3-Dichlorobenzene		0.00098	U	0.00016	0.00098
1,4-Dichlorobenzene		0.00098	U	0.000098	0.00098
1,4-Dioxane		0.020	U	0.0090	0.020
2-Butanone (MEK)		0.0049	U	0.0011	0.0049
2-Hexanone		0.0049	U	0.00077	0.0049
4-Isopropyltoluene		0.00098	U	0.000096	0.00098
4-Methyl-2-pentanone (MIBK)		0.0049	U	0.00065	0.0049
Acetone		0.0049	U	0.0037	0.0049
Benzene		0.00098	U	0.00025	0.00098
Bromoform		0.00098	U	0.00042	0.00098
Bromomethane		0.00098	U	0.00047	0.00098
Carbon disulfide		0.00098	U	0.00026	0.00098
Carbon tetrachloride		0.00098	U *	0.00018	0.00098
Chlorobenzene		0.00098	U	0.00017	0.00098
Chlorobromomethane		0.00098	U	0.00028	0.00098
Chlorodibromomethane		0.00098	U	0.00019	0.00098
Chloroethane		0.00098	U	0.00051	0.00098
Chloroform		0.00098	U	0.00031	0.00098
Chloromethane		0.00098	U	0.00043	0.00098
cis-1,2-Dichloroethene		0.00098	U	0.00015	0.00098
cis-1,3-Dichloropropene		0.00098	U	0.00027	0.00098
Cyclohexane		0.00098	U	0.00022	0.00098
Dichlorobromomethane		0.00098	U	0.00025	0.00098
Dichlorodifluoromethane		0.00098	U *	0.00033	0.00098
Ethylbenzene		0.00098	U	0.00020	0.00098
Ethylene Dibromide		0.00098	U	0.00018	0.00098
Isopropylbenzene		0.00098	U	0.00012	0.00098
Methyl acetate		0.0049	U	0.0042	0.0049
Methyl tert-butyl ether		0.00098	U	0.00012	0.00098
Methylcyclohexane		0.00098	U *	0.00016	0.00098
Methylene Chloride		0.00098	U	0.00016	0.00098
m-Xylene & p-Xylene		0.00098	U	0.00017	0.00098

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5 Date Sampled: 08/02/2017 1540
Client Matrix: Solid % Moisture: 15.1 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71752.D
Dilution:	1.0			Initial Weight/Volume:	5.99 g
Analysis Date:	08/08/2017 1910			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2041				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00098	U	0.00019	0.00098
n-Butylbenzene		0.00098	U	0.00014	0.00098
N-Propylbenzene		0.00098	U	0.00017	0.00098
o-Xylene		0.00098	U	0.000093	0.00098
sec-Butylbenzene		0.00098	U	0.000087	0.00098
Styrene		0.00098	U	0.00012	0.00098
tert-Butylbenzene		0.00098	U	0.00012	0.00098
Tetrachloroethene		0.00098	U	0.00014	0.00098
Toluene		0.00098	U	0.00061	0.00098
trans-1,2-Dichloroethene		0.00098	U	0.00024	0.00098
trans-1,3-Dichloropropene		0.00098	U	0.00026	0.00098
Trichloroethene		0.00098	U	0.00014	0.00098
Trichlorofluoromethane		0.00098	U	0.00040	0.00098
Vinyl chloride		0.00098	U	0.00054	0.00098
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		78 - 135
4-Bromofluorobenzene	99		67 - 126
Dibromofluoromethane (Surr)	107		61 - 149
Toluene-d8 (Surr)	114		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71752.D
Dilution:	1.0			Initial Weight/Volume:	5.99 g
Analysis Date:	08/08/2017 1910			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2041				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.0053	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6 | Date Sampled: 08/02/2017 1545
Client Matrix: Solid | % Moisture: 13.2 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71753.D
Dilution:	1.0			Initial Weight/Volume:	5.01 g
Analysis Date:	08/08/2017 1934			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2042				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0012	U	0.00027	0.0012
1,1,2,2-Tetrachloroethane		0.0012	U	0.00025	0.0012
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0012	U	0.00035	0.0012
1,1,2-Trichloroethane		0.0012	U	0.00020	0.0012
1,1-Dichloroethane		0.0012	U	0.00024	0.0012
1,1-Dichloroethene		0.0012	U	0.00026	0.0012
1,2,3-Trichlorobenzene		0.0012	U	0.00021	0.0012
1,2,4-Trichlorobenzene		0.0012	U	0.00011	0.0012
1,2,4-Trimethylbenzene		0.0012	U	0.00011	0.0012
1,2-Dibromo-3-Chloropropane		0.0012	U	0.00053	0.0012
1,2-Dichlorobenzene		0.0012	U	0.00017	0.0012
1,2-Dichloroethane		0.0012	U	0.00034	0.0012
1,2-Dichloropropane		0.0012	U	0.00049	0.0012
1,3,5-Trimethylbenzene		0.0012	U	0.00013	0.0012
1,3-Dichlorobenzene		0.0012	U	0.00018	0.0012
1,4-Dichlorobenzene		0.0012	U	0.00012	0.0012
1,4-Dioxane		0.023	U	0.011	0.023
2-Butanone (MEK)		0.0058	U	0.0013	0.0058
2-Hexanone		0.0058	U	0.00090	0.0058
4-Isopropyltoluene		0.0012	U	0.00011	0.0012
4-Methyl-2-pentanone (MIBK)		0.0058	U	0.00076	0.0058
Acetone		0.0058	U	0.0044	0.0058
Benzene		0.0012	U	0.00030	0.0012
Bromoform		0.0012	U	0.00049	0.0012
Bromomethane		0.0012	U	0.00055	0.0012
Carbon disulfide		0.0012	U	0.00031	0.0012
Carbon tetrachloride		0.0012	U *	0.00021	0.0012
Chlorobenzene		0.0012	U	0.00020	0.0012
Chlorobromomethane		0.0012	U	0.00032	0.0012
Chlorodibromomethane		0.0012	U	0.00022	0.0012
Chloroethane		0.0012	U	0.00060	0.0012
Chloroform		0.0012	U	0.00037	0.0012
Chloromethane		0.0012	U	0.00050	0.0012
cis-1,2-Dichloroethene		0.0012	U	0.00017	0.0012
cis-1,3-Dichloropropene		0.0012	U	0.00031	0.0012
Cyclohexane		0.0012	U	0.00025	0.0012
Dichlorobromomethane		0.0012	U	0.00030	0.0012
Dichlorodifluoromethane		0.0012	U *	0.00039	0.0012
Ethylbenzene		0.0012	U	0.00023	0.0012
Ethylene Dibromide		0.0012	U	0.00021	0.0012
Isopropylbenzene		0.0012	U	0.00014	0.0012
Methyl acetate		0.0058	U	0.0049	0.0058
Methyl tert-butyl ether		0.0012	U	0.00014	0.0012
Methylcyclohexane		0.0012	U *	0.00018	0.0012
Methylene Chloride		0.00061	J B	0.00019	0.0012
m-Xylene & p-Xylene		0.0012	U	0.00020	0.0012

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6 Date Sampled: 08/02/2017 1545
Client Matrix: Solid % Moisture: 13.2 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71753.D
Dilution:	1.0			Initial Weight/Volume:	5.01 g
Analysis Date:	08/08/2017 1934			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2042				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0012	U	0.00022	0.0012
n-Butylbenzene		0.0012	U	0.00016	0.0012
N-Propylbenzene		0.0012	U	0.00020	0.0012
o-Xylene		0.0012	U	0.00011	0.0012
sec-Butylbenzene		0.0012	U	0.00010	0.0012
Styrene		0.0012	U	0.00014	0.0012
tert-Butylbenzene		0.0012	U	0.00014	0.0012
Tetrachloroethene		0.0012	U	0.00016	0.0012
Toluene		0.0012	U	0.00072	0.0012
trans-1,2-Dichloroethene		0.0012	U	0.00028	0.0012
trans-1,3-Dichloropropene		0.0012	U	0.00031	0.0012
Trichloroethene		0.0012	U	0.00017	0.0012
Trichlorofluoromethane		0.0012	U	0.00047	0.0012
Vinyl chloride		0.0012	U	0.00063	0.0012
Xylenes, Total		0.0023	U	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		78 - 135
4-Bromofluorobenzene	89		67 - 126
Dibromofluoromethane (Surr)	98		61 - 149
Toluene-d8 (Surr)	101		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71753.D
Dilution:	1.0			Initial Weight/Volume:	5.01 g
Analysis Date:	08/08/2017 1934			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2042				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.74	0.010	J

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-10(1-3')**

Lab Sample ID: 460-138465-7 | Date Sampled: 08/02/2017 1305
Client Matrix: Solid | % Moisture: 8.0 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71754.D
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	08/08/2017 1957			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2042				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00024	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00022	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00031	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00019	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000095	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000098	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00048	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00015	0.0010
1,2-Dichloroethane		0.0010	U	0.00031	0.0010
1,2-Dichloropropane		0.0010	U	0.00044	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.021	U	0.0095	0.021
2-Butanone (MEK)		0.0052	U	0.0012	0.0052
2-Hexanone		0.0052	U	0.00081	0.0052
4-Isopropyltoluene		0.0010	U	0.00010	0.0010
4-Methyl-2-pentanone (MIBK)		0.0052	U	0.00069	0.0052
Acetone		0.0052	U	0.0039	0.0052
Benzene		0.0010	U	0.00027	0.0010
Bromoform		0.0010	U	0.00044	0.0010
Bromomethane		0.0010	U	0.00049	0.0010
Carbon disulfide		0.0010	U	0.00028	0.0010
Carbon tetrachloride		0.0010	U *	0.00019	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00029	0.0010
Chlorodibromomethane		0.0010	U	0.00020	0.0010
Chloroethane		0.0010	U	0.00054	0.0010
Chloroform		0.0010	U	0.00033	0.0010
Chloromethane		0.0010	U	0.00045	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00016	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Cyclohexane		0.0010	U	0.00023	0.0010
Dichlorobromomethane		0.0010	U	0.00027	0.0010
Dichlorodifluoromethane		0.0010	U *	0.00035	0.0010
Ethylbenzene		0.0010	U	0.00021	0.0010
Ethylene Dibromide		0.0010	U	0.00019	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0052	U	0.0045	0.0052
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U *	0.00017	0.0010
Methylene Chloride		0.00037	J B	0.00017	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00018	0.0010

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid
% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71754.D
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	08/08/2017 1957			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2042				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00020	0.0010
n-Butylbenzene		0.0010	U	0.00015	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000099	0.0010
sec-Butylbenzene		0.0010	U	0.000091	0.0010
Styrene		0.0010	U	0.00013	0.0010
tert-Butylbenzene		0.0010	U	0.00013	0.0010
Tetrachloroethene		0.0010	U	0.00015	0.0010
Toluene		0.0010	U	0.00065	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00026	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00028	0.0010
Trichloroethene		0.0010	U	0.00015	0.0010
Trichlorofluoromethane		0.0010	U	0.00042	0.0010
Vinyl chloride		0.0010	U	0.00057	0.0010
Xylenes, Total		0.0021	U	0.00026	0.0021

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		78 - 135
4-Bromofluorobenzene	98		67 - 126
Dibromofluoromethane (Surr)	107		61 - 149
Toluene-d8 (Surr)	113		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(1-3')**

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71754.D
Dilution:	1.0			Initial Weight/Volume:	5.24 g
Analysis Date:	08/08/2017 1957			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2042				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.73	0.0075	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8 | Date Sampled: 08/02/2017 1310
Client Matrix: Solid | % Moisture: 10.6 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71755.D
Dilution:	1.0			Initial Weight/Volume:	5.69 g
Analysis Date:	08/08/2017 2021			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2043				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00098	U	0.00023	0.00098
1,1,2,2-Tetrachloroethane		0.00098	U	0.00021	0.00098
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00098	U	0.00030	0.00098
1,1,2-Trichloroethane		0.00098	U	0.00017	0.00098
1,1-Dichloroethane		0.00098	U	0.00020	0.00098
1,1-Dichloroethene		0.00098	U	0.00022	0.00098
1,2,3-Trichlorobenzene		0.00098	U	0.00018	0.00098
1,2,4-Trichlorobenzene		0.00098	U	0.000090	0.00098
1,2,4-Trimethylbenzene		0.00098	U	0.000092	0.00098
1,2-Dibromo-3-Chloropropane		0.00098	U	0.00045	0.00098
1,2-Dichlorobenzene		0.00098	U	0.00014	0.00098
1,2-Dichloroethane		0.00098	U	0.00029	0.00098
1,2-Dichloropropane		0.00098	U	0.00042	0.00098
1,3,5-Trimethylbenzene		0.00098	U	0.00011	0.00098
1,3-Dichlorobenzene		0.00098	U	0.00016	0.00098
1,4-Dichlorobenzene		0.00098	U	0.000098	0.00098
1,4-Dioxane		0.020	U	0.0090	0.020
2-Butanone (MEK)		0.0049	U	0.0011	0.0049
2-Hexanone		0.0049	U	0.00077	0.0049
4-Isopropyltoluene		0.00098	U	0.000096	0.00098
4-Methyl-2-pentanone (MIBK)		0.0049	U	0.00065	0.0049
Acetone		0.0049	U	0.0037	0.0049
Benzene		0.00098	U	0.00025	0.00098
Bromoform		0.00098	U	0.00042	0.00098
Bromomethane		0.00098	U	0.00047	0.00098
Carbon disulfide		0.00098	U	0.00026	0.00098
Carbon tetrachloride		0.00098	U *	0.00018	0.00098
Chlorobenzene		0.00098	U	0.00017	0.00098
Chlorobromomethane		0.00098	U	0.00028	0.00098
Chlorodibromomethane		0.00098	U	0.00019	0.00098
Chloroethane		0.00098	U	0.00051	0.00098
Chloroform		0.00098	U	0.00031	0.00098
Chloromethane		0.00098	U	0.00043	0.00098
cis-1,2-Dichloroethene		0.00098	U	0.00015	0.00098
cis-1,3-Dichloropropene		0.00098	U	0.00027	0.00098
Cyclohexane		0.00098	U	0.00022	0.00098
Dichlorobromomethane		0.00098	U	0.00025	0.00098
Dichlorodifluoromethane		0.00098	U *	0.00033	0.00098
Ethylbenzene		0.00098	U	0.00020	0.00098
Ethylene Dibromide		0.00098	U	0.00018	0.00098
Isopropylbenzene		0.00098	U	0.00012	0.00098
Methyl acetate		0.0049	U	0.0042	0.0049
Methyl tert-butyl ether		0.00098	U	0.00012	0.00098
Methylcyclohexane		0.00098	U *	0.00016	0.00098
Methylene Chloride		0.00034	J B	0.00016	0.00098
m-Xylene & p-Xylene		0.00098	U	0.00017	0.00098

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-10(10-12')

Lab Sample ID: 460-138465-8 Date Sampled: 08/02/2017 1310
Client Matrix: Solid % Moisture: 10.6 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71755.D
Dilution:	1.0			Initial Weight/Volume:	5.69 g
Analysis Date:	08/08/2017 2021			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2043				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00098	U	0.00019	0.00098
n-Butylbenzene		0.00098	U	0.00014	0.00098
N-Propylbenzene		0.00098	U	0.00017	0.00098
o-Xylene		0.00098	U	0.000093	0.00098
sec-Butylbenzene		0.00098	U	0.000086	0.00098
Styrene		0.00098	U	0.00012	0.00098
tert-Butylbenzene		0.00098	U	0.00012	0.00098
Tetrachloroethene		0.00098	U	0.00014	0.00098
Toluene		0.00098	U	0.00061	0.00098
trans-1,2-Dichloroethene		0.00098	U	0.00024	0.00098
trans-1,3-Dichloropropene		0.00098	U	0.00026	0.00098
Trichloroethene		0.00098	U	0.00014	0.00098
Trichlorofluoromethane		0.00098	U	0.00040	0.00098
Vinyl chloride		0.00098	U	0.00054	0.00098
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		78 - 135
4-Bromofluorobenzene	93		67 - 126
Dibromofluoromethane (Surr)	104		61 - 149
Toluene-d8 (Surr)	108		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(10-12')

Lab Sample ID: 460-138465-8
Client Matrix: Solid

% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71755.D
Dilution:	1.0			Initial Weight/Volume:	5.69 g
Analysis Date:	08/08/2017 2021			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2043				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.74	0.0079	J

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9 | Date Sampled: 08/02/2017 1242
Client Matrix: Solid | % Moisture: 8.7 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71756.D
Dilution:	1.0			Initial Weight/Volume:	6.10 g
Analysis Date:	08/08/2017 2044			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2044				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00090	U	0.00021	0.00090
1,1,2,2-Tetrachloroethane		0.00090	U	0.00019	0.00090
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00090	U	0.00027	0.00090
1,1,2-Trichloroethane		0.00090	U	0.00016	0.00090
1,1-Dichloroethane		0.00090	U	0.00018	0.00090
1,1-Dichloroethene		0.00090	U	0.00020	0.00090
1,2,3-Trichlorobenzene		0.00090	U	0.00016	0.00090
1,2,4-Trichlorobenzene		0.00090	U	0.000083	0.00090
1,2,4-Trimethylbenzene		0.00090	U	0.000084	0.00090
1,2-Dibromo-3-Chloropropane		0.00090	U	0.00041	0.00090
1,2-Dichlorobenzene		0.00090	U	0.00013	0.00090
1,2-Dichloroethane		0.00090	U	0.00027	0.00090
1,2-Dichloropropane		0.00090	U	0.00038	0.00090
1,3,5-Trimethylbenzene		0.00090	U	0.00010	0.00090
1,3-Dichlorobenzene		0.00090	U	0.00014	0.00090
1,4-Dichlorobenzene		0.00090	U	0.000090	0.00090
1,4-Dioxane		0.018	U	0.0082	0.018
2-Butanone (MEK)		0.0045	U	0.0010	0.0045
2-Hexanone		0.0045	U	0.00070	0.0045
4-Isopropyltoluene		0.00090	U	0.000088	0.00090
4-Methyl-2-pentanone (MIBK)		0.0045	U	0.00060	0.0045
Acetone		0.0045	U	0.0034	0.0045
Benzene		0.00090	U	0.00023	0.00090
Bromoform		0.00090	U	0.00038	0.00090
Bromomethane		0.00090	U	0.00043	0.00090
Carbon disulfide		0.00090	U	0.00024	0.00090
Carbon tetrachloride		0.00090	U *	0.00016	0.00090
Chlorobenzene		0.00090	U	0.00016	0.00090
Chlorobromomethane		0.00090	U	0.00025	0.00090
Chlorodibromomethane		0.00090	U	0.00017	0.00090
Chloroethane		0.00090	U	0.00047	0.00090
Chloroform		0.00090	U	0.00029	0.00090
Chloromethane		0.00090	U	0.00039	0.00090
cis-1,2-Dichloroethene		0.00090	U	0.00014	0.00090
cis-1,3-Dichloropropene		0.00090	U	0.00025	0.00090
Cyclohexane		0.00090	U	0.00020	0.00090
Dichlorobromomethane		0.00090	U	0.00023	0.00090
Dichlorodifluoromethane		0.00090	U *	0.00030	0.00090
Ethylbenzene		0.00090	U	0.00018	0.00090
Ethylene Dibromide		0.00090	U	0.00016	0.00090
Isopropylbenzene		0.00090	U	0.00011	0.00090
Methyl acetate		0.0045	U	0.0039	0.0045
Methyl tert-butyl ether		0.00090	U	0.00011	0.00090
Methylcyclohexane		0.00090	U *	0.00014	0.00090
Methylene Chloride		0.00031	J B	0.00015	0.00090
m-Xylene & p-Xylene		0.00090	U	0.00016	0.00090

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9 Date Sampled: 08/02/2017 1242
Client Matrix: Solid % Moisture: 8.7 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71756.D
Dilution:	1.0			Initial Weight/Volume:	6.10 g
Analysis Date:	08/08/2017 2044			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2044				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00090	U	0.00017	0.00090
n-Butylbenzene		0.00090	U	0.00013	0.00090
N-Propylbenzene		0.00090	U	0.00016	0.00090
o-Xylene		0.00090	U	0.000085	0.00090
sec-Butylbenzene		0.00090	U	0.000079	0.00090
Styrene		0.00090	U	0.00011	0.00090
tert-Butylbenzene		0.00090	U	0.00011	0.00090
Tetrachloroethene		0.00090	U	0.00013	0.00090
Toluene		0.00090	U	0.00056	0.00090
trans-1,2-Dichloroethene		0.00090	U	0.00022	0.00090
trans-1,3-Dichloropropene		0.00090	U	0.00024	0.00090
Trichloroethene		0.00090	U	0.00013	0.00090
Trichlorofluoromethane		0.00090	U	0.00036	0.00090
Vinyl chloride		0.00090	U	0.00049	0.00090
Xylenes, Total		0.0018	U	0.00023	0.0018

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		78 - 135
4-Bromofluorobenzene	96		67 - 126
Dibromofluoromethane (Surr)	108		61 - 149
Toluene-d8 (Surr)	110		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(1-3')**

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71756.D
Dilution:	1.0			Initial Weight/Volume:	6.10 g
Analysis Date:	08/08/2017 2044			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2044				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.0065	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10 | Date Sampled: 08/02/2017 1245
Client Matrix: Solid | % Moisture: 6.6 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71757.D
Dilution:	1.0			Initial Weight/Volume:	4.41 g
Analysis Date:	08/08/2017 2108			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2045				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0012	U	0.00028	0.0012
1,1,2,2-Tetrachloroethane		0.0012	U	0.00026	0.0012
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0012	U	0.00037	0.0012
1,1,2-Trichloroethane		0.0012	U	0.00022	0.0012
1,1-Dichloroethane		0.0012	U	0.00025	0.0012
1,1-Dichloroethene		0.0012	U	0.00027	0.0012
1,2,3-Trichlorobenzene		0.0012	U	0.00022	0.0012
1,2,4-Trichlorobenzene		0.0012	U	0.00011	0.0012
1,2,4-Trimethylbenzene		0.0012	U	0.00011	0.0012
1,2-Dibromo-3-Chloropropane		0.0012	U	0.00056	0.0012
1,2-Dichlorobenzene		0.0012	U	0.00017	0.0012
1,2-Dichloroethane		0.0012	U	0.00036	0.0012
1,2-Dichloropropane		0.0012	U	0.00051	0.0012
1,3,5-Trimethylbenzene		0.0012	U	0.00014	0.0012
1,3-Dichlorobenzene		0.0012	U	0.00019	0.0012
1,4-Dichlorobenzene		0.0012	U	0.00012	0.0012
1,4-Dioxane		0.024	U	0.011	0.024
2-Butanone (MEK)		0.0061	U	0.0013	0.0061
2-Hexanone		0.0061	U	0.00095	0.0061
4-Isopropyltoluene		0.0012	U	0.00012	0.0012
4-Methyl-2-pentanone (MIBK)		0.0061	U	0.00081	0.0061
Acetone		0.0061	U	0.0046	0.0061
Benzene		0.0012	U	0.00031	0.0012
Bromoform		0.0012	U	0.00052	0.0012
Bromomethane		0.0012	U	0.00058	0.0012
Carbon disulfide		0.0012	U	0.00032	0.0012
Carbon tetrachloride		0.0012	U *	0.00022	0.0012
Chlorobenzene		0.0012	U	0.00021	0.0012
Chlorobromomethane		0.0012	U	0.00034	0.0012
Chlorodibromomethane		0.0012	U	0.00024	0.0012
Chloroethane		0.0012	U	0.00063	0.0012
Chloroform		0.0012	U	0.00039	0.0012
Chloromethane		0.0012	U	0.00053	0.0012
cis-1,2-Dichloroethene		0.0012	U	0.00018	0.0012
cis-1,3-Dichloropropene		0.0012	U	0.00033	0.0012
Cyclohexane		0.0012	U	0.00027	0.0012
Dichlorobromomethane		0.0012	U	0.00031	0.0012
Dichlorodifluoromethane		0.0012	U *	0.00041	0.0012
Ethylbenzene		0.0012	U	0.00024	0.0012
Ethylene Dibromide		0.0012	U	0.00022	0.0012
Isopropylbenzene		0.0012	U	0.00015	0.0012
Methyl acetate		0.0061	U	0.0052	0.0061
Methyl tert-butyl ether		0.0012	U	0.00015	0.0012
Methylcyclohexane		0.0012	U *	0.00019	0.0012
Methylene Chloride		0.0011	J B	0.00020	0.0012
m-Xylene & p-Xylene		0.0012	U	0.00021	0.0012

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-11(10-12')

Lab Sample ID: 460-138465-10 Date Sampled: 08/02/2017 1245
Client Matrix: Solid % Moisture: 6.6 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71757.D
Dilution:	1.0			Initial Weight/Volume:	4.41 g
Analysis Date:	08/08/2017 2108			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2045				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0012	U	0.00023	0.0012
n-Butylbenzene		0.0012	U	0.00017	0.0012
N-Propylbenzene		0.0012	U	0.00021	0.0012
o-Xylene		0.0012	U	0.00012	0.0012
sec-Butylbenzene		0.0012	U	0.00011	0.0012
Styrene		0.0012	U	0.00015	0.0012
tert-Butylbenzene		0.0012	U	0.00015	0.0012
Tetrachloroethene		0.0012	U	0.00017	0.0012
Toluene		0.0012	U	0.00076	0.0012
trans-1,2-Dichloroethene		0.0012	U	0.00030	0.0012
trans-1,3-Dichloropropene		0.0012	U	0.00032	0.0012
Trichloroethene		0.0012	U	0.00017	0.0012
Trichlorofluoromethane		0.0012	U	0.00049	0.0012
Vinyl chloride		0.0012	U	0.00066	0.0012
Xylenes, Total		0.0024	U	0.00031	0.0024

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		78 - 135
4-Bromofluorobenzene	91		67 - 126
Dibromofluoromethane (Surr)	98		61 - 149
Toluene-d8 (Surr)	107		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71757.D
Dilution:	1.0			Initial Weight/Volume:	4.41 g
Analysis Date:	08/08/2017 2108			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2045				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.73	0.012	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 | Date Sampled: 08/02/2017 1145
Client Matrix: Solid | % Moisture: 9.1 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71758.D
Dilution:	1.0			Initial Weight/Volume:	5.76 g
Analysis Date:	08/08/2017 2131			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2045				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00095	U	0.00022	0.00095
1,1,2,2-Tetrachloroethane		0.00095	U	0.00020	0.00095
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00095	U	0.00029	0.00095
1,1,2-Trichloroethane		0.00095	U	0.00017	0.00095
1,1-Dichloroethane		0.00095	U	0.00020	0.00095
1,1-Dichloroethene		0.00095	U	0.00021	0.00095
1,2,3-Trichlorobenzene		0.00095	U	0.00017	0.00095
1,2,4-Trichlorobenzene		0.00095	U	0.000088	0.00095
1,2,4-Trimethylbenzene		0.00095	U	0.000090	0.00095
1,2-Dibromo-3-Chloropropane		0.00095	U	0.00044	0.00095
1,2-Dichlorobenzene		0.00095	U	0.00014	0.00095
1,2-Dichloroethane		0.00095	U	0.00028	0.00095
1,2-Dichloropropane		0.00095	U	0.00040	0.00095
1,3,5-Trimethylbenzene		0.00095	U	0.00011	0.00095
1,3-Dichlorobenzene		0.00095	U	0.00015	0.00095
1,4-Dichlorobenzene		0.00095	U	0.000095	0.00095
1,4-Dioxane		0.019	U	0.0088	0.019
2-Butanone (MEK)		0.0048	U	0.0011	0.0048
2-Hexanone		0.0048	U	0.00074	0.0048
4-Isopropyltoluene		0.00095	U	0.000094	0.00095
4-Methyl-2-pentanone (MIBK)		0.0048	U	0.00063	0.0048
Acetone		0.0048	U	0.0036	0.0048
Benzene		0.00095	U	0.00025	0.00095
Bromoform		0.00095	U	0.00041	0.00095
Bromomethane		0.00095	U	0.00045	0.00095
Carbon disulfide		0.00095	U	0.00025	0.00095
Carbon tetrachloride		0.00095	U *	0.00017	0.00095
Chlorobenzene		0.00095	U	0.00017	0.00095
Chlorobromomethane		0.00095	U	0.00027	0.00095
Chlorodibromomethane		0.00095	U	0.00019	0.00095
Chloroethane		0.00095	U	0.00050	0.00095
Chloroform		0.00095	U	0.00030	0.00095
Chloromethane		0.00095	U	0.00042	0.00095
cis-1,2-Dichloroethene		0.00095	U	0.00015	0.00095
cis-1,3-Dichloropropene		0.00095	U	0.00026	0.00095
Cyclohexane		0.00095	U	0.00021	0.00095
Dichlorobromomethane		0.00095	U	0.00025	0.00095
Dichlorodifluoromethane		0.00095	U *	0.00032	0.00095
Ethylbenzene		0.00095	U	0.00019	0.00095
Ethylene Dibromide		0.00095	U	0.00017	0.00095
Isopropylbenzene		0.00095	U	0.00012	0.00095
Methyl acetate		0.0048	U	0.0041	0.0048
Methyl tert-butyl ether		0.00095	U	0.00012	0.00095
Methylcyclohexane		0.00095	U *	0.00015	0.00095
Methylene Chloride		0.00066	J B	0.00016	0.00095
m-Xylene & p-Xylene		0.00095	U	0.00017	0.00095

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 | Date Sampled: 08/02/2017 1145
Client Matrix: Solid | % Moisture: 9.1 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71758.D
Dilution:	1.0			Initial Weight/Volume:	5.76 g
Analysis Date:	08/08/2017 2131			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2045				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00095	U	0.00018	0.00095
n-Butylbenzene		0.00095	U	0.00014	0.00095
N-Propylbenzene		0.00095	U	0.00017	0.00095
o-Xylene		0.00095	U	0.000091	0.00095
sec-Butylbenzene		0.00095	U	0.000084	0.00095
Styrene		0.00095	U	0.00012	0.00095
tert-Butylbenzene		0.00095	U	0.00012	0.00095
Tetrachloroethene		0.00095	U	0.00014	0.00095
Toluene		0.00095	U	0.00060	0.00095
trans-1,2-Dichloroethene		0.00095	U	0.00023	0.00095
trans-1,3-Dichloropropene		0.00095	U	0.00025	0.00095
Trichloroethene		0.00095	U	0.00014	0.00095
Trichlorofluoromethane		0.00095	U	0.00039	0.00095
Vinyl chloride		0.00095	U	0.00052	0.00095
Xylenes, Total		0.0019	U	0.00024	0.0019

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		78 - 135
4-Bromofluorobenzene	95		67 - 126
Dibromofluoromethane (Surr)	103		61 - 149
Toluene-d8 (Surr)	111		73 - 121

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 Date Sampled: 08/02/2017 1145
Client Matrix: Solid % Moisture: 9.1 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71758.D
Dilution:	1.0			Initial Weight/Volume:	5.76 g
Analysis Date:	08/08/2017 2131			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2045				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.73	0.0084	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12 | Date Sampled: 08/02/2017 1155
Client Matrix: Solid | % Moisture: 12.9 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71759.D
Dilution:	1.0			Initial Weight/Volume:	6.33 g
Analysis Date:	08/08/2017 2155			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2046				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.00091	U	0.00021	0.00091
1,1,2,2-Tetrachloroethane		0.00091	U	0.00019	0.00091
1,1,2-Trichloro-1,2,2-trifluoroethane		0.00091	U	0.00027	0.00091
1,1,2-Trichloroethane		0.00091	U	0.00016	0.00091
1,1-Dichloroethane		0.00091	U	0.00019	0.00091
1,1-Dichloroethene		0.00091	U	0.00020	0.00091
1,2,3-Trichlorobenzene		0.00091	U	0.00016	0.00091
1,2,4-Trichlorobenzene		0.00091	U	0.000083	0.00091
1,2,4-Trimethylbenzene		0.00091	U	0.000085	0.00091
1,2-Dibromo-3-Chloropropane		0.00091	U	0.00042	0.00091
1,2-Dichlorobenzene		0.00091	U	0.00013	0.00091
1,2-Dichloroethane		0.00091	U	0.00027	0.00091
1,2-Dichloropropane		0.00091	U	0.00038	0.00091
1,3,5-Trimethylbenzene		0.00091	U	0.00010	0.00091
1,3-Dichlorobenzene		0.00091	U	0.00014	0.00091
1,4-Dichlorobenzene		0.00091	U	0.000091	0.00091
1,4-Dioxane		0.018	U	0.0083	0.018
2-Butanone (MEK)		0.0045	U	0.0010	0.0045
2-Hexanone		0.0045	U	0.00071	0.0045
4-Isopropyltoluene		0.00091	U	0.000089	0.00091
4-Methyl-2-pentanone (MIBK)		0.0045	U	0.00060	0.0045
Acetone		0.0041	J	0.0034	0.0045
Benzene		0.00091	U	0.00023	0.00091
Bromoform		0.00091	U	0.00039	0.00091
Bromomethane		0.00091	U	0.00043	0.00091
Carbon disulfide		0.00091	U	0.00024	0.00091
Carbon tetrachloride		0.00091	U *	0.00016	0.00091
Chlorobenzene		0.00091	U	0.00016	0.00091
Chlorobromomethane		0.00091	U	0.00025	0.00091
Chlorodibromomethane		0.00091	U	0.00018	0.00091
Chloroethane		0.00091	U	0.00047	0.00091
Chloroform		0.00091	U	0.00029	0.00091
Chloromethane		0.00091	U	0.00039	0.00091
cis-1,2-Dichloroethene		0.00091	U	0.00014	0.00091
cis-1,3-Dichloropropene		0.00091	U	0.00025	0.00091
Cyclohexane		0.00091	U	0.00020	0.00091
Dichlorobromomethane		0.00091	U	0.00023	0.00091
Dichlorodifluoromethane		0.00091	U *	0.00031	0.00091
Ethylbenzene		0.00091	U	0.00018	0.00091
Ethylene Dibromide		0.00091	U	0.00016	0.00091
Isopropylbenzene		0.00091	U	0.00011	0.00091
Methyl acetate		0.0045	U	0.0039	0.0045
Methyl tert-butyl ether		0.00091	U	0.00011	0.00091
Methylcyclohexane		0.00091	U *	0.00015	0.00091
Methylene Chloride		0.00051	J B	0.00015	0.00091
m-Xylene & p-Xylene		0.00091	U	0.00016	0.00091

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-12(10-12')

Lab Sample ID: 460-138465-12 Date Sampled: 08/02/2017 1155
Client Matrix: Solid % Moisture: 12.9 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71759.D
Dilution:	1.0			Initial Weight/Volume:	6.33 g
Analysis Date:	08/08/2017 2155			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2046				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.00091	U	0.00017	0.00091
n-Butylbenzene		0.00091	U	0.00013	0.00091
N-Propylbenzene		0.00091	U	0.00016	0.00091
o-Xylene		0.00091	U	0.000086	0.00091
sec-Butylbenzene		0.00091	U	0.000080	0.00091
Styrene		0.00091	U	0.00011	0.00091
tert-Butylbenzene		0.00091	U	0.00011	0.00091
Tetrachloroethene		0.00091	U	0.00013	0.00091
Toluene		0.00091	U	0.00057	0.00091
trans-1,2-Dichloroethene		0.00091	U	0.00022	0.00091
trans-1,3-Dichloropropene		0.00091	U	0.00024	0.00091
Trichloroethene		0.00091	U	0.00013	0.00091
Trichlorofluoromethane		0.00091	U	0.00037	0.00091
Vinyl chloride		0.00091	U	0.00049	0.00091
Xylenes, Total		0.0018	U	0.00023	0.0018

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		78 - 135
4-Bromofluorobenzene	91		67 - 126
Dibromofluoromethane (Surr)	98		61 - 149
Toluene-d8 (Surr)	105		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71759.D
Dilution:	1.0			Initial Weight/Volume:	6.33 g
Analysis Date:	08/08/2017 2155			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2046				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.0084	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13 | Date Sampled: 08/02/2017 1615
Client Matrix: Solid | % Moisture: 5.4 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71760.D
Dilution:	1.0			Initial Weight/Volume:	5.28 g
Analysis Date:	08/08/2017 2219			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2047				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane		0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane		0.0010	U	0.00018	0.0010
1,1-Dichloroethane		0.0010	U	0.00021	0.0010
1,1-Dichloroethene		0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene		0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene		0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene		0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane		0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene		0.0010	U	0.00014	0.0010
1,2-Dichloroethane		0.0010	U	0.00030	0.0010
1,2-Dichloropropane		0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene		0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene		0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene		0.0010	U	0.00010	0.0010
1,4-Dioxane		0.020	U	0.0092	0.020
2-Butanone (MEK)		0.0050	U	0.0011	0.0050
2-Hexanone		0.0050	U	0.00078	0.0050
4-Isopropyltoluene		0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)		0.0050	U	0.00066	0.0050
Acetone		0.0050	U	0.0038	0.0050
Benzene		0.0010	U	0.00026	0.0010
Bromoform		0.0010	U	0.00043	0.0010
Bromomethane		0.0010	U	0.00047	0.0010
Carbon disulfide		0.0010	U	0.00027	0.0010
Carbon tetrachloride		0.0010	U *	0.00018	0.0010
Chlorobenzene		0.0010	U	0.00018	0.0010
Chlorobromomethane		0.0010	U	0.00028	0.0010
Chlorodibromomethane		0.0010	U	0.00019	0.0010
Chloroethane		0.0010	U	0.00052	0.0010
Chloroform		0.0010	U	0.00032	0.0010
Chloromethane		0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene		0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Cyclohexane		0.0010	U	0.00022	0.0010
Dichlorobromomethane		0.0010	U	0.00026	0.0010
Dichlorodifluoromethane		0.0010	U *	0.00034	0.0010
Ethylbenzene		0.0010	U	0.00020	0.0010
Ethylene Dibromide		0.0010	U	0.00018	0.0010
Isopropylbenzene		0.0010	U	0.00013	0.0010
Methyl acetate		0.0050	U	0.0043	0.0050
Methyl tert-butyl ether		0.0010	U	0.00013	0.0010
Methylcyclohexane		0.0010	U *	0.00016	0.0010
Methylene Chloride		0.00056	J B	0.00016	0.0010
m-Xylene & p-Xylene		0.0010	U	0.00017	0.0010

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13 Date Sampled: 08/02/2017 1615
Client Matrix: Solid % Moisture: 5.4 Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71760.D
Dilution:	1.0			Initial Weight/Volume:	5.28 g
Analysis Date:	08/08/2017 2219			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2047				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0010	U	0.00019	0.0010
n-Butylbenzene		0.0010	U	0.00014	0.0010
N-Propylbenzene		0.0010	U	0.00018	0.0010
o-Xylene		0.0010	U	0.000095	0.0010
sec-Butylbenzene		0.0010	U	0.000088	0.0010
Styrene		0.0010	U	0.00012	0.0010
tert-Butylbenzene		0.0010	U	0.00012	0.0010
Tetrachloroethene		0.0010	U	0.00014	0.0010
Toluene		0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene		0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene		0.0010	U	0.00027	0.0010
Trichloroethene		0.0010	U	0.00014	0.0010
Trichlorofluoromethane		0.0010	U	0.00041	0.0010
Vinyl chloride		0.0010	U	0.00055	0.0010
Xylenes, Total		0.0020	U	0.00025	0.0020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		78 - 135
4-Bromofluorobenzene	98		67 - 126
Dibromofluoromethane (Surr)	105		61 - 149
Toluene-d8 (Surr)	113		73 - 121

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13
Client Matrix: Solid

% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71760.D
Dilution:	1.0			Initial Weight/Volume:	5.28 g
Analysis Date:	08/08/2017 2219			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2047				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1717-00-6	1,1-Dichloro-1-fluoroethane	2.74	0.0098	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14 | Date Sampled: 08/02/2017 1650
Client Matrix: Solid | % Moisture: 4.4 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71761.D
Dilution:	1.0			Initial Weight/Volume:	4.58 g
Analysis Date:	08/08/2017 2242			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2048				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1,1-Trichloroethane		0.0011	U	0.00027	0.0011
1,1,2,2-Tetrachloroethane		0.0011	U	0.00024	0.0011
1,1,2-Trichloro-1,2,2-trifluoroethane		0.0011	U	0.00034	0.0011
1,1,2-Trichloroethane		0.0011	U	0.00020	0.0011
1,1-Dichloroethane		0.0011	U	0.00024	0.0011
1,1-Dichloroethene		0.0011	U	0.00026	0.0011
1,2,3-Trichlorobenzene		0.0011	U	0.00021	0.0011
1,2,4-Trichlorobenzene		0.0011	U	0.00011	0.0011
1,2,4-Trimethylbenzene		0.0011	U	0.00011	0.0011
1,2-Dibromo-3-Chloropropane		0.0011	U	0.00053	0.0011
1,2-Dichlorobenzene		0.0011	U	0.00016	0.0011
1,2-Dichloroethane		0.0011	U	0.00034	0.0011
1,2-Dichloropropane		0.0011	U	0.00048	0.0011
1,3,5-Trimethylbenzene		0.0011	U	0.00013	0.0011
1,3-Dichlorobenzene		0.0011	U	0.00018	0.0011
1,4-Dichlorobenzene		0.0011	U	0.00011	0.0011
1,4-Dioxane		0.023	U	0.010	0.023
2-Butanone (MEK)		0.0057	U	0.0013	0.0057
2-Hexanone		0.0057	U	0.00089	0.0057
4-Isopropyltoluene		0.0011	U	0.00011	0.0011
4-Methyl-2-pentanone (MIBK)		0.0057	U	0.00076	0.0057
Acetone		0.0057	U	0.0043	0.0057
Benzene		0.0011	U	0.00029	0.0011
Bromoform		0.0011	U	0.00049	0.0011
Bromomethane		0.0011	U	0.00054	0.0011
Carbon disulfide		0.0011	U	0.00030	0.0011
Carbon tetrachloride		0.0011	U *	0.00021	0.0011
Chlorobenzene		0.0011	U	0.00020	0.0011
Chlorobromomethane		0.0011	U	0.00032	0.0011
Chlorodibromomethane		0.0011	U	0.00022	0.0011
Chloroethane		0.0011	U	0.00060	0.0011
Chloroform		0.0011	U	0.00036	0.0011
Chloromethane		0.0011	U	0.00050	0.0011
cis-1,2-Dichloroethene		0.0011	U	0.00017	0.0011
cis-1,3-Dichloropropene		0.0011	U	0.00031	0.0011
Cyclohexane		0.0011	U	0.00025	0.0011
Dichlorobromomethane		0.0011	U	0.00029	0.0011
Dichlorodifluoromethane		0.0011	U *	0.00039	0.0011
Ethylbenzene		0.0011	U	0.00023	0.0011
Ethylene Dibromide		0.0011	U	0.00021	0.0011
Isopropylbenzene		0.0011	U	0.00014	0.0011
Methyl acetate		0.0057	U	0.0049	0.0057
Methyl tert-butyl ether		0.0011	U	0.00014	0.0011
Methylcyclohexane		0.0011	U *	0.00018	0.0011
Methylene Chloride		0.00062	J B	0.00019	0.0011
m-Xylene & p-Xylene		0.0011	U	0.00020	0.0011

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71761.D
Dilution:	1.0			Initial Weight/Volume:	4.58 g
Analysis Date:	08/08/2017 2242			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2048				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Naphthalene		0.0011	U	0.00022	0.0011
n-Butylbenzene		0.0011	U	0.00016	0.0011
N-Propylbenzene		0.0011	U	0.00020	0.0011
o-Xylene		0.0011	U	0.00011	0.0011
sec-Butylbenzene		0.0011	U	0.00010	0.0011
Styrene		0.0011	U	0.00014	0.0011
tert-Butylbenzene		0.0011	U	0.00014	0.0011
Tetrachloroethene		0.0011	U	0.00016	0.0011
Toluene		0.0011	U	0.00071	0.0011
trans-1,2-Dichloroethene		0.0011	U	0.00028	0.0011
trans-1,3-Dichloropropene		0.0011	U	0.00030	0.0011
Trichloroethene		0.0011	U	0.00016	0.0011
Trichlorofluoromethane		0.0011	U	0.00046	0.0011
Vinyl chloride		0.0011	U	0.00062	0.0011
Xylenes, Total		0.0023	U	0.00029	0.0023

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		78 - 135
4-Bromofluorobenzene	95		67 - 126
Dibromofluoromethane (Surr)	103		61 - 149
Toluene-d8 (Surr)	108		73 - 121

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-13(10-12')

Lab Sample ID: 460-138465-14 | Date Sampled: 08/02/2017 1650
Client Matrix: Solid | % Moisture: 4.4 | Date Received: 08/03/2017 1211

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Prep Method:	5035	Prep Batch:	460-453860	Lab File ID:	K71761.D
Dilution:	1.0			Initial Weight/Volume:	4.58 g
Analysis Date:	08/08/2017 2242			Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2048				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	2.74	0.0072	J

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454194	Lab File ID:	X263205.D
Dilution:	1.0			Initial Weight/Volume:	15.0255 g
Analysis Date:	08/10/2017 0939			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.032	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.028	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0088	0.15
2,4-Dimethylphenol		0.37	U	0.082	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.076	U	0.015	0.076
2,6-Dinitrotoluene		0.076	U	0.020	0.076
2-Chloronaphthalene		0.37	U	0.0085	0.37
2-Chlorophenol		0.37	U	0.0095	0.37
2-Methylnaphthalene		0.37	U	0.0083	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.013	0.37
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.10	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0096	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.76	U	0.18	0.76
Acenaphthene		0.020	J	0.0091	0.37
Acenaphthylene		0.37	U	0.0096	0.37
Acetophenone		0.37	U	0.0082	0.37
Anthracene		0.040	J	0.036	0.37
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.37	U	0.029	0.37
Benzo[a]anthracene		0.24		0.031	0.037
Benzo[a]pyrene		0.19		0.011	0.037
Benzo[b]fluoranthene		0.34		0.015	0.037
Benzo[g,h,i]perylene		0.23	J	0.022	0.37
Benzo[k]fluoranthene		0.17		0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.012	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0088	0.037
Bis(2-ethylhexyl) phthalate		0.080	J	0.015	0.37
Butyl benzyl phthalate		0.37	U	0.012	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.029	J	0.0093	0.37
Chrysene		0.33	J	0.010	0.37
Dibenz(a,h)anthracene		0.054		0.019	0.037

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 | Date Sampled: 08/02/2017 1025
Client Matrix: Solid | % Moisture: 11.9 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454194	Lab File ID:	X263205.D
Dilution:	1.0			Initial Weight/Volume:	15.0255 g
Analysis Date:	08/10/2017 0939			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.011	J	0.011	0.37
Diethyl phthalate		0.37	U	0.011	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.026	J	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.52		0.011	0.37
Fluorene		0.024	J	0.0082	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.076	U	0.011	0.076
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.014	0.037
Indeno[1,2,3-cd]pyrene		0.22		0.025	0.037
Isophorone		0.15	U	0.0080	0.15
Naphthalene		0.37	U	0.0095	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.013	0.037
N-Nitrosodiphenylamine		0.37	U	0.034	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		0.37		0.010	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.58		0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	74		10 - 103
2-Fluorobiphenyl	66		38 - 95
2-Fluorophenol (Surr)	53		25 - 92
Nitrobenzene-d5 (Surr)	59		37 - 94
Phenol-d5 (Surr)	55		32 - 91
Terphenyl-d14 (Surr)	97		24 - 109

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454194	Lab File ID:	X263205.D
Dilution:	1.0			Initial Weight/Volume:	15.0255 g
Analysis Date:	08/10/2017 0939			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 11**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
141-79-7	3-Penten-2-one, 4-methyl-	2.26	3.2	J N
70-55-3	Benzenesulfonamide, 4-methyl-	8.00	0.51	J N
629-92-5	Nonadecane	12.95	0.69	J N
	Unknown	13.53	0.32	J
67860-04-2	Oxirane, heptadecyl-	13.64	1.1	J N
13475-75-7	Pentadecane, 8-hexyl-	13.91	0.92	J N
	Unknown	14.42	0.40	J
	Unknown	15.71	0.39	J
14811-95-1	1,19-Eicosadiene	15.98	0.57	J N
1058-61-3	Stigmast-4-en-3-one	16.15	0.39	J N
	Unknown	16.97	0.35	J

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 13.3 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19574.D
Dilution:	1.0			Initial Weight/Volume:	15.0458 g
Analysis Date:	08/09/2017 1613			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.38	U	0.032	0.38
1,2,4,5-Tetrachlorobenzene		0.38	U	0.028	0.38
2,2'-oxybis[1-chloropropane]		0.38	U	0.016	0.38
2,3,4,6-Tetrachlorophenol		0.38	U	0.036	0.38
2,4,5-Trichlorophenol		0.38	U	0.038	0.38
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0090	0.15
2,4-Dimethylphenol		0.38	U	0.084	0.38
2,4-Dinitrophenol		0.31	U	0.29	0.31
2,4-Dinitrotoluene		0.077	U	0.015	0.077
2,6-Dinitrotoluene		0.077	U	0.020	0.077
2-Chloronaphthalene		0.38	U	0.0086	0.38
2-Chlorophenol		0.38	U	0.0097	0.38
2-Methylnaphthalene		0.38	U	0.0084	0.38
2-Methylphenol		0.38	U	0.017	0.38
2-Nitroaniline		0.38	U	0.013	0.38
2-Nitrophenol		0.38	U	0.013	0.38
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.38	U	0.011	0.38
4,6-Dinitro-2-methylphenol		0.31	U	0.10	0.31
4-Bromophenyl phenyl ether		0.38	U	0.012	0.38
4-Chloro-3-methylphenol		0.38	U	0.016	0.38
4-Chloroaniline		0.38	U	0.0098	0.38
4-Chlorophenyl phenyl ether		0.38	U	0.011	0.38
4-Methylphenol		0.38	U	0.010	0.38
4-Nitroaniline		0.38	U	0.014	0.38
4-Nitrophenol		0.77	U	0.18	0.77
Acenaphthene		0.38	U	0.0092	0.38
Acenaphthylene		0.38	U	0.0098	0.38
Acetophenone		0.0095	J	0.0083	0.38
Anthracene		0.38	U	0.036	0.38
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.38	U	0.029	0.38
Benzo[a]anthracene		0.038	U	0.032	0.038
Benzo[a]pyrene		0.016	J	0.012	0.038
Benzo[b]fluoranthene		0.044		0.015	0.038
Benzo[g,h,i]perylene		0.38	U	0.022	0.38
Benzo[k]fluoranthene		0.038	U	0.017	0.038
Bis(2-chloroethoxy)methane		0.38	U	0.012	0.38
Bis(2-chloroethyl)ether		0.038	U	0.0090	0.038
Bis(2-ethylhexyl) phthalate		0.38	U	0.015	0.38
Butyl benzyl phthalate		0.38	U	0.012	0.38
Caprolactam		0.38	U	0.027	0.38
Carbazole		0.38	U	0.0094	0.38
Chrysene		0.039	J	0.010	0.38
Dibenz(a,h)anthracene		0.038	U	0.020	0.038

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2 | Date Sampled: 08/02/2017 1025
Client Matrix: Solid | % Moisture: 13.3 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19574.D
Dilution:	1.0			Initial Weight/Volume:	15.0458 g
Analysis Date:	08/09/2017 1613			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.38	U	0.012	0.38
Diethyl phthalate		0.38	U	0.011	0.38
Dimethyl phthalate		0.38	U	0.011	0.38
Di-n-butyl phthalate		0.38	U	0.011	0.38
Di-n-octyl phthalate		0.38	U	0.019	0.38
Fluoranthene		0.082	J	0.011	0.38
Fluorene		0.38	U	0.0083	0.38
Hexachlorobenzene		0.038	U	0.015	0.038
Hexachlorobutadiene		0.077	U	0.011	0.077
Hexachlorocyclopentadiene		0.38	U	0.024	0.38
Hexachloroethane		0.038	U	0.014	0.038
Indeno[1,2,3-cd]pyrene		0.038	U	0.025	0.038
Isophorone		0.28		0.0082	0.15
Naphthalene		0.38	U	0.0097	0.38
Nitrobenzene		0.038	U	0.012	0.038
N-Nitrosodi-n-propylamine		0.038	U	0.013	0.038
N-Nitrosodiphenylamine		0.38	U	0.035	0.38
Pentachlorophenol		0.31	U	0.046	0.31
Phenanthrene		0.068	J	0.010	0.38
Phenol		0.38	U	0.012	0.38
Pyrene		0.050	J	0.017	0.38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	49		10 - 103
2-Fluorobiphenyl	54		38 - 95
2-Fluorophenol (Surr)	58		25 - 92
Nitrobenzene-d5 (Surr)	55		37 - 94
Phenol-d5 (Surr)	47		32 - 91
Terphenyl-d14 (Surr)	34		24 - 109

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 13.3 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19574.D
Dilution:	1.0			Initial Weight/Volume:	15.0458 g
Analysis Date:	08/09/2017 1613			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 8**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.60	1.5	J
124-18-5	n-Decane	4.37	0.012	J
	Unknown	5.11	0.42	J
623-15-4	3-Buten-2-one, 4-(2-furanyl)-	5.75	0.34	J N
	Unknown	12.60	0.57	J
	Unknown	12.96	0.35	J
192-65-4	1,2:4,5-Dibenzopyrene	13.30	0.32	J N
191-07-1	Coronene	14.67	0.43	J N

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3 Date Sampled: 08/02/2017 1055
Client Matrix: Solid % Moisture: 10.5 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19587.D
Dilution:	1.0			Initial Weight/Volume:	15.0115 g
Analysis Date:	08/09/2017 2055			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.031	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.027	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0087	0.15
2,4-Dimethylphenol		0.37	U	0.081	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.075	U	0.015	0.075
2,6-Dinitrotoluene		0.075	U	0.020	0.075
2-Chloronaphthalene		0.37	U	0.0084	0.37
2-Chlorophenol		0.37	U	0.0094	0.37
2-Methylnaphthalene		0.37	U	0.0081	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.012	0.37
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.098	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0095	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.75	U	0.18	0.75
Acenaphthene		0.021	J	0.0089	0.37
Acenaphthylene		0.020	J	0.0095	0.37
Acetophenone		0.37	U	0.0080	0.37
Anthracene		0.085	J	0.035	0.37
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		0.51		0.031	0.037
Benzo[a]pyrene		0.59		0.011	0.037
Benzo[b]fluoranthene		1.0		0.014	0.037
Benzo[g,h,i]perylene		0.25	J	0.021	0.37
Benzo[k]fluoranthene		0.35		0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.011	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0087	0.037
Bis(2-ethylhexyl) phthalate		0.18	J	0.014	0.37
Butyl benzyl phthalate		0.37	U	0.011	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.043	J	0.0092	0.37
Chrysene		0.61		0.010	0.37
Dibenz(a,h)anthracene		0.11		0.019	0.037

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3 | Date Sampled: 08/02/2017 1055
Client Matrix: Solid | % Moisture: 10.5 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19587.D
Dilution:	1.0			Initial Weight/Volume:	15.0115 g
Analysis Date:	08/09/2017 2055			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.012	J	0.011	0.37
Diethyl phthalate		0.37	U	0.010	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		1.0		0.011	0.37
Fluorene		0.026	J	0.0080	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.075	U	0.010	0.075
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.014	0.037
Indeno[1,2,3-cd]pyrene		0.43		0.025	0.037
Isophorone		0.15	U	0.0079	0.15
Naphthalene		0.017	J	0.0094	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.012	0.037
N-Nitrosodiphenylamine		0.37	U	0.033	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		0.41		0.0098	0.37
Phenol		0.028	J	0.012	0.37
Pyrene		0.71		0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	66		10 - 103
2-Fluorobiphenyl	57		38 - 95
2-Fluorophenol (Surr)	51		25 - 92
Nitrobenzene-d5 (Surr)	52		37 - 94
Phenol-d5 (Surr)	56		32 - 91
Terphenyl-d14 (Surr)	58		24 - 109

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3 Date Sampled: 08/02/2017 1055
Client Matrix: Solid % Moisture: 10.5 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19587.D
Dilution:	1.0			Initial Weight/Volume:	15.0115 g
Analysis Date:	08/09/2017 2055			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 10**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.04	200	J
2136-70-1	Ethanol, 2-(tetradecyloxy)-	12.67	0.71	J N
88104-31-8	2- Chloropropionic acid, octadecyl ester	13.75	2.9	J N
192-97-2	Benzo[e]pyrene	13.86	0.61	J N
67860-04-2	Oxirane, heptadecyl-	14.55	1.3	J N
629-99-2	Pentacosane	14.86	0.76	J N
2004-39-9	1-Heptacosanol	14.91	0.71	J N
7494-34-0	26-Nor-5-cholesten-3.beta.-ol-25-one	15.20	0.33	J N
83-48-7	Stigmasterol	16.04	0.34	J N
83-46-5	.beta.-Sitosterol	16.48	1.0	J N

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4 Date Sampled: 08/02/2017 1055
Client Matrix: Solid % Moisture: 13.4 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19588.D
Dilution:	1.0			Initial Weight/Volume:	15.0438 g
Analysis Date:	08/09/2017 2117			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.38	U	0.032	0.38
1,2,4,5-Tetrachlorobenzene		0.38	U	0.028	0.38
2,2'-oxybis[1-chloropropane]		0.38	U	0.016	0.38
2,3,4,6-Tetrachlorophenol		0.38	U	0.036	0.38
2,4,5-Trichlorophenol		0.38	U	0.038	0.38
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0090	0.15
2,4-Dimethylphenol		0.38	U	0.084	0.38
2,4-Dinitrophenol		0.31	U	0.29	0.31
2,4-Dinitrotoluene		0.077	U	0.015	0.077
2,6-Dinitrotoluene		0.077	U	0.020	0.077
2-Chloronaphthalene		0.38	U	0.0086	0.38
2-Chlorophenol		0.38	U	0.0097	0.38
2-Methylnaphthalene		0.0087	J	0.0084	0.38
2-Methylphenol		0.38	U	0.017	0.38
2-Nitroaniline		0.38	U	0.013	0.38
2-Nitrophenol		0.38	U	0.013	0.38
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.38	U	0.011	0.38
4,6-Dinitro-2-methylphenol		0.31	U	0.10	0.31
4-Bromophenyl phenyl ether		0.38	U	0.012	0.38
4-Chloro-3-methylphenol		0.38	U	0.016	0.38
4-Chloroaniline		0.38	U	0.0098	0.38
4-Chlorophenyl phenyl ether		0.38	U	0.011	0.38
4-Methylphenol		0.38	U	0.010	0.38
4-Nitroaniline		0.38	U	0.014	0.38
4-Nitrophenol		0.77	U	0.18	0.77
Acenaphthene		0.026	J	0.0092	0.38
Acenaphthylene		0.023	J	0.0098	0.38
Acetophenone		0.012	J	0.0083	0.38
Anthracene		0.10	J	0.036	0.38
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.040	J	0.029	0.38
Benzo[a]anthracene		0.64		0.032	0.038
Benzo[a]pyrene		0.72		0.012	0.038
Benzo[b]fluoranthene		1.2		0.015	0.038
Benzo[g,h,i]perylene		0.30	J	0.022	0.38
Benzo[k]fluoranthene		0.47		0.017	0.038
Bis(2-chloroethoxy)methane		0.38	U	0.012	0.38
Bis(2-chloroethyl)ether		0.038	U	0.0090	0.038
Bis(2-ethylhexyl) phthalate		0.32	J	0.015	0.38
Butyl benzyl phthalate		0.38	U	0.012	0.38
Caprolactam		0.38	U	0.027	0.38
Carbazole		0.048	J	0.0094	0.38
Chrysene		0.75		0.010	0.38
Dibenz(a,h)anthracene		0.12		0.020	0.038

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4 | Date Sampled: 08/02/2017 1055
Client Matrix: Solid | % Moisture: 13.4 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19588.D
Dilution:	1.0			Initial Weight/Volume:	15.0438 g
Analysis Date:	08/09/2017 2117			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.015	J	0.012	0.38
Diethyl phthalate		0.38	U	0.011	0.38
Dimethyl phthalate		0.38	U	0.011	0.38
Di-n-butyl phthalate		0.38	U	0.011	0.38
Di-n-octyl phthalate		0.38	U	0.019	0.38
Fluoranthene		1.2		0.011	0.38
Fluorene		0.030	J	0.0083	0.38
Hexachlorobenzene		0.038	U	0.015	0.038
Hexachlorobutadiene		0.077	U	0.011	0.077
Hexachlorocyclopentadiene		0.38	U	0.024	0.38
Hexachloroethane		0.038	U	0.014	0.038
Indeno[1,2,3-cd]pyrene		0.49		0.025	0.038
Isophorone		0.15	U	0.0082	0.15
Naphthalene		0.014	J	0.0097	0.38
Nitrobenzene		0.038	U	0.012	0.038
N-Nitrosodi-n-propylamine		0.038	U	0.013	0.038
N-Nitrosodiphenylamine		0.38	U	0.035	0.38
Pentachlorophenol		0.31	U	0.046	0.31
Phenanthrene		0.46		0.010	0.38
Phenol		0.067	J	0.012	0.38
Pyrene		0.81		0.017	0.38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	63		10 - 103
2-Fluorobiphenyl	53		38 - 95
2-Fluorophenol (Surr)	48		25 - 92
Nitrobenzene-d5 (Surr)	48		37 - 94
Phenol-d5 (Surr)	51		32 - 91
Terphenyl-d14 (Surr)	52		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19588.D
Dilution:	1.0			Initial Weight/Volume:	15.0438 g
Analysis Date:	08/09/2017 2117			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 20**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	11.72	0.44	J
1599-67-3	1-Docosene	12.67	1.2	J N
	Unknown	13.00	0.50	J
1000144-57-9	16-Heptadecenal	13.41	1.8	J N
296-56-0	Cycloeicosane	13.75	3.7	J N
192-97-2	Benzo[e]pyrene	13.86	0.74	J N
	Unknown	14.29	0.34	J
7390-81-0	Oxirane, hexadecyl-	14.55	1.6	J N
629-78-7	Heptadecane	14.86	0.97	J N
3452-07-1	1-Eicosene	14.91	0.86	J N
10191-41-0	Vitamin E	15.13	0.43	J N
7494-34-0	26-Nor-5-cholesten-3.beta.-ol-25-one	15.19	1.1	J N
	Unknown	15.87	0.37	J
83-48-7	Stigmasterol	16.04	0.79	J N
55320-06-4	Heneicosane, 11-decyl-	16.13	0.38	J N
	Unknown	16.30	0.42	J
83-47-6	.gamma.-Sitosterol	16.48	2.1	J N
	Unknown	16.59	0.48	J
	Unknown	16.88	0.79	J
	Unknown	17.01	0.42	J

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-5(1-3')**

Lab Sample ID: 460-138465-5 | Date Sampled: 08/02/2017 1540
Client Matrix: Solid | % Moisture: 15.1 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455506	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19690.D
Dilution:	1.0			Initial Weight/Volume:	15.0264 g
Analysis Date:	08/11/2017 1134			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.39	U	0.033	0.39
1,2,4,5-Tetrachlorobenzene		0.39	U	0.029	0.39
2,2'-oxybis[1-chloropropane]		0.39	U	0.016	0.39
2,3,4,6-Tetrachlorophenol		0.39	U	0.037	0.39
2,4,5-Trichlorophenol		0.39	U	0.039	0.39
2,4,6-Trichlorophenol		0.16	U	0.011	0.16
2,4-Dichlorophenol		0.16	U	0.0092	0.16
2,4-Dimethylphenol		0.39	U	0.085	0.39
2,4-Dinitrophenol		0.31	U	0.29	0.31
2,4-Dinitrotoluene		0.079	U	0.015	0.079
2,6-Dinitrotoluene		0.079	U	0.021	0.079
2-Chloronaphthalene		0.39	U	0.0088	0.39
2-Chlorophenol		0.39	U	0.0099	0.39
2-Methylnaphthalene		0.021	J	0.0086	0.39
2-Methylphenol		0.39	U	0.017	0.39
2-Nitroaniline		0.39	U	0.013	0.39
2-Nitrophenol		0.39	U	0.013	0.39
3,3'-Dichlorobenzidine		0.16	U	0.043	0.16
3-Nitroaniline		0.39	U	0.012	0.39
4,6-Dinitro-2-methylphenol		0.31	U	0.10	0.31
4-Bromophenyl phenyl ether		0.39	U	0.012	0.39
4-Chloro-3-methylphenol		0.39	U	0.017	0.39
4-Chloroaniline		0.39	U	0.010	0.39
4-Chlorophenyl phenyl ether		0.39	U	0.012	0.39
4-Methylphenol		0.39	U	0.011	0.39
4-Nitroaniline		0.39	U	0.015	0.39
4-Nitrophenol		0.79	U	0.19	0.79
Acenaphthene		0.39	U	0.0094	0.39
Acenaphthylene		0.39	U	0.010	0.39
Acetophenone		0.39	U	0.0085	0.39
Anthracene		0.39	U	0.037	0.39
Atrazine		0.16	U	0.017	0.16
Benzaldehyde		0.39	U	0.030	0.39
Benzo[a]anthracene		0.039	U	0.032	0.039
Benzo[a]pyrene		0.039	U	0.012	0.039
Benzo[b]fluoranthene		0.039	U	0.015	0.039
Benzo[g,h,i]perylene		0.39	U	0.022	0.39
Benzo[k]fluoranthene		0.039	U	0.017	0.039
Bis(2-chloroethoxy)methane		0.39	U	0.012	0.39
Bis(2-chloroethyl)ether		0.039	U	0.0092	0.039
Bis(2-ethylhexyl) phthalate		0.39	U	0.015	0.39
Butyl benzyl phthalate		0.39	U	0.012	0.39
Caprolactam		0.39	U	0.028	0.39
Carbazole		0.39	U	0.0096	0.39
Chrysene		0.39	U	0.011	0.39
Dibenz(a,h)anthracene		0.039	U	0.020	0.039

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5 | Date Sampled: 08/02/2017 1540
Client Matrix: Solid | % Moisture: 15.1 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455506	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19690.D
Dilution:	1.0			Initial Weight/Volume:	15.0264 g
Analysis Date:	08/11/2017 1134			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.39	U	0.012	0.39
Diethyl phthalate		0.39	U	0.011	0.39
Dimethyl phthalate		0.39	U	0.011	0.39
Di-n-butyl phthalate		0.39	U	0.012	0.39
Di-n-octyl phthalate		0.39	U	0.020	0.39
Fluoranthene		0.39	U	0.012	0.39
Fluorene		0.39	U	0.0085	0.39
Hexachlorobenzene		0.039	U	0.016	0.039
Hexachlorobutadiene		0.079	U	0.011	0.079
Hexachlorocyclopentadiene		0.39	U	0.024	0.39
Hexachloroethane		0.039	U	0.014	0.039
Indeno[1,2,3-cd]pyrene		0.039	U	0.026	0.039
Isophorone		0.16	U	0.0084	0.16
Naphthalene		0.036	J	0.0099	0.39
Nitrobenzene		0.039	U	0.012	0.039
N-Nitrosodi-n-propylamine		0.039	U	0.013	0.039
N-Nitrosodiphenylamine		0.39	U	0.035	0.39
Pentachlorophenol		0.31	U	0.047	0.31
Phenanthrene		0.028	J	0.010	0.39
Phenol		0.39	U	0.013	0.39
Pyrene		0.39	U	0.018	0.39

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	58		10 - 103
2-Fluorobiphenyl	38		38 - 95
2-Fluorophenol (Surr)	39		25 - 92
Nitrobenzene-d5 (Surr)	38		37 - 94
Phenol-d5 (Surr)	42		32 - 91
Terphenyl-d14 (Surr)	62		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455506	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19690.D
Dilution:	1.0			Initial Weight/Volume:	15.0264 g
Analysis Date:	08/11/2017 1134			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	5.39	0.49	J
	Unknown	5.70	0.42	J

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6 Date Sampled: 08/02/2017 1545
Client Matrix: Solid % Moisture: 13.2 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19589.D
Dilution:	1.0			Initial Weight/Volume:	15.0138 g
Analysis Date:	08/09/2017 2139			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.38	U	0.032	0.38
1,2,4,5-Tetrachlorobenzene		0.38	U	0.028	0.38
2,2'-oxybis[1-chloropropane]		0.38	U	0.016	0.38
2,3,4,6-Tetrachlorophenol		0.38	U	0.036	0.38
2,4,5-Trichlorophenol		0.38	U	0.038	0.38
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0090	0.15
2,4-Dimethylphenol		0.38	U	0.084	0.38
2,4-Dinitrophenol		0.31	U	0.29	0.31
2,4-Dinitrotoluene		0.077	U	0.015	0.077
2,6-Dinitrotoluene		0.077	U	0.020	0.077
2-Chloronaphthalene		0.38	U	0.0086	0.38
2-Chlorophenol		0.38	U	0.0097	0.38
2-Methylnaphthalene		0.38	U	0.0084	0.38
2-Methylphenol		0.38	U	0.017	0.38
2-Nitroaniline		0.38	U	0.013	0.38
2-Nitrophenol		0.38	U	0.013	0.38
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.38	U	0.011	0.38
4,6-Dinitro-2-methylphenol		0.31	U	0.10	0.31
4-Bromophenyl phenyl ether		0.38	U	0.012	0.38
4-Chloro-3-methylphenol		0.38	U	0.016	0.38
4-Chloroaniline		0.38	U	0.0098	0.38
4-Chlorophenyl phenyl ether		0.38	U	0.011	0.38
4-Methylphenol		0.38	U	0.010	0.38
4-Nitroaniline		0.38	U	0.014	0.38
4-Nitrophenol		0.77	U	0.18	0.77
Acenaphthene		0.021	J	0.0092	0.38
Acenaphthylene		0.38	U	0.0098	0.38
Acetophenone		0.38	U	0.0083	0.38
Anthracene		0.078	J	0.036	0.38
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.38	U	0.029	0.38
Benzo[a]anthracene		0.42		0.032	0.038
Benzo[a]pyrene		0.45		0.012	0.038
Benzo[b]fluoranthene		0.76		0.015	0.038
Benzo[g,h,i]perylene		0.21	J	0.022	0.38
Benzo[k]fluoranthene		0.30		0.017	0.038
Bis(2-chloroethoxy)methane		0.38	U	0.012	0.38
Bis(2-chloroethyl)ether		0.038	U	0.0090	0.038
Bis(2-ethylhexyl) phthalate		0.38	U	0.015	0.38
Butyl benzyl phthalate		0.38	U	0.012	0.38
Caprolactam		0.38	U	0.027	0.38
Carbazole		0.12	J	0.0094	0.38
Chrysene		0.52		0.010	0.38
Dibenz(a,h)anthracene		0.038	U	0.020	0.038

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6 Date Sampled: 08/02/2017 1545
Client Matrix: Solid % Moisture: 13.2 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19589.D
Dilution:	1.0			Initial Weight/Volume:	15.0138 g
Analysis Date:	08/09/2017 2139			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.022	J	0.012	0.38
Diethyl phthalate		0.38	U	0.011	0.38
Dimethyl phthalate		0.38	U	0.011	0.38
Di-n-butyl phthalate		0.38	U	0.011	0.38
Di-n-octyl phthalate		0.38	U	0.019	0.38
Fluoranthene		1.4		0.011	0.38
Fluorene		0.020	J	0.0083	0.38
Hexachlorobenzene		0.038	U	0.015	0.038
Hexachlorobutadiene		0.077	U	0.011	0.077
Hexachlorocyclopentadiene		0.38	U	0.024	0.38
Hexachloroethane		0.038	U	0.014	0.038
Indeno[1,2,3-cd]pyrene		0.33		0.025	0.038
Isophorone		0.023	J	0.0082	0.15
Naphthalene		0.38	U	0.0097	0.38
Nitrobenzene		0.038	U	0.012	0.038
N-Nitrosodi-n-propylamine		0.038	U	0.013	0.038
N-Nitrosodiphenylamine		0.38	U	0.035	0.38
Pentachlorophenol		0.31	U	0.046	0.31
Phenanthrene		0.66		0.010	0.38
Phenol		0.38	U	0.012	0.38
Pyrene		0.90		0.017	0.38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	56		10 - 103
2-Fluorobiphenyl	54		38 - 95
2-Fluorophenol (Surr)	48		25 - 92
Nitrobenzene-d5 (Surr)	51		37 - 94
Phenol-d5 (Surr)	55		32 - 91
Terphenyl-d14 (Surr)	56		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-5(10-12')**

Lab Sample ID: 460-138465-6
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19589.D
Dilution:	1.0			Initial Weight/Volume:	15.0138 g
Analysis Date:	08/09/2017 2139			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 10**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.14	530	J
	Unknown	3.69	2.0	J
504-20-1	2,5-Heptadien-4-one, 2,6-dimethyl-	5.22	0.45	J N
	Unknown	5.45	1.4	J
	Unknown	5.76	0.81	J
	Unknown	6.83	0.32	J
	Unknown	13.00	1.3	J
	Unknown	13.03	1.3	J
198-55-0	Perylene	13.86	0.36	J N
	Unknown	14.95	0.33	J

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7 Date Sampled: 08/02/2017 1305
Client Matrix: Solid % Moisture: 8.0 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263229.D
Dilution:	1.0			Initial Weight/Volume:	15.0224 g
Analysis Date:	08/10/2017 2003			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0085	0.14
2,4-Dimethylphenol		0.36	U	0.079	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.073	U	0.014	0.073
2,6-Dinitrotoluene		0.073	U	0.019	0.073
2-Chloronaphthalene		0.36	U	0.0081	0.36
2-Chlorophenol		0.36	U	0.0091	0.36
2-Methylnaphthalene		0.36	U	0.0079	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.14	U	0.040	0.14
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.096	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.015	0.36
4-Chloroaniline		0.36	U	0.0092	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0098	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.73	U	0.17	0.73
Acenaphthene		0.36	U	0.0087	0.36
Acenaphthylene		0.36	U	0.0092	0.36
Acetophenone		0.36	U	0.0078	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.36	U	0.027	0.36
Benzo[a]anthracene		0.036	U	0.030	0.036
Benzo[a]pyrene		0.036	U	0.011	0.036
Benzo[b]fluoranthene		0.036	U	0.014	0.036
Benzo[g,h,i]perylene		0.36	U	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0085	0.036
Bis(2-ethylhexyl) phthalate		0.36	U	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0089	0.36
Chrysene		0.36	U	0.0098	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7 | Date Sampled: 08/02/2017 1305
Client Matrix: Solid | % Moisture: 8.0 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263229.D
Dilution:	1.0			Initial Weight/Volume:	15.0224 g
Analysis Date:	08/10/2017 2003			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.010	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.36	U	0.011	0.36
Fluorene		0.36	U	0.0078	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.073	U	0.010	0.073
Hexachlorocyclopentadiene		0.36	U	0.022	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.14	U	0.0077	0.14
Naphthalene		0.36	U	0.0091	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.043	0.29
Phenanthrene		0.36	U	0.0096	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.36	U	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	69		10 - 103
2-Fluorobiphenyl	61		38 - 95
2-Fluorophenol (Surr)	53		25 - 92
Nitrobenzene-d5 (Surr)	64		37 - 94
Phenol-d5 (Surr)	58		32 - 91
Terphenyl-d14 (Surr)	71		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263229.D
Dilution:	1.0			Initial Weight/Volume:	15.0224 g
Analysis Date:	08/10/2017 2003			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
1195-09-1	2-Methoxy-5-methylphenol	3.30	0.93	J N
	Unknown	5.05	0.99	J
	Unknown	5.37	0.62	J

Client Sample ID: SB-10(10-12')

Lab Sample ID: 460-138465-8 Date Sampled: 08/02/2017 1310
Client Matrix: Solid % Moisture: 10.6 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263230.D
Dilution:	1.0			Initial Weight/Volume:	15.0419 g
Analysis Date:	08/10/2017 2027			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.37	U	0.031	0.37
1,2,4,5-Tetrachlorobenzene		0.37	U	0.027	0.37
2,2'-oxybis[1-chloropropane]		0.37	U	0.015	0.37
2,3,4,6-Tetrachlorophenol		0.37	U	0.035	0.37
2,4,5-Trichlorophenol		0.37	U	0.037	0.37
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0087	0.15
2,4-Dimethylphenol		0.37	U	0.081	0.37
2,4-Dinitrophenol		0.30	U	0.28	0.30
2,4-Dinitrotoluene		0.075	U	0.015	0.075
2,6-Dinitrotoluene		0.075	U	0.020	0.075
2-Chloronaphthalene		0.37	U	0.0084	0.37
2-Chlorophenol		0.37	U	0.0094	0.37
2-Methylnaphthalene		0.37	U	0.0081	0.37
2-Methylphenol		0.37	U	0.016	0.37
2-Nitroaniline		0.37	U	0.012	0.37
2-Nitrophenol		0.37	U	0.012	0.37
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.37	U	0.011	0.37
4,6-Dinitro-2-methylphenol		0.30	U	0.098	0.30
4-Bromophenyl phenyl ether		0.37	U	0.012	0.37
4-Chloro-3-methylphenol		0.37	U	0.016	0.37
4-Chloroaniline		0.37	U	0.0095	0.37
4-Chlorophenyl phenyl ether		0.37	U	0.011	0.37
4-Methylphenol		0.37	U	0.010	0.37
4-Nitroaniline		0.37	U	0.014	0.37
4-Nitrophenol		0.75	U	0.18	0.75
Acenaphthene		0.37	U	0.0089	0.37
Acenaphthylene		0.37	U	0.0095	0.37
Acetophenone		0.37	U	0.0080	0.37
Anthracene		0.37	U	0.035	0.37
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.37	U	0.028	0.37
Benzo[a]anthracene		0.037	U	0.031	0.037
Benzo[a]pyrene		0.022	J	0.011	0.037
Benzo[b]fluoranthene		0.033	J	0.014	0.037
Benzo[g,h,i]perylene		0.37	U	0.021	0.37
Benzo[k]fluoranthene		0.037	U	0.016	0.037
Bis(2-chloroethoxy)methane		0.37	U	0.011	0.37
Bis(2-chloroethyl)ether		0.037	U	0.0087	0.037
Bis(2-ethylhexyl) phthalate		0.016	J	0.014	0.37
Butyl benzyl phthalate		0.37	U	0.011	0.37
Caprolactam		0.37	U	0.027	0.37
Carbazole		0.37	U	0.0091	0.37
Chrysene		0.031	J	0.010	0.37
Dibenz(a,h)anthracene		0.037	U	0.019	0.037

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-10(10-12')

Lab Sample ID: 460-138465-8 | Date Sampled: 08/02/2017 1310
Client Matrix: Solid | % Moisture: 10.6 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263230.D
Dilution:	1.0			Initial Weight/Volume:	15.0419 g
Analysis Date:	08/10/2017 2027			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.37	U	0.011	0.37
Diethyl phthalate		0.37	U	0.010	0.37
Dimethyl phthalate		0.37	U	0.011	0.37
Di-n-butyl phthalate		0.37	U	0.011	0.37
Di-n-octyl phthalate		0.37	U	0.019	0.37
Fluoranthene		0.050	J	0.011	0.37
Fluorene		0.37	U	0.0080	0.37
Hexachlorobenzene		0.037	U	0.015	0.037
Hexachlorobutadiene		0.075	U	0.010	0.075
Hexachlorocyclopentadiene		0.37	U	0.023	0.37
Hexachloroethane		0.037	U	0.013	0.037
Indeno[1,2,3-cd]pyrene		0.037	U	0.025	0.037
Isophorone		0.15	U	0.0079	0.15
Naphthalene		0.37	U	0.0094	0.37
Nitrobenzene		0.037	U	0.012	0.037
N-Nitrosodi-n-propylamine		0.037	U	0.012	0.037
N-Nitrosodiphenylamine		0.37	U	0.033	0.37
Pentachlorophenol		0.30	U	0.045	0.30
Phenanthrene		0.025	J	0.0098	0.37
Phenol		0.37	U	0.012	0.37
Pyrene		0.044	J	0.017	0.37

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	72		10 - 103
2-Fluorobiphenyl	57		38 - 95
2-Fluorophenol (Surr)	46		25 - 92
Nitrobenzene-d5 (Surr)	56		37 - 94
Phenol-d5 (Surr)	52		32 - 91
Terphenyl-d14 (Surr)	77		24 - 109

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-10(10-12')

Lab Sample ID: 460-138465-8 Date Sampled: 08/02/2017 1310
Client Matrix: Solid % Moisture: 10.6 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263230.D
Dilution:	1.0			Initial Weight/Volume:	15.0419 g
Analysis Date:	08/10/2017 2027			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9 Date Sampled: 08/02/2017 1242
Client Matrix: Solid % Moisture: 8.7 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263231.D
Dilution:	1.0			Initial Weight/Volume:	15.0256 g
Analysis Date:	08/10/2017 2051			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0085	0.15
2,4-Dimethylphenol		0.36	U	0.079	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.073	U	0.014	0.073
2,6-Dinitrotoluene		0.073	U	0.019	0.073
2-Chloronaphthalene		0.36	U	0.0082	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.36	U	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.15	U	0.040	0.15
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.096	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.016	0.36
4-Chloroaniline		0.36	U	0.0093	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0098	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.73	U	0.17	0.73
Acenaphthene		0.36	U	0.0087	0.36
Acenaphthylene		0.36	U	0.0093	0.36
Acetophenone		0.36	U	0.0079	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.36	U	0.028	0.36
Benzo[a]anthracene		0.042		0.030	0.036
Benzo[a]pyrene		0.034	J	0.011	0.036
Benzo[b]fluoranthene		0.051		0.014	0.036
Benzo[g,h,i]perylene		0.026	J	0.021	0.36
Benzo[k]fluoranthene		0.036	U	0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0085	0.036
Bis(2-ethylhexyl) phthalate		0.029	J	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0090	0.36
Chrysene		0.037	J	0.0098	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263231.D
Dilution:	1.0			Initial Weight/Volume:	15.0256 g
Analysis Date:	08/10/2017 2051			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.010	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.065	J	0.011	0.36
Fluorene		0.36	U	0.0079	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.073	U	0.010	0.073
Hexachlorocyclopentadiene		0.36	U	0.023	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.036	U	0.024	0.036
Isophorone		0.034	J	0.0078	0.15
Naphthalene		0.36	U	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.035	J	0.0096	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.065	J	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	68		10 - 103
2-Fluorobiphenyl	63		38 - 95
2-Fluorophenol (Surr)	54		25 - 92
Nitrobenzene-d5 (Surr)	61		37 - 94
Phenol-d5 (Surr)	57		32 - 91
Terphenyl-d14 (Surr)	74		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455418	Instrument ID:	CBNAMS5
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	X263231.D
Dilution:	1.0			Initial Weight/Volume:	15.0256 g
Analysis Date:	08/10/2017 2051			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 4**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
88-19-7	Benzenesulfonamide, 2-methyl-	7.79	0.36	J N
70-55-3	Benzenesulfonamide, 4-methyl-	7.99	1.5	J N
7494-34-0	26-Nor-5-cholesten-3.beta.-ol-25-one	14.38	3.8	J N
1000210-38-4	17-(1,5-Dimethylhexyl) -10,13-dimethyl-2,3,4,7,8,9,10,11,12,1	14.64	0.44	J N

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10 | Date Sampled: 08/02/2017 1245
Client Matrix: Solid | % Moisture: 6.6 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19577.D
Dilution:	1.0			Initial Weight/Volume:	15.0118 g
Analysis Date:	08/09/2017 1718			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.015	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.035	0.35
2,4,6-Trichlorophenol		0.14	U	0.010	0.14
2,4-Dichlorophenol		0.14	U	0.0083	0.14
2,4-Dimethylphenol		0.35	U	0.078	0.35
2,4-Dinitrophenol		0.28	U	0.27	0.28
2,4-Dinitrotoluene		0.072	U	0.014	0.072
2,6-Dinitrotoluene		0.072	U	0.019	0.072
2-Chloronaphthalene		0.35	U	0.0080	0.35
2-Chlorophenol		0.35	U	0.0090	0.35
2-Methylnaphthalene		0.35	U	0.0078	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.012	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.039	0.14
3-Nitroaniline		0.35	U	0.010	0.35
4,6-Dinitro-2-methylphenol		0.28	U	0.094	0.28
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0091	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.011	0.35
4-Methylphenol		0.35	U	0.0096	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.72	U	0.17	0.72
Acenaphthene		0.35	U	0.0086	0.35
Acenaphthylene		0.35	U	0.0091	0.35
Acetophenone		0.35	U	0.0077	0.35
Anthracene		0.35	U	0.034	0.35
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.35	U	0.027	0.35
Benzo[a]anthracene		0.035	U	0.030	0.035
Benzo[a]pyrene		0.035	U	0.011	0.035
Benzo[b]fluoranthene		0.035	U	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0083	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.025	0.35
Carbazole		0.35	U	0.0088	0.35
Chrysene		0.35	U	0.0096	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10 | Date Sampled: 08/02/2017 1245
Client Matrix: Solid | % Moisture: 6.6 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19577.D
Dilution:	1.0			Initial Weight/Volume:	15.0118 g
Analysis Date:	08/09/2017 1718			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.011	0.35
Diethyl phthalate		0.35	U	0.010	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.011	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.35	U	0.010	0.35
Fluorene		0.35	U	0.0077	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.072	U	0.0099	0.072
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.024	0.035
Isophorone		0.14	U	0.0076	0.14
Naphthalene		0.35	U	0.0090	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.032	0.35
Pentachlorophenol		0.28	U	0.043	0.28
Phenanthrene		0.35	U	0.0094	0.35
Phenol		0.35	U	0.012	0.35
Pyrene		0.35	U	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	60		10 - 103
2-Fluorobiphenyl	73		38 - 95
2-Fluorophenol (Surr)	70		25 - 92
Nitrobenzene-d5 (Surr)	77		37 - 94
Phenol-d5 (Surr)	74		32 - 91
Terphenyl-d14 (Surr)	81		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19577.D
Dilution:	1.0			Initial Weight/Volume:	15.0118 g
Analysis Date:	08/09/2017 1718			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 5**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.12	360	J
6141-68-0	Furan, 2-(1,1-dimethylethyl)-4-methyl-	3.47	0.34	J N
	Unknown	3.68	0.63	J
	Unknown	5.45	1.3	J
	Unknown	5.76	0.56	J

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 | Date Sampled: 08/02/2017 1145
Client Matrix: Solid | % Moisture: 9.1 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19578.D
Dilution:	1.0			Initial Weight/Volume:	15.0147 g
Analysis Date:	08/09/2017 1740			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.36	U	0.031	0.36
1,2,4,5-Tetrachlorobenzene		0.36	U	0.027	0.36
2,2'-oxybis[1-chloropropane]		0.36	U	0.015	0.36
2,3,4,6-Tetrachlorophenol		0.36	U	0.034	0.36
2,4,5-Trichlorophenol		0.36	U	0.036	0.36
2,4,6-Trichlorophenol		0.15	U	0.010	0.15
2,4-Dichlorophenol		0.15	U	0.0086	0.15
2,4-Dimethylphenol		0.36	U	0.080	0.36
2,4-Dinitrophenol		0.29	U	0.27	0.29
2,4-Dinitrotoluene		0.074	U	0.014	0.074
2,6-Dinitrotoluene		0.074	U	0.019	0.074
2-Chloronaphthalene		0.36	U	0.0082	0.36
2-Chlorophenol		0.36	U	0.0092	0.36
2-Methylnaphthalene		0.36	U	0.0080	0.36
2-Methylphenol		0.36	U	0.016	0.36
2-Nitroaniline		0.36	U	0.012	0.36
2-Nitrophenol		0.36	U	0.012	0.36
3,3'-Dichlorobenzidine		0.15	U	0.041	0.15
3-Nitroaniline		0.36	U	0.011	0.36
4,6-Dinitro-2-methylphenol		0.29	U	0.097	0.29
4-Bromophenyl phenyl ether		0.36	U	0.011	0.36
4-Chloro-3-methylphenol		0.36	U	0.016	0.36
4-Chloroaniline		0.36	U	0.0093	0.36
4-Chlorophenyl phenyl ether		0.36	U	0.011	0.36
4-Methylphenol		0.36	U	0.0099	0.36
4-Nitroaniline		0.36	U	0.014	0.36
4-Nitrophenol		0.74	U	0.17	0.74
Acenaphthene		0.36	U	0.0088	0.36
Acenaphthylene		0.36	U	0.0093	0.36
Acetophenone		0.36	U	0.0079	0.36
Anthracene		0.36	U	0.034	0.36
Atrazine		0.15	U	0.016	0.15
Benzaldehyde		0.36	U	0.028	0.36
Benzo[a]anthracene		0.092		0.030	0.036
Benzo[a]pyrene		0.10		0.011	0.036
Benzo[b]fluoranthene		0.16		0.014	0.036
Benzo[g,h,i]perylene		0.041	J	0.021	0.36
Benzo[k]fluoranthene		0.056		0.016	0.036
Bis(2-chloroethoxy)methane		0.36	U	0.011	0.36
Bis(2-chloroethyl)ether		0.036	U	0.0086	0.036
Bis(2-ethylhexyl) phthalate		0.082	J	0.014	0.36
Butyl benzyl phthalate		0.36	U	0.011	0.36
Caprolactam		0.36	U	0.026	0.36
Carbazole		0.36	U	0.0090	0.36
Chrysene		0.093	J	0.0099	0.36
Dibenz(a,h)anthracene		0.036	U	0.019	0.036

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 | Date Sampled: 08/02/2017 1145
Client Matrix: Solid | % Moisture: 9.1 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19578.D
Dilution:	1.0			Initial Weight/Volume:	15.0147 g
Analysis Date:	08/09/2017 1740			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.36	U	0.011	0.36
Diethyl phthalate		0.36	U	0.010	0.36
Dimethyl phthalate		0.36	U	0.011	0.36
Di-n-butyl phthalate		0.36	U	0.011	0.36
Di-n-octyl phthalate		0.36	U	0.018	0.36
Fluoranthene		0.17	J	0.011	0.36
Fluorene		0.36	U	0.0079	0.36
Hexachlorobenzene		0.036	U	0.015	0.036
Hexachlorobutadiene		0.074	U	0.010	0.074
Hexachlorocyclopentadiene		0.36	U	0.023	0.36
Hexachloroethane		0.036	U	0.013	0.036
Indeno[1,2,3-cd]pyrene		0.10		0.024	0.036
Isophorone		0.15	U	0.0078	0.15
Naphthalene		0.36	U	0.0092	0.36
Nitrobenzene		0.036	U	0.011	0.036
N-Nitrosodi-n-propylamine		0.036	U	0.012	0.036
N-Nitrosodiphenylamine		0.36	U	0.033	0.36
Pentachlorophenol		0.29	U	0.044	0.29
Phenanthrene		0.082	J	0.0097	0.36
Phenol		0.36	U	0.012	0.36
Pyrene		0.14	J	0.016	0.36

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	65		10 - 103
2-Fluorobiphenyl	61		38 - 95
2-Fluorophenol (Surr)	59		25 - 92
Nitrobenzene-d5 (Surr)	64		37 - 94
Phenol-d5 (Surr)	62		32 - 91
Terphenyl-d14 (Surr)	68		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19578.D
Dilution:	1.0			Initial Weight/Volume:	15.0147 g
Analysis Date:	08/09/2017 1740			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.03	220	J

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-12(10-12')

Lab Sample ID: 460-138465-12 Date Sampled: 08/02/2017 1155
Client Matrix: Solid % Moisture: 12.9 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19579.D
Dilution:	1.0			Initial Weight/Volume:	15.0316 g
Analysis Date:	08/09/2017 1801			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.38	U	0.032	0.38
1,2,4,5-Tetrachlorobenzene		0.38	U	0.028	0.38
2,2'-oxybis[1-chloropropane]		0.38	U	0.016	0.38
2,3,4,6-Tetrachlorophenol		0.38	U	0.036	0.38
2,4,5-Trichlorophenol		0.38	U	0.038	0.38
2,4,6-Trichlorophenol		0.15	U	0.011	0.15
2,4-Dichlorophenol		0.15	U	0.0089	0.15
2,4-Dimethylphenol		0.38	U	0.083	0.38
2,4-Dinitrophenol		0.30	U	0.29	0.30
2,4-Dinitrotoluene		0.077	U	0.015	0.077
2,6-Dinitrotoluene		0.077	U	0.020	0.077
2-Chloronaphthalene		0.38	U	0.0086	0.38
2-Chlorophenol		0.38	U	0.0096	0.38
2-Methylnaphthalene		0.38	U	0.0084	0.38
2-Methylphenol		0.38	U	0.016	0.38
2-Nitroaniline		0.38	U	0.012	0.38
2-Nitrophenol		0.38	U	0.013	0.38
3,3'-Dichlorobenzidine		0.15	U	0.042	0.15
3-Nitroaniline		0.38	U	0.011	0.38
4,6-Dinitro-2-methylphenol		0.30	U	0.10	0.30
4-Bromophenyl phenyl ether		0.38	U	0.012	0.38
4-Chloro-3-methylphenol		0.38	U	0.016	0.38
4-Chloroaniline		0.38	U	0.0097	0.38
4-Chlorophenyl phenyl ether		0.38	U	0.011	0.38
4-Methylphenol		0.38	U	0.010	0.38
4-Nitroaniline		0.38	U	0.014	0.38
4-Nitrophenol		0.77	U	0.18	0.77
Acenaphthene		0.38	U	0.0092	0.38
Acenaphthylene		0.38	U	0.0097	0.38
Acetophenone		0.38	U	0.0082	0.38
Anthracene		0.38	U	0.036	0.38
Atrazine		0.15	U	0.017	0.15
Benzaldehyde		0.38	U	0.029	0.38
Benzo[a]anthracene		0.038	U	0.032	0.038
Benzo[a]pyrene		0.038	U	0.011	0.038
Benzo[b]fluoranthene		0.038	U	0.015	0.038
Benzo[g,h,i]perylene		0.38	U	0.022	0.38
Benzo[k]fluoranthene		0.038	U	0.016	0.038
Bis(2-chloroethoxy)methane		0.38	U	0.012	0.38
Bis(2-chloroethyl)ether		0.038	U	0.0089	0.038
Bis(2-ethylhexyl) phthalate		0.38	U	0.015	0.38
Butyl benzyl phthalate		0.38	U	0.012	0.38
Caprolactam		0.38	U	0.027	0.38
Carbazole		0.38	U	0.0094	0.38
Chrysene		0.38	U	0.010	0.38
Dibenz(a,h)anthracene		0.038	U	0.020	0.038

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-12(10-12')

Lab Sample ID: 460-138465-12 Date Sampled: 08/02/2017 1155
Client Matrix: Solid % Moisture: 12.9 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19579.D
Dilution:	1.0			Initial Weight/Volume:	15.0316 g
Analysis Date:	08/09/2017 1801			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.38	U	0.011	0.38
Diethyl phthalate		0.38	U	0.011	0.38
Dimethyl phthalate		0.38	U	0.011	0.38
Di-n-butyl phthalate		0.38	U	0.011	0.38
Di-n-octyl phthalate		0.38	U	0.019	0.38
Fluoranthene		0.38	U	0.011	0.38
Fluorene		0.38	U	0.0082	0.38
Hexachlorobenzene		0.038	U	0.015	0.038
Hexachlorobutadiene		0.077	U	0.011	0.077
Hexachlorocyclopentadiene		0.38	U	0.024	0.38
Hexachloroethane		0.038	U	0.014	0.038
Indeno[1,2,3-cd]pyrene		0.038	U	0.025	0.038
Isophorone		0.15	U	0.0081	0.15
Naphthalene		0.38	U	0.0096	0.38
Nitrobenzene		0.038	U	0.012	0.038
N-Nitrosodi-n-propylamine		0.038	U	0.013	0.038
N-Nitrosodiphenylamine		0.38	U	0.034	0.38
Pentachlorophenol		0.30	U	0.046	0.30
Phenanthrene		0.38	U	0.010	0.38
Phenol		0.38	U	0.012	0.38
Pyrene		0.38	U	0.017	0.38

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	44		10 - 103
2-Fluorobiphenyl	67		38 - 95
2-Fluorophenol (Surr)	61		25 - 92
Nitrobenzene-d5 (Surr)	70		37 - 94
Phenol-d5 (Surr)	66		32 - 91
Terphenyl-d14 (Surr)	71		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19579.D
Dilution:	1.0			Initial Weight/Volume:	15.0316 g
Analysis Date:	08/09/2017 1801			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 8**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.24	1100	J
	Unknown	3.48	3.4	J
	Unknown	3.69	5.7	J
	Unknown	4.11	0.42	J
504-20-1	2,5-Heptadien-4-one, 2,6-dimethyl-	5.22	0.62	J N
	Unknown	5.46	4.9	J
	Unknown	5.77	2.6	J
	Unknown	6.83	0.38	J

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13 Date Sampled: 08/02/2017 1615
Client Matrix: Solid % Moisture: 5.4 Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19580.D
Dilution:	1.0			Initial Weight/Volume:	15.0322 g
Analysis Date:	08/09/2017 1823			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.35	U	0.030	0.35
1,2,4,5-Tetrachlorobenzene		0.35	U	0.026	0.35
2,2'-oxybis[1-chloropropane]		0.35	U	0.014	0.35
2,3,4,6-Tetrachlorophenol		0.35	U	0.033	0.35
2,4,5-Trichlorophenol		0.35	U	0.035	0.35
2,4,6-Trichlorophenol		0.14	U	0.0099	0.14
2,4-Dichlorophenol		0.14	U	0.0082	0.14
2,4-Dimethylphenol		0.35	U	0.077	0.35
2,4-Dinitrophenol		0.28	U	0.26	0.28
2,4-Dinitrotoluene		0.071	U	0.014	0.071
2,6-Dinitrotoluene		0.071	U	0.019	0.071
2-Chloronaphthalene		0.35	U	0.0079	0.35
2-Chlorophenol		0.35	U	0.0089	0.35
2-Methylnaphthalene		0.35	U	0.0077	0.35
2-Methylphenol		0.35	U	0.015	0.35
2-Nitroaniline		0.35	U	0.012	0.35
2-Nitrophenol		0.35	U	0.012	0.35
3,3'-Dichlorobenzidine		0.14	U	0.039	0.14
3-Nitroaniline		0.35	U	0.010	0.35
4,6-Dinitro-2-methylphenol		0.28	U	0.093	0.28
4-Bromophenyl phenyl ether		0.35	U	0.011	0.35
4-Chloro-3-methylphenol		0.35	U	0.015	0.35
4-Chloroaniline		0.35	U	0.0090	0.35
4-Chlorophenyl phenyl ether		0.35	U	0.010	0.35
4-Methylphenol		0.35	U	0.0095	0.35
4-Nitroaniline		0.35	U	0.013	0.35
4-Nitrophenol		0.71	U	0.17	0.71
Acenaphthene		0.35	U	0.0084	0.35
Acenaphthylene		0.35	U	0.0090	0.35
Acetophenone		0.35	U	0.0076	0.35
Anthracene		0.35	U	0.033	0.35
Atrazine		0.14	U	0.016	0.14
Benzaldehyde		0.35	U	0.027	0.35
Benzo[a]anthracene		0.035	U	0.029	0.035
Benzo[a]pyrene		0.035	U	0.011	0.035
Benzo[b]fluoranthene		0.035	U	0.014	0.035
Benzo[g,h,i]perylene		0.35	U	0.020	0.35
Benzo[k]fluoranthene		0.035	U	0.015	0.035
Bis(2-chloroethoxy)methane		0.35	U	0.011	0.35
Bis(2-chloroethyl)ether		0.035	U	0.0082	0.035
Bis(2-ethylhexyl) phthalate		0.35	U	0.014	0.35
Butyl benzyl phthalate		0.35	U	0.011	0.35
Caprolactam		0.35	U	0.025	0.35
Carbazole		0.35	U	0.0087	0.35
Chrysene		0.35	U	0.0095	0.35
Dibenz(a,h)anthracene		0.035	U	0.018	0.035

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13 | Date Sampled: 08/02/2017 1615
Client Matrix: Solid | % Moisture: 5.4 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19580.D
Dilution:	1.0			Initial Weight/Volume:	15.0322 g
Analysis Date:	08/09/2017 1823			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.35	U	0.011	0.35
Diethyl phthalate		0.35	U	0.0099	0.35
Dimethyl phthalate		0.35	U	0.010	0.35
Di-n-butyl phthalate		0.35	U	0.010	0.35
Di-n-octyl phthalate		0.35	U	0.018	0.35
Fluoranthene		0.35	U	0.010	0.35
Fluorene		0.35	U	0.0076	0.35
Hexachlorobenzene		0.035	U	0.014	0.035
Hexachlorobutadiene		0.071	U	0.0098	0.071
Hexachlorocyclopentadiene		0.35	U	0.022	0.35
Hexachloroethane		0.035	U	0.013	0.035
Indeno[1,2,3-cd]pyrene		0.035	U	0.023	0.035
Isophorone		0.14	U	0.0075	0.14
Naphthalene		0.35	U	0.0089	0.35
Nitrobenzene		0.035	U	0.011	0.035
N-Nitrosodi-n-propylamine		0.035	U	0.012	0.035
N-Nitrosodiphenylamine		0.35	U	0.032	0.35
Pentachlorophenol		0.28	U	0.042	0.28
Phenanthrene		0.35	U	0.0093	0.35
Phenol		0.35	U	0.011	0.35
Pyrene		0.35	U	0.016	0.35

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	54		10 - 103
2-Fluorobiphenyl	63		38 - 95
2-Fluorophenol (Surr)	60		25 - 92
Nitrobenzene-d5 (Surr)	66		37 - 94
Phenol-d5 (Surr)	64		32 - 91
Terphenyl-d14 (Surr)	69		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(1-3')**

Lab Sample ID: 460-138465-13
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19580.D
Dilution:	1.0			Initial Weight/Volume:	15.0322 g
Analysis Date:	08/09/2017 1823			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 4**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Unknown	3.10	410	J
	Unknown	3.68	0.48	J
	Unknown	5.45	0.70	J
	Unknown	5.76	0.53	J

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14 | Date Sampled: 08/02/2017 1650
Client Matrix: Solid | % Moisture: 4.4 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19591.D
Dilution:	1.0			Initial Weight/Volume:	15.0220 g
Analysis Date:	08/09/2017 2222			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
1,1'-Biphenyl		0.34	U	0.029	0.34
1,2,4,5-Tetrachlorobenzene		0.34	U	0.026	0.34
2,2'-oxybis[1-chloropropane]		0.34	U	0.014	0.34
2,3,4,6-Tetrachlorophenol		0.34	U	0.032	0.34
2,4,5-Trichlorophenol		0.34	U	0.034	0.34
2,4,6-Trichlorophenol		0.14	U	0.0098	0.14
2,4-Dichlorophenol		0.14	U	0.0081	0.14
2,4-Dimethylphenol		0.34	U	0.076	0.34
2,4-Dinitrophenol		0.28	U	0.26	0.28
2,4-Dinitrotoluene		0.070	U	0.014	0.070
2,6-Dinitrotoluene		0.070	U	0.018	0.070
2-Chloronaphthalene		0.34	U	0.0078	0.34
2-Chlorophenol		0.34	U	0.0088	0.34
2-Methylnaphthalene		0.34	U	0.0076	0.34
2-Methylphenol		0.34	U	0.015	0.34
2-Nitroaniline		0.34	U	0.011	0.34
2-Nitrophenol		0.34	U	0.012	0.34
3,3'-Dichlorobenzidine		0.14	U	0.039	0.14
3-Nitroaniline		0.34	U	0.010	0.34
4,6-Dinitro-2-methylphenol		0.28	U	0.092	0.28
4-Bromophenyl phenyl ether		0.34	U	0.011	0.34
4-Chloro-3-methylphenol		0.34	U	0.015	0.34
4-Chloroaniline		0.34	U	0.0089	0.34
4-Chlorophenyl phenyl ether		0.34	U	0.010	0.34
4-Methylphenol		0.34	U	0.0094	0.34
4-Nitroaniline		0.34	U	0.013	0.34
4-Nitrophenol		0.70	U	0.17	0.70
Acenaphthene		0.34	U	0.0084	0.34
Acenaphthylene		0.34	U	0.0089	0.34
Acetophenone		0.34	U	0.0075	0.34
Anthracene		0.34	U	0.033	0.34
Atrazine		0.14	U	0.015	0.14
Benzaldehyde		0.34	U	0.026	0.34
Benzo[a]anthracene		0.034	U	0.029	0.034
Benzo[a]pyrene		0.032	J	0.010	0.034
Benzo[b]fluoranthene		0.034	U	0.013	0.034
Benzo[g,h,i]perylene		0.34	U	0.020	0.34
Benzo[k]fluoranthene		0.042		0.015	0.034
Bis(2-chloroethoxy)methane		0.34	U	0.011	0.34
Bis(2-chloroethyl)ether		0.034	U	0.0081	0.034
Bis(2-ethylhexyl) phthalate		0.34	U	0.013	0.34
Butyl benzyl phthalate		0.34	U	0.011	0.34
Caprolactam		0.34	U	0.025	0.34
Carbazole		0.34	U	0.0086	0.34
Chrysene		0.029	J	0.0094	0.34
Dibenz(a,h)anthracene		0.034	U	0.018	0.034

Client: AKRF Inc | Job Number: 460-138465-1

Client Sample ID: SB-13(10-12')

Lab Sample ID: 460-138465-14 | Date Sampled: 08/02/2017 1650
Client Matrix: Solid | % Moisture: 4.4 | Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19591.D
Dilution:	1.0			Initial Weight/Volume:	15.0220 g
Analysis Date:	08/09/2017 2222			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Dibenzofuran		0.34	U	0.010	0.34
Diethyl phthalate		0.34	U	0.0098	0.34
Dimethyl phthalate		0.34	U	0.010	0.34
Di-n-butyl phthalate		0.34	U	0.010	0.34
Di-n-octyl phthalate		0.34	U	0.018	0.34
Fluoranthene		0.037	J	0.010	0.34
Fluorene		0.34	U	0.0075	0.34
Hexachlorobenzene		0.034	U	0.014	0.034
Hexachlorobutadiene		0.070	U	0.0097	0.070
Hexachlorocyclopentadiene		0.34	U	0.022	0.34
Hexachloroethane		0.034	U	0.013	0.034
Indeno[1,2,3-cd]pyrene		0.034	U	0.023	0.034
Isophorone		0.14	U	0.0074	0.14
Naphthalene		0.34	U	0.0088	0.34
Nitrobenzene		0.034	U	0.011	0.034
N-Nitrosodi-n-propylamine		0.034	U	0.012	0.034
N-Nitrosodiphenylamine		0.34	U	0.031	0.34
Pentachlorophenol		0.28	U	0.042	0.28
Phenanthrene		0.017	J	0.0092	0.34
Phenol		0.34	U	0.011	0.34
Pyrene		0.028	J	0.016	0.34

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol (Surr)	85		10 - 103
2-Fluorobiphenyl	66		38 - 95
2-Fluorophenol (Surr)	64		25 - 92
Nitrobenzene-d5 (Surr)	59		37 - 94
Phenol-d5 (Surr)	74		32 - 91
Terphenyl-d14 (Surr)	69		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Prep Method:	3546	Prep Batch:	460-454195	Lab File ID:	L19591.D
Dilution:	1.0			Initial Weight/Volume:	15.0220 g
Analysis Date:	08/09/2017 2222			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(0-2')**

Lab Sample ID: 460-138465-1
Client Matrix: Solid
% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8015D Gasoline Range Organics (GRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-455075	Instrument ID:	CVOAGC1
Prep Method:	5035	Prep Batch:	460-453878	Initial Weight/Volume:	5.64 g
Dilution:	50			Final Weight/Volume:	10 mL
Analysis Date:	08/09/2017 1312			Injection Volume:	5 mL
Prep Date:	08/03/2017 2216			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
GRO		2.5	U	2.5	2.5

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	105		80 - 135

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(0-2')**

Lab Sample ID: 460-138465-1
Client Matrix: Solid
% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8015D Diesel Range Organics (DRO) (GC)

Analysis Method:	8015D	Analysis Batch:	460-454764	Instrument ID:	CBNAGC3
Prep Method:	3546	Prep Batch:	460-454654	Lab File ID:	3F010474.D
Dilution:	1.0			Initial Weight/Volume:	15.0214 g
Analysis Date:	08/08/2017 1839			Final Weight/Volume:	1 mL
Prep Date:	08/07/2017 1810			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
#2 Diesel Fuel		15		1.2	7.6
C10-C44		34		1.2	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	71		25 - 132

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0017 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 0915			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0076	U	0.0013	0.0076
4,4'-DDE		0.0058	J	0.00090	0.0076
4,4'-DDT		0.0073	J	0.0014	0.0076
Aldrin		0.0076	U	0.0011	0.0076
alpha-BHC		0.0023	U	0.00077	0.0023
beta-BHC		0.0023	U	0.00085	0.0023
Chlordane (technical)		0.076	U	0.018	0.076
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.00099	0.0023
Endosulfan I		0.0076	U	0.0012	0.0076
Endosulfan II		0.0076	U	0.0020	0.0076
Endosulfan sulfate		0.0076	U	0.00095	0.0076
Endrin		0.0076	U	0.0011	0.0076
Endrin aldehyde		0.0076	U	0.0018	0.0076
Endrin ketone		0.0076	U	0.0015	0.0076
gamma-BHC (Lindane)		0.0023	U	0.00070	0.0023
Heptachlor		0.0076	U	0.00090	0.0076
Heptachlor epoxide		0.0076	U	0.0011	0.0076
Methoxychlor		0.0076	U	0.0017	0.0076
Toxaphene		0.076	U	0.027	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	123		50 - 150
Tetrachloro-m-xylene	119		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0017 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 0915			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		50 - 150
Tetrachloro-m-xylene	118		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 0953			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0077	U	0.0013	0.0077
4,4'-DDE		0.0077	U	0.00091	0.0077
4,4'-DDT		0.0027	J	0.0014	0.0077
Aldrin		0.0077	U	0.0012	0.0077
alpha-BHC		0.0023	U	0.00078	0.0023
beta-BHC		0.0023	U	0.00086	0.0023
Chlordane (technical)		0.077	U	0.019	0.077
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.0010	0.0023
Endosulfan I		0.0077	U	0.0012	0.0077
Endosulfan II		0.0077	U	0.0020	0.0077
Endosulfan sulfate		0.0077	U	0.00097	0.0077
Endrin		0.0077	U	0.0011	0.0077
Endrin aldehyde		0.0077	U	0.0018	0.0077
Endrin ketone		0.0077	U	0.0015	0.0077
gamma-BHC (Lindane)		0.0023	U	0.00071	0.0023
Heptachlor		0.0077	U	0.00091	0.0077
Heptachlor epoxide		0.0077	U	0.0012	0.0077
Methoxychlor		0.0077	U	0.0018	0.0077
Toxaphene		0.077	U	0.028	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	125		50 - 150
Tetrachloro-m-xylene	117		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 0953			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		50 - 150
Tetrachloro-m-xylene	115		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0086 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1006			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0075	U	0.0013	0.0075
4,4'-DDE		0.0069	J	0.00088	0.0075
4,4'-DDT		0.0075	U	0.0014	0.0075
Aldrin		0.0075	U	0.0011	0.0075
alpha-BHC		0.0022	U	0.00076	0.0022
beta-BHC		0.0022	U	0.00084	0.0022
Chlordane (technical)		0.13		0.018	0.075
delta-BHC		0.0022	U	0.00046	0.0022
Dieldrin		0.0022	U	0.00097	0.0022
Endosulfan I		0.0075	U	0.0011	0.0075
Endosulfan II		0.0075	U	0.0019	0.0075
Endosulfan sulfate		0.0075	U	0.00094	0.0075
Endrin		0.0075	U	0.0011	0.0075
Endrin aldehyde		0.0075	U	0.0018	0.0075
Endrin ketone		0.0075	U	0.0015	0.0075
gamma-BHC (Lindane)		0.0022	U	0.00069	0.0022
Heptachlor		0.0075	U	0.00088	0.0075
Heptachlor epoxide		0.0075	U	0.0011	0.0075
Methoxychlor		0.0075	U	0.0017	0.0075
Toxaphene		0.075	U	0.027	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		50 - 150
Tetrachloro-m-xylene	102		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0086 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1006			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	108		50 - 150
Tetrachloro-m-xylene	99		47 - 150

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4 Date Sampled: 08/02/2017 1055
Client Matrix: Solid % Moisture: 13.4 Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0025 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1019			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0077	U	0.0013	0.0077
4,4'-DDE		0.0077	U	0.00091	0.0077
4,4'-DDT		0.0077	U	0.0014	0.0077
Aldrin		0.0077	U	0.0012	0.0077
alpha-BHC		0.0023	U	0.00078	0.0023
beta-BHC		0.0023	U	0.00087	0.0023
Chlordane (technical)		0.21		0.019	0.077
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.0010	0.0023
Endosulfan I		0.0077	U	0.0012	0.0077
Endosulfan II		0.0077	U	0.0020	0.0077
Endosulfan sulfate		0.0077	U	0.00097	0.0077
Endrin		0.0077	U	0.0011	0.0077
Endrin aldehyde		0.0077	U	0.0018	0.0077
Endrin ketone		0.0077	U	0.0015	0.0077
gamma-BHC (Lindane)		0.0023	U	0.00072	0.0023
Heptachlor		0.0077	U	0.00091	0.0077
Heptachlor epoxide		0.0077	U	0.0012	0.0077
Methoxychlor		0.0077	U	0.0018	0.0077
Toxaphene		0.077	U	0.028	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	97		50 - 150
Tetrachloro-m-xylene	94		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0025 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1019			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	95		50 - 150
Tetrachloro-m-xylene	91		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0110 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1032			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0079	U	0.0013	0.0079
4,4'-DDE		0.0079	U	0.00093	0.0079
4,4'-DDT		0.0079	U	0.0014	0.0079
Aldrin		0.0079	U	0.0012	0.0079
alpha-BHC		0.0024	U	0.00080	0.0024
beta-BHC		0.0024	U	0.00088	0.0024
Chlordane (technical)		0.079	U	0.019	0.079
delta-BHC		0.0024	U	0.00048	0.0024
Dieldrin		0.0024	U	0.0010	0.0024
Endosulfan I		0.0079	U	0.0012	0.0079
Endosulfan II		0.0079	U	0.0020	0.0079
Endosulfan sulfate		0.0079	U	0.00099	0.0079
Endrin		0.0079	U	0.0011	0.0079
Endrin aldehyde		0.0079	U	0.0019	0.0079
Endrin ketone		0.0079	U	0.0015	0.0079
gamma-BHC (Lindane)		0.0024	U	0.00073	0.0024
Heptachlor		0.0079	U	0.00093	0.0079
Heptachlor epoxide		0.0079	U	0.0012	0.0079
Methoxychlor		0.0079	U	0.0018	0.0079
Toxaphene		0.079	U	0.028	0.079

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0110 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1032			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		50 - 150
Tetrachloro-m-xylene	113		47 - 150

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6 Date Sampled: 08/02/2017 1545
Client Matrix: Solid % Moisture: 13.2 Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1045			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0077	U	0.0013	0.0077
4,4'-DDE		0.0077	U	0.00091	0.0077
4,4'-DDT		0.0077	U	0.0014	0.0077
Aldrin		0.0077	U	0.0012	0.0077
alpha-BHC		0.0023	U	0.00078	0.0023
beta-BHC		0.0023	U	0.00086	0.0023
Chlordane (technical)		0.077	U	0.019	0.077
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.0010	0.0023
Endosulfan I		0.0077	U	0.0012	0.0077
Endosulfan II		0.0077	U	0.0020	0.0077
Endosulfan sulfate		0.0077	U	0.00097	0.0077
Endrin		0.0077	U	0.0011	0.0077
Endrin aldehyde		0.0077	U	0.0018	0.0077
Endrin ketone		0.0077	U	0.0015	0.0077
gamma-BHC (Lindane)		0.0023	U	0.00071	0.0023
Heptachlor		0.0077	U	0.00091	0.0077
Heptachlor epoxide		0.0077	U	0.0012	0.0077
Methoxychlor		0.0077	U	0.0018	0.0077
Toxaphene		0.077	U	0.028	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		50 - 150
Tetrachloro-m-xylene	107		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1045			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	104		50 - 150
Tetrachloro-m-xylene	106		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0092 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1058			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0073	U	0.0012	0.0073
4,4'-DDE		0.0073	U	0.00086	0.0073
4,4'-DDT		0.0073	U	0.0013	0.0073
Aldrin		0.0073	U	0.0011	0.0073
alpha-BHC		0.0022	U	0.00074	0.0022
beta-BHC		0.0022	U	0.00081	0.0022
Chlordane (technical)		0.073	U	0.018	0.073
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00095	0.0022
Endosulfan I		0.0073	U	0.0011	0.0073
Endosulfan II		0.0073	U	0.0019	0.0073
Endosulfan sulfate		0.0073	U	0.00091	0.0073
Endrin		0.0073	U	0.0010	0.0073
Endrin aldehyde		0.0073	U	0.0017	0.0073
Endrin ketone		0.0073	U	0.0014	0.0073
gamma-BHC (Lindane)		0.0022	U	0.00067	0.0022
Heptachlor		0.0073	U	0.00086	0.0073
Heptachlor epoxide		0.0073	U	0.0011	0.0073
Methoxychlor		0.0073	U	0.0017	0.0073
Toxaphene		0.073	U	0.026	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	124		50 - 150
Tetrachloro-m-xylene	121		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0092 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1058			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	117		50 - 150
Tetrachloro-m-xylene	121		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0065 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1110			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0075	U	0.0013	0.0075
4,4'-DDE		0.0075	U	0.00088	0.0075
4,4'-DDT		0.0075	U	0.0014	0.0075
Aldrin		0.0075	U	0.0011	0.0075
alpha-BHC		0.0022	U	0.00076	0.0022
beta-BHC		0.0022	U	0.00084	0.0022
Chlordane (technical)		0.075	U	0.018	0.075
delta-BHC		0.0022	U	0.00046	0.0022
Dieldrin		0.0022	U	0.00097	0.0022
Endosulfan I		0.0075	U	0.0011	0.0075
Endosulfan II		0.0075	U	0.0019	0.0075
Endosulfan sulfate		0.0075	U	0.00094	0.0075
Endrin		0.0075	U	0.0011	0.0075
Endrin aldehyde		0.0075	U	0.0018	0.0075
Endrin ketone		0.0075	U	0.0015	0.0075
gamma-BHC (Lindane)		0.0022	U	0.00069	0.0022
Heptachlor		0.0075	U	0.00088	0.0075
Heptachlor epoxide		0.0075	U	0.0011	0.0075
Methoxychlor		0.0075	U	0.0017	0.0075
Toxaphene		0.075	U	0.027	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		50 - 150
Tetrachloro-m-xylene	110		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0065 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1110			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	110		50 - 150
Tetrachloro-m-xylene	108		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0070 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1123			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0073	U	0.0012	0.0073
4,4'-DDE		0.0073	U	0.00086	0.0073
4,4'-DDT		0.0073	U	0.0013	0.0073
Aldrin		0.0073	U	0.0011	0.0073
alpha-BHC		0.0022	U	0.00074	0.0022
beta-BHC		0.0022	U	0.00082	0.0022
Chlordane (technical)		0.073	U	0.018	0.073
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00095	0.0022
Endosulfan I		0.0073	U	0.0011	0.0073
Endosulfan II		0.0073	U	0.0019	0.0073
Endosulfan sulfate		0.0073	U	0.00092	0.0073
Endrin		0.0073	U	0.0011	0.0073
Endrin aldehyde		0.0073	U	0.0017	0.0073
Endrin ketone		0.0073	U	0.0014	0.0073
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0073	U	0.00086	0.0073
Heptachlor epoxide		0.0026	J	0.0011	0.0073
Methoxychlor		0.0073	U	0.0017	0.0073
Toxaphene		0.073	U	0.026	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	115		50 - 150
Tetrachloro-m-xylene	112		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(1-3')**

Lab Sample ID: 460-138465-9
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0070 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1123			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	109		50 - 150
Tetrachloro-m-xylene	111		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0449 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1136			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0071	U	0.0012	0.0071
4,4'-DDE		0.0071	U	0.00084	0.0071
4,4'-DDT		0.0071	U	0.0013	0.0071
Aldrin		0.0071	U	0.0011	0.0071
alpha-BHC		0.0021	U	0.00073	0.0021
beta-BHC		0.0021	U	0.00080	0.0021
Chlordane (technical)		0.071	U	0.017	0.071
delta-BHC		0.0021	U	0.00044	0.0021
Dieldrin		0.0021	U	0.00093	0.0021
Endosulfan I		0.0071	U	0.0011	0.0071
Endosulfan II		0.0071	U	0.0018	0.0071
Endosulfan sulfate		0.0071	U	0.00090	0.0071
Endrin		0.0071	U	0.0010	0.0071
Endrin aldehyde		0.0071	U	0.0017	0.0071
Endrin ketone		0.0071	U	0.0014	0.0071
gamma-BHC (Lindane)		0.0021	U	0.00066	0.0021
Heptachlor		0.0071	U	0.00084	0.0071
Heptachlor epoxide		0.0071	U	0.0011	0.0071
Methoxychlor		0.0071	U	0.0016	0.0071
Toxaphene		0.071	U	0.026	0.071

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		50 - 150
Tetrachloro-m-xylene	111		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0449 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1136			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	108		50 - 150
Tetrachloro-m-xylene	109		47 - 150

Client: AKRF Inc Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 Date Sampled: 08/02/2017 1145
Client Matrix: Solid % Moisture: 9.1 Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0083 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1149			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0074	U	0.0013	0.0074
4,4'-DDE		0.0074	U	0.00087	0.0074
4,4'-DDT		0.024		0.0014	0.0074
Aldrin		0.0074	U	0.0011	0.0074
alpha-BHC		0.0022	U	0.00075	0.0022
beta-BHC		0.0022	U	0.00082	0.0022
Chlordane (technical)		0.22		0.018	0.074
delta-BHC		0.0022	U	0.00045	0.0022
Dieldrin		0.0022	U	0.00096	0.0022
Endosulfan I		0.0074	U	0.0011	0.0074
Endosulfan II		0.0074	U	0.0019	0.0074
Endosulfan sulfate		0.0074	U	0.00092	0.0074
Endrin		0.0074	U	0.0011	0.0074
Endrin aldehyde		0.0074	U	0.0017	0.0074
Endrin ketone		0.0074	U	0.0014	0.0074
gamma-BHC (Lindane)		0.0022	U	0.00068	0.0022
Heptachlor		0.0074	U	0.00087	0.0074
Heptachlor epoxide		0.0085		0.0011	0.0074
Methoxychlor		0.0074	U	0.0017	0.0074
Toxaphene		0.074	U	0.027	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	117		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0083 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1149			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		50 - 150
Tetrachloro-m-xylene	116		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(10-12')

Lab Sample ID: 460-138465-12
Client Matrix: Solid

% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0221 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1202			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0077	U	0.0013	0.0077
4,4'-DDE		0.0077	U	0.00091	0.0077
4,4'-DDT		0.0077	U	0.0014	0.0077
Aldrin		0.0077	U	0.0012	0.0077
alpha-BHC		0.0023	U	0.00078	0.0023
beta-BHC		0.0023	U	0.00086	0.0023
Chlordane (technical)		0.077	U	0.019	0.077
delta-BHC		0.0023	U	0.00047	0.0023
Dieldrin		0.0023	U	0.0010	0.0023
Endosulfan I		0.0077	U	0.0012	0.0077
Endosulfan II		0.0077	U	0.0020	0.0077
Endosulfan sulfate		0.0077	U	0.00096	0.0077
Endrin		0.0077	U	0.0011	0.0077
Endrin aldehyde		0.0077	U	0.0018	0.0077
Endrin ketone		0.0077	U	0.0015	0.0077
gamma-BHC (Lindane)		0.0023	U	0.00071	0.0023
Heptachlor		0.0077	U	0.00091	0.0077
Heptachlor epoxide		0.0077	U	0.0011	0.0077
Methoxychlor		0.0077	U	0.0018	0.0077
Toxaphene		0.077	U	0.028	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119		50 - 150
Tetrachloro-m-xylene	117		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0221 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1202			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		50 - 150
Tetrachloro-m-xylene	115		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(1-3')**

Lab Sample ID: 460-138465-13
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0325 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1215			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0071	U	0.0012	0.0071
4,4'-DDE		0.0071	U	0.00083	0.0071
4,4'-DDT		0.0071	U	0.0013	0.0071
Aldrin		0.0071	U	0.0011	0.0071
alpha-BHC		0.0021	U	0.00072	0.0021
beta-BHC		0.0021	U	0.00079	0.0021
Chlordane (technical)		0.071	U	0.017	0.071
delta-BHC		0.0021	U	0.00043	0.0021
Dieldrin		0.0021	U	0.00092	0.0021
Endosulfan I		0.0071	U	0.0011	0.0071
Endosulfan II		0.0071	U	0.0018	0.0071
Endosulfan sulfate		0.0071	U	0.00089	0.0071
Endrin		0.0071	U	0.0010	0.0071
Endrin aldehyde		0.0071	U	0.0017	0.0071
Endrin ketone		0.0071	U	0.0014	0.0071
gamma-BHC (Lindane)		0.0021	U	0.00065	0.0021
Heptachlor		0.0071	U	0.00083	0.0071
Heptachlor epoxide		0.0071	U	0.0011	0.0071
Methoxychlor		0.0071	U	0.0016	0.0071
Toxaphene		0.071	U	0.026	0.071

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	116		50 - 150
Tetrachloro-m-xylene	114		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13
Client Matrix: Solid

% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0325 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1215			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		50 - 150
Tetrachloro-m-xylene	113		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(10-12')

Lab Sample ID: 460-138465-14
Client Matrix: Solid

% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0001 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1227			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.0070	U	0.0012	0.0070
4,4'-DDE		0.0070	U	0.00083	0.0070
4,4'-DDT		0.0070	U	0.0013	0.0070
Aldrin		0.0070	U	0.0011	0.0070
alpha-BHC		0.0021	U	0.00071	0.0021
beta-BHC		0.0021	U	0.00078	0.0021
Chlordane (technical)		0.070	U	0.017	0.070
delta-BHC		0.0021	U	0.00043	0.0021
Dieldrin		0.0021	U	0.00091	0.0021
Endosulfan I		0.0070	U	0.0011	0.0070
Endosulfan II		0.0070	U	0.0018	0.0070
Endosulfan sulfate		0.0070	U	0.00088	0.0070
Endrin		0.0070	U	0.0010	0.0070
Endrin aldehyde		0.0070	U	0.0017	0.0070
Endrin ketone		0.0070	U	0.0014	0.0070
gamma-BHC (Lindane)		0.0021	U	0.00065	0.0021
Heptachlor		0.0070	U	0.00083	0.0070
Heptachlor epoxide		0.0070	U	0.0010	0.0070
Methoxychlor		0.0070	U	0.0016	0.0070
Toxaphene		0.070	U	0.025	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		50 - 150
Tetrachloro-m-xylene	113		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8081B Organochlorine Pesticides (GC)

Analysis Method:	8081B	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Prep Method:	3546	Prep Batch:	460-454134	Initial Weight/Volume:	+15.0001 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1227			Injection Volume:	1 uL
Prep Date:	08/04/2017 2113			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		50 - 150
Tetrachloro-m-xylene	109		47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1
Client Matrix: Solid
% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0017 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1644			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.076	U	0.010	0.076
Aroclor 1221		0.076	U	0.010	0.076
Aroclor 1232		0.076	U	0.010	0.076
Aroclor 1242		0.076	U	0.010	0.076
Aroclor 1248		0.076	U	0.010	0.076
Aroclor 1254		0.076	U	0.010	0.076
Aroclor 1260		0.076	U	0.010	0.076
Aroclor 1268		0.076	U	0.010	0.076
Aroclor-1262		0.076	U	0.010	0.076
Polychlorinated biphenyls, Total		0.076	U	0.010	0.076

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0017 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1644			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	106		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1728			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.077	U	0.010	0.077
Aroclor 1221		0.077	U	0.010	0.077
Aroclor 1232		0.077	U	0.010	0.077
Aroclor 1242		0.077	U	0.010	0.077
Aroclor 1248		0.077	U	0.010	0.077
Aroclor 1254		0.077	U	0.011	0.077
Aroclor 1260		0.077	U	0.011	0.077
Aroclor 1268		0.077	U	0.011	0.077
Aroclor-1262		0.077	U	0.011	0.077
Polychlorinated biphenyls, Total		0.077	U	0.011	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	111		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(3-5')**

Lab Sample ID: 460-138465-2
Client Matrix: Solid
% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0057 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1728			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	109		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0086 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1742			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.075	U	0.0099	0.075
Aroclor 1221		0.075	U	0.0099	0.075
Aroclor 1232		0.075	U	0.0099	0.075
Aroclor 1242		0.075	U	0.0099	0.075
Aroclor 1248		0.075	U	0.0099	0.075
Aroclor 1254		0.075	U	0.010	0.075
Aroclor 1260		0.075	U	0.010	0.075
Aroclor 1268		0.075	U	0.010	0.075
Aroclor-1262		0.075	U	0.010	0.075
Polychlorinated biphenyls, Total		0.075	U	0.010	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-19(0-2')**

Lab Sample ID: 460-138465-3
Client Matrix: Solid
% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0086 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1742			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	107		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0025 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1757			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.077	U	0.010	0.077
Aroclor 1221		0.077	U	0.010	0.077
Aroclor 1232		0.077	U	0.010	0.077
Aroclor 1242		0.077	U	0.010	0.077
Aroclor 1248		0.077	U	0.010	0.077
Aroclor 1254		0.077	U	0.011	0.077
Aroclor 1260		0.077	U	0.011	0.077
Aroclor 1268		0.077	U	0.011	0.077
Aroclor-1262		0.077	U	0.011	0.077
Polychlorinated biphenyls, Total		0.077	U	0.011	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	96		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4
Client Matrix: Solid

% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0025 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1757			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	95		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0110 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1812			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.079	U	0.010	0.079
Aroclor 1221		0.079	U	0.010	0.079
Aroclor 1232		0.079	U	0.010	0.079
Aroclor 1242		0.079	U	0.010	0.079
Aroclor 1248		0.079	U	0.010	0.079
Aroclor 1254		0.079	U	0.011	0.079
Aroclor 1260		0.079	U	0.011	0.079
Aroclor 1268		0.079	U	0.011	0.079
Aroclor-1262		0.079	U	0.011	0.079
Polychlorinated biphenyls, Total		0.079	U	0.011	0.079

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0110 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1812			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	103		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1826			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.077	U	0.010	0.077
Aroclor 1221		0.077	U	0.010	0.077
Aroclor 1232		0.077	U	0.010	0.077
Aroclor 1242		0.077	U	0.010	0.077
Aroclor 1248		0.077	U	0.010	0.077
Aroclor 1254		0.077	U	0.011	0.077
Aroclor 1260		0.077	U	0.011	0.077
Aroclor 1268		0.077	U	0.011	0.077
Aroclor-1262		0.077	U	0.011	0.077
Polychlorinated biphenyls, Total		0.077	U	0.011	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	97		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0030 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1826			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	95		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0092 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1841			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.073	U	0.0097	0.073
Aroclor 1221		0.073	U	0.0097	0.073
Aroclor 1232		0.073	U	0.0097	0.073
Aroclor 1242		0.073	U	0.0097	0.073
Aroclor 1248		0.073	U	0.0097	0.073
Aroclor 1254		0.073	U	0.010	0.073
Aroclor 1260		0.073	U	0.010	0.073
Aroclor 1268		0.073	U	0.010	0.073
Aroclor-1262		0.073	U	0.010	0.073
Polychlorinated biphenyls, Total		0.073	U	0.010	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	114		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0092 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1841			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	109		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0065 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1855			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.075	U	0.0099	0.075
Aroclor 1221		0.075	U	0.0099	0.075
Aroclor 1232		0.075	U	0.0099	0.075
Aroclor 1242		0.075	U	0.0099	0.075
Aroclor 1248		0.075	U	0.0099	0.075
Aroclor 1254		0.075	U	0.010	0.075
Aroclor 1260		0.075	U	0.010	0.075
Aroclor 1268		0.075	U	0.010	0.075
Aroclor-1262		0.075	U	0.010	0.075
Polychlorinated biphenyls, Total		0.075	U	0.010	0.075

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0065 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1855			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	108		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0070 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1910			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.073	U	0.0097	0.073
Aroclor 1221		0.073	U	0.0097	0.073
Aroclor 1232		0.073	U	0.0097	0.073
Aroclor 1242		0.073	U	0.0097	0.073
Aroclor 1248		0.073	U	0.0097	0.073
Aroclor 1254		0.073	U	0.010	0.073
Aroclor 1260		0.073	U	0.010	0.073
Aroclor 1268		0.073	U	0.010	0.073
Aroclor-1262		0.073	U	0.010	0.073
Polychlorinated biphenyls, Total		0.073	U	0.010	0.073

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	101		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0070 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1910			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	99		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0449 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1924			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.071	U	0.0095	0.071
Aroclor 1221		0.071	U	0.0095	0.071
Aroclor 1232		0.071	U	0.0095	0.071
Aroclor 1242		0.071	U	0.0095	0.071
Aroclor 1248		0.071	U	0.0095	0.071
Aroclor 1254		0.071	U	0.0098	0.071
Aroclor 1260		0.071	U	0.0098	0.071
Aroclor 1268		0.071	U	0.0098	0.071
Aroclor-1262		0.071	U	0.0098	0.071
Polychlorinated biphenyls, Total		0.071	U	0.0098	0.071

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	109		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(10-12')

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0449 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1924			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	108		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0083 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1939			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.074	U	0.0098	0.074
Aroclor 1221		0.074	U	0.0098	0.074
Aroclor 1232		0.074	U	0.0098	0.074
Aroclor 1242		0.074	U	0.0098	0.074
Aroclor 1248		0.074	U	0.0098	0.074
Aroclor 1254		0.074	U	0.010	0.074
Aroclor 1260		0.074	U	0.010	0.074
Aroclor 1268		0.074	U	0.010	0.074
Aroclor-1262		0.074	U	0.010	0.074
Polychlorinated biphenyls, Total		0.074	U	0.010	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	112		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0083 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1939			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	105		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(10-12')

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0221 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1954			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.077	U	0.010	0.077
Aroclor 1221		0.077	U	0.010	0.077
Aroclor 1232		0.077	U	0.010	0.077
Aroclor 1242		0.077	U	0.010	0.077
Aroclor 1248		0.077	U	0.010	0.077
Aroclor 1254		0.077	U	0.011	0.077
Aroclor 1260		0.077	U	0.011	0.077
Aroclor 1268		0.077	U	0.011	0.077
Aroclor-1262		0.077	U	0.011	0.077
Polychlorinated biphenyls, Total		0.077	U	0.011	0.077

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	113		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0221 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 1954			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	104		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13
Client Matrix: Solid

% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0325 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 2008			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.071	U	0.0094	0.071
Aroclor 1221		0.071	U	0.0094	0.071
Aroclor 1232		0.071	U	0.0094	0.071
Aroclor 1242		0.071	U	0.0094	0.071
Aroclor 1248		0.071	U	0.0094	0.071
Aroclor 1254		0.071	U	0.0097	0.071
Aroclor 1260		0.071	U	0.0097	0.071
Aroclor 1268		0.071	U	0.0097	0.071
Aroclor-1262		0.071	U	0.0097	0.071
Polychlorinated biphenyls, Total		0.071	U	0.0097	0.071

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	104		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0325 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 2008			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	101		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0001 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 2023			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aroclor 1016		0.070	U	0.0093	0.070
Aroclor 1221		0.070	U	0.0093	0.070
Aroclor 1232		0.070	U	0.0093	0.070
Aroclor 1242		0.070	U	0.0093	0.070
Aroclor 1248		0.070	U	0.0093	0.070
Aroclor 1254		0.070	U	0.0096	0.070
Aroclor 1260		0.070	U	0.0096	0.070
Aroclor 1268		0.070	U	0.0096	0.070
Aroclor-1262		0.070	U	0.0096	0.070
Polychlorinated biphenyls, Total		0.070	U	0.0096	0.070

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	97		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(10-12')

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Prep Method:	3546	Prep Batch:	460-454136	Initial Weight/Volume:	+15.0001 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/05/2017 2023			Injection Volume:	1 uL
Prep Date:	08/04/2017 2124			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	96		35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0371 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1137			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0088	0.019
2,4-D		0.019	U	0.0088	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	120		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(0-2')**

Lab Sample ID: 460-138465-1
Client Matrix: Solid
% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0371 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1137			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	111		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(3-5')**

Lab Sample ID: 460-138465-2
Client Matrix: Solid
% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0394 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1151			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0090	0.020
2,4-D		0.020	U	0.0090	0.020
Silvex (2,4,5-TP)		0.020	U	0.013	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-18(3-5')**

Lab Sample ID: 460-138465-2
Client Matrix: Solid
% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0394 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1151			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	104		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0338 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1248			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0087	0.019
2,4-D		0.019	U	0.0087	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	125		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-19(0-2')**

Lab Sample ID: 460-138465-3
Client Matrix: Solid
% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0338 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1248			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	118		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-19(3-5')**

Lab Sample ID: 460-138465-4
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0197 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1303			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0090	0.020
2,4-D		0.020	U	0.0090	0.020
Silvex (2,4,5-TP)		0.020	U	0.013	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	118		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-19(3-5')**

Lab Sample ID: 460-138465-4
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0197 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1303			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	115		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0429 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1318			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0092	0.020
2,4-D		0.020	U	0.0092	0.020
Silvex (2,4,5-TP)		0.020	U	0.013	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	123		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-5(1-3')**

Lab Sample ID: 460-138465-5
Client Matrix: Solid
% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0429 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1318			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	112		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-5(10-12')**

Lab Sample ID: 460-138465-6
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0408 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1332			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.020	U	0.0090	0.020
2,4-D		0.020	U	0.0090	0.020
Silvex (2,4,5-TP)		0.020	U	0.013	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	125		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-5(10-12')**

Lab Sample ID: 460-138465-6
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0408 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1332			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	111		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0316 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1347			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0085	0.018
2,4-D		0.018	U	0.0085	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	124		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(1-3')**

Lab Sample ID: 460-138465-7
Client Matrix: Solid
% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0316 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1347			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0277 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1402			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0087	0.019
2,4-D		0.019	U	0.0087	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	124		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0277 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1402			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	111		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0294 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1417			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0085	0.019
2,4-D		0.019	U	0.0085	0.019
Silvex (2,4,5-TP)		0.019	U	0.012	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	108		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(1-3')**

Lab Sample ID: 460-138465-9
Client Matrix: Solid
% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454288	Initial Weight/Volume:	30.0294 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/08/2017 1417			Injection Volume:	1 uL
Prep Date:	08/05/2017 2205			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	108		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0429 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1837			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0083	0.018
2,4-D		0.018	U	0.0083	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	121		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6

Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0429 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1837			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	112		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(1-3')**

Lab Sample ID: 460-138465-11
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0354 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1852			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0086	0.019
2,4-D		0.019	U	0.0086	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	125		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(1-3')**

Lab Sample ID: 460-138465-11
Client Matrix: Solid
% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0354 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1852			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	113		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0273 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1906			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.019	U	0.0089	0.019
2,4-D		0.019	U	0.0089	0.019
Silvex (2,4,5-TP)		0.019	U	0.013	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	120		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0273 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1906			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13
Client Matrix: Solid

% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0261 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1921			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0082	0.018
2,4-D		0.018	U	0.0082	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	123		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(1-3')**

Lab Sample ID: 460-138465-13
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0261 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1921			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	116		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0389 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1936			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
2,4,5-T		0.018	U	0.0081	0.018
2,4-D		0.018	U	0.0081	0.018
Silvex (2,4,5-TP)		0.018	U	0.012	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	135		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Prep Method:	8151A	Prep Batch:	460-454105	Initial Weight/Volume:	30.0389 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	08/07/2017 1936			Injection Volume:	1 uL
Prep Date:	08/04/2017 1801			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	126		80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1
Client Matrix: Solid

% Moisture: 11.9

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453879	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.27 g
Analysis Date:	08/04/2017 1334			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.6	U	0.43	3.6
Arsenic		7.1		0.66	2.7
Barium		64.5		2.9	35.8
Beryllium		0.54		0.041	0.36
Cadmium		0.72	U	0.11	0.72
Chromium		25.0		0.50	1.8
Cobalt		6.9	J	1.0	8.9
Copper		29.5		1.0	4.5
Lead		63.3		0.54	1.8
Manganese		268		0.28	2.7
Nickel		36.0		0.68	7.2
Selenium		1.8	J	1.1	3.6
Silver		1.8	U	0.27	1.8
Thallium		3.6	U	1.1	3.6
Vanadium		41.5		1.1	8.9
Zinc		69.2		0.46	5.4

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	08/08/2017 0843			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.074		0.011	0.017

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2
Client Matrix: Solid

% Moisture: 13.3

Date Sampled: 08/02/2017 1025
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453879	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.37 g
Analysis Date:	08/04/2017 1338			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.4	U	0.40	3.4
Arsenic		5.9		0.62	2.5
Barium		67.6		2.7	33.7
Beryllium		0.58		0.039	0.34
Cadmium		0.67	U	0.10	0.67
Chromium		23.0		0.47	1.7
Cobalt		6.7	J	0.96	8.4
Copper		30.1		0.95	4.2
Lead		35.3		0.51	1.7
Manganese		239		0.26	2.5
Nickel		32.3		0.64	6.7
Selenium		1.4	J	1.0	3.4
Silver		1.7	U	0.26	1.7
Thallium		3.4	U	0.99	3.4
Vanadium		26.2		1.0	8.4
Zinc		50.5		0.44	5.1

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/08/2017 0848			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.037		0.012	0.019

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3
Client Matrix: Solid

% Moisture: 10.5

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.27 g
Analysis Date:	08/04/2017 1420			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.5	U	0.42	3.5
Arsenic		3.2		0.65	2.6
Barium		61.0		2.8	35.2
Beryllium		0.35		0.040	0.35
Cadmium		0.13	J	0.10	0.70
Chromium		16.3		0.49	1.8
Cobalt		5.9	J	1.0	8.8
Copper		33.8		0.99	4.4
Lead		81.9		0.53	1.8
Manganese		272		0.27	2.6
Nickel		33.5		0.67	7.0
Selenium		1.2	J	1.1	3.5
Silver		1.8	U	0.27	1.8
Thallium		3.5	U	1.0	3.5
Vanadium		19.5		1.0	8.8
Zinc		113		0.45	5.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0850			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.32		0.012	0.019

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 08/02/2017 1055
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.29 g
Analysis Date:	08/04/2017 1424			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.6	U	0.43	3.6
Arsenic		4.9		0.66	2.7
Barium		75.0		2.9	35.8
Beryllium		0.37		0.041	0.36
Cadmium		0.33	J	0.11	0.72
Chromium		18.8		0.50	1.8
Cobalt		8.1	J	1.0	8.9
Copper		49.4		1.0	4.5
Lead		144		0.54	1.8
Manganese		368		0.28	2.7
Nickel		49.6		0.68	7.2
Selenium		1.1	J	1.1	3.6
Silver		1.8	U	0.27	1.8
Thallium		3.6	U	1.1	3.6
Vanadium		24.6		1.1	8.9
Zinc		204		0.46	5.4

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/08/2017 0851			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.27		0.012	0.019

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5
Client Matrix: Solid

% Moisture: 15.1

Date Sampled: 08/02/2017 1540
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.31 g
Analysis Date:	08/04/2017 1428			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.6	U	0.43	3.6
Arsenic		5.9		0.67	2.7
Barium		81.9		2.9	36.0
Beryllium		0.48		0.041	0.36
Cadmium		0.72	U	0.11	0.72
Chromium		17.0		0.50	1.8
Cobalt		8.1	J	1.0	9.0
Copper		49.9		1.0	4.5
Lead		87.7		0.54	1.8
Manganese		444		0.28	2.7
Nickel		37.2		0.68	7.2
Selenium		3.6	U	1.1	3.6
Silver		1.8	U	0.27	1.8
Thallium		3.6	U	1.1	3.6
Vanadium		23.9		1.1	9.0
Zinc		113		0.46	5.4

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	08/08/2017 0853			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.015	J	0.012	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-5(10-12')

Lab Sample ID: 460-138465-6
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 08/02/2017 1545
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.26 g
Analysis Date:	08/04/2017 1444			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.7	U	0.44	3.7
Arsenic		4.8		0.68	2.7
Barium		40.4		3.0	36.6
Beryllium		0.67		0.042	0.37
Cadmium		0.73	U	0.11	0.73
Chromium		19.4		0.51	1.8
Cobalt		5.5	J	1.0	9.1
Copper		42.2		1.0	4.6
Lead		8.3		0.55	1.8
Manganese		234		0.28	2.7
Nickel		24.9		0.69	7.3
Selenium		3.7	U	1.1	3.7
Silver		1.8	U	0.28	1.8
Thallium		3.7	U	1.1	3.7
Vanadium		23.0		1.1	9.1
Zinc		33.0		0.47	5.5

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/08/2017 0855			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.019	U	0.012	0.019

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(1-3')

Lab Sample ID: 460-138465-7
Client Matrix: Solid

% Moisture: 8.0

Date Sampled: 08/02/2017 1305
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.22 g
Analysis Date:	08/04/2017 1447			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.6	U	0.43	3.6
Arsenic		1.7	J	0.66	2.7
Barium		35.6		2.9	35.6
Beryllium		0.33	J	0.041	0.36
Cadmium		0.71	U	0.11	0.71
Chromium		13.1		0.49	1.8
Cobalt		11.9		1.0	8.9
Copper		12.1		1.0	4.5
Lead		14.7		0.54	1.8
Manganese		373		0.28	2.7
Nickel		67.9		0.68	7.1
Selenium		3.6	U	1.1	3.6
Silver		1.8	U	0.27	1.8
Thallium		3.6	U	1.1	3.6
Vanadium		13.1		1.1	8.9
Zinc		26.7		0.46	5.3

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/08/2017 0942			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.012	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-10(10-12')

Lab Sample ID: 460-138465-8
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 08/02/2017 1310
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.33 g
Analysis Date:	08/04/2017 1451			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.4	U	0.40	3.4
Arsenic		3.0		0.62	2.5
Barium		43.0		2.7	33.6
Beryllium		0.36		0.039	0.34
Cadmium		0.67	U	0.10	0.67
Chromium		14.7		0.47	1.7
Cobalt		6.9	J	0.96	8.4
Copper		21.0		0.95	4.2
Lead		64.0		0.51	1.7
Manganese		273		0.26	2.5
Nickel		53.6		0.64	6.7
Selenium		3.4	U	1.0	3.4
Silver		1.7	U	0.26	1.7
Thallium		3.4	U	0.99	3.4
Vanadium		17.8		1.0	8.4
Zinc		51.5		0.43	5.0

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	08/08/2017 0944			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.048		0.012	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 08/02/2017 1242
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.28 g
Analysis Date:	08/04/2017 1455			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.4	U	0.41	3.4
Arsenic		2.5	J	0.63	2.6
Barium		46.6		2.8	34.2
Beryllium		0.36		0.039	0.34
Cadmium		0.68	U	0.10	0.68
Chromium		16.3		0.47	1.7
Cobalt		7.2	J	0.98	8.6
Copper		22.8		0.97	4.3
Lead		104		0.52	1.7
Manganese		236		0.27	2.6
Nickel		62.3		0.65	6.8
Selenium		1.0	J	1.0	3.4
Silver		1.7	U	0.26	1.7
Thallium		3.4	U	1.0	3.4
Vanadium		17.8		1.0	8.6
Zinc		48.2		0.44	5.1

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	08/08/2017 0946			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.073		0.012	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10
Client Matrix: Solid
% Moisture: 6.6
Date Sampled: 08/02/2017 1245
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.31 g
Analysis Date:	08/04/2017 1459			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.3	U	0.39	3.3
Arsenic		0.78	J	0.60	2.5
Barium		18.4	J	2.6	32.7
Beryllium		0.22	J	0.038	0.33
Cadmium		0.65	U	0.097	0.65
Chromium		13.4		0.45	1.6
Cobalt		4.6	J	0.93	8.2
Copper		10.5		0.92	4.1
Lead		4.2		0.49	1.6
Manganese		197		0.25	2.5
Nickel		34.3		0.62	6.5
Selenium		3.3	U	0.99	3.3
Silver		1.6	U	0.25	1.6
Thallium		3.3	U	0.96	3.3
Vanadium		13.2		0.97	8.2
Zinc		17.9		0.42	4.9

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	08/08/2017 1001			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.011	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11
Client Matrix: Solid

% Moisture: 9.1

Date Sampled: 08/02/2017 1145
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.34 g
Analysis Date:	08/04/2017 1503			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.3	U	0.39	3.3
Arsenic		2.0	J	0.61	2.5
Barium		33.5		2.7	32.8
Beryllium		0.31	J	0.038	0.33
Cadmium		0.66	U	0.098	0.66
Chromium		13.0		0.46	1.6
Cobalt		6.5	J	0.94	8.2
Copper		21.7		0.93	4.1
Lead		23.4		0.50	1.6
Manganese		267		0.25	2.5
Nickel		52.5		0.62	6.6
Selenium		1.1	J	0.99	3.3
Silver		1.6	U	0.25	1.6
Thallium		3.3	U	0.97	3.3
Vanadium		14.9		0.98	8.2
Zinc		36.4		0.42	4.9

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	08/08/2017 0954			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.049		0.011	0.017

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-12(10-12')

Lab Sample ID: 460-138465-12
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 08/02/2017 1155
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.34 g
Analysis Date:	08/04/2017 1507			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.4	U	0.41	3.4
Arsenic		2.7		0.63	2.6
Barium		32.2	J	2.8	34.3
Beryllium		0.47		0.039	0.34
Cadmium		0.69	U	0.10	0.69
Chromium		20.2		0.48	1.7
Cobalt		8.4	J	0.98	8.6
Copper		11.0		0.97	4.3
Lead		7.0		0.52	1.7
Manganese		264		0.27	2.6
Nickel		43.9		0.65	6.9
Selenium		3.4	U	1.0	3.4
Silver		1.7	U	0.26	1.7
Thallium		3.4	U	1.0	3.4
Vanadium		26.9		1.0	8.6
Zinc		32.9		0.44	5.1

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	08/08/2017 1003			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.012	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(1-3')

Lab Sample ID: 460-138465-13
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 08/02/2017 1615
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.34 g
Analysis Date:	08/04/2017 1511			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.2	U	0.38	3.2
Arsenic		1.7	J	0.58	2.4
Barium		22.5	J	2.6	31.6
Beryllium		0.37		0.036	0.32
Cadmium		0.63	U	0.094	0.63
Chromium		9.7		0.44	1.6
Cobalt		6.1	J	0.90	7.9
Copper		12.3		0.89	3.9
Lead		5.0		0.48	1.6
Manganese		225		0.24	2.4
Nickel		50.1		0.60	6.3
Selenium		3.2	U	0.95	3.2
Silver		1.6	U	0.24	1.6
Thallium		3.2	U	0.93	3.2
Vanadium		17.0		0.94	7.9
Zinc		18.7		0.41	4.7

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 1005			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018	U	0.012	0.018

Client: AKRF Inc

Job Number: 460-138465-1

Client Sample ID: SB-13(10-12')

Lab Sample ID: 460-138465-14
Client Matrix: Solid

% Moisture: 4.4

Date Sampled: 08/02/2017 1650
Date Received: 08/03/2017 1211

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	460-454076	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0			Initial Weight/Volume:	1.32 g
Analysis Date:	08/04/2017 1515			Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		3.2	U	0.38	3.2
Arsenic		1.1	J	0.59	2.4
Barium		19.1	J	2.6	31.7
Beryllium		0.17	J	0.036	0.32
Cadmium		0.63	U	0.094	0.63
Chromium		8.7		0.44	1.6
Cobalt		4.4	J	0.90	7.9
Copper		9.1		0.90	4.0
Lead		2.2		0.48	1.6
Manganese		242		0.25	2.4
Nickel		11.2		0.60	6.3
Selenium		3.2	U	0.96	3.2
Silver		1.6	U	0.24	1.6
Thallium		3.2	U	0.94	3.2
Vanadium		15.0		0.94	7.9
Zinc		15.3		0.41	4.8

7471B Mercury (CVAA)

Analysis Method:	7471B	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Prep Method:	7471B	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	08/08/2017 1007			Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.016	U	0.010	0.016

General Chemistry

Client Sample ID: SB-18(0-2')

Lab Sample ID: 460-138465-1 Date Sampled: 08/02/2017 1025
Client Matrix: Solid % Moisture: 11.9 Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium, hexavalent	2.3	U	mg/Kg	0.45	2.3	1.0	7196A
Analysis Batch: 460-455014	Analysis Date: 08/09/2017 1130						DryWt Corrected: Y
Prep Batch: 460-454846	Prep Date: 08/08/2017 1423						
Cyanide, Total	1.1	U	mg/Kg	0.53	1.1	1.0	9012B
Analysis Batch: 480-371297	Analysis Date: 08/09/2017 1246						DryWt Corrected: Y
Prep Batch: 480-371235	Prep Date: 08/09/2017 0850						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	11.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	88.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-18(3-5')

Lab Sample ID: 460-138465-2 Date Sampled: 08/02/2017 1025
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	86.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-19(0-2')

Lab Sample ID: 460-138465-3 Date Sampled: 08/02/2017 1055
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.5		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	89.5		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-19(3-5')

Lab Sample ID: 460-138465-4 Date Sampled: 08/02/2017 1055
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	86.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-5(1-3')

Lab Sample ID: 460-138465-5 Date Sampled: 08/02/2017 1540
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	15.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	84.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-5(10-12')**

Lab Sample ID: 460-138465-6 Date Sampled: 08/02/2017 1545
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.2		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	86.8		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-10(1-3')**

Lab Sample ID: 460-138465-7 Date Sampled: 08/02/2017 1305
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	92.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-10(10-12')**

Lab Sample ID: 460-138465-8 Date Sampled: 08/02/2017 1310
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	89.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-11(1-3')

Lab Sample ID: 460-138465-9 Date Sampled: 08/02/2017 1242
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	91.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-11(10-12')**

Lab Sample ID: 460-138465-10 Date Sampled: 08/02/2017 1245
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	93.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: SB-12(1-3')

Lab Sample ID: 460-138465-11 Date Sampled: 08/02/2017 1145
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	90.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-12(10-12')**

Lab Sample ID: 460-138465-12 Date Sampled: 08/02/2017 1155
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	87.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-13(1-3')**

Lab Sample ID: 460-138465-13 Date Sampled: 08/02/2017 1615
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	94.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

General Chemistry

Client Sample ID: **SB-13(10-12')**

Lab Sample ID: 460-138465-14 Date Sampled: 08/02/2017 1650
Client Matrix: Solid Date Received: 08/03/2017 1211

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.4		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N
Percent Solids	95.6		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-454651	Analysis Date: 08/07/2017 1750						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: AKRF Inc Job Number: 460-138465-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	LCS or LCSD is outside acceptance limits.
	*	RPD of the LCS and LCSD exceeds the control limits
	B	The analyte was found in an associated blank, as well as in the sample.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	MS or MSD is outside acceptance limits.
	*	Surrogate is outside acceptance limits.
	A	The tentatively identified compound is a suspected aldol-condensation product.
	N	This flag indicates the presumptive evidence of a compound.
GC VOA		
	U	Analyzed for but not detected.
GC Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	*	Duplicate RPD exceeds control limits
	J	Indicates an estimated value.
	*	MS or MSD is outside acceptance limits.

DATA REPORTING QUALIFIERS

Client: AKRF Inc

Job Number: 460-138465-1

Lab Section	Qualifier	Description
Metals		
	U	Indicates analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Sample result is greater than the MDL but below the CRDL
	N	Spiked sample recovery is not within control limits.
General Chemistry		
	U	Indicates analyzed for but not detected.

QUALITY CONTROL RESULTS

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-453860					
LB3 460-453860/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	5035	
460-138465-1	SB-18(0-2')	T	Solid	5035	
460-138465-2	SB-18(3-5')	T	Solid	5035	
460-138465-3	SB-19(0-2')	T	Solid	5035	
460-138465-4	SB-19(3-5')	T	Solid	5035	
460-138465-5	SB-5(1-3')	T	Solid	5035	
460-138465-6	SB-5(10-12')	T	Solid	5035	
460-138465-7	SB-10(1-3')	T	Solid	5035	
460-138465-8	SB-10(10-12')	T	Solid	5035	
460-138465-9	SB-11(1-3')	T	Solid	5035	
460-138465-10	SB-11(10-12')	T	Solid	5035	
460-138465-11	SB-12(1-3')	T	Solid	5035	
460-138465-12	SB-12(10-12')	T	Solid	5035	
460-138465-13	SB-13(1-3')	T	Solid	5035	
460-138465-14	SB-13(10-12')	T	Solid	5035	
Analysis Batch:460-454778					
LCS 460-454778/5	Lab Control Sample	T	Solid	8260C	
LCSD 460-454778/6	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-454778/8	Method Blank	T	Solid	8260C	
LB3 460-453860/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	8260C	460-453860
460-138465-1	SB-18(0-2')	T	Solid	8260C	460-453860
460-138465-2	SB-18(3-5')	T	Solid	8260C	460-453860
460-138465-4	SB-19(3-5')	T	Solid	8260C	460-453860
460-138465-5	SB-5(1-3')	T	Solid	8260C	460-453860
460-138465-6	SB-5(10-12')	T	Solid	8260C	460-453860
460-138465-7	SB-10(1-3')	T	Solid	8260C	460-453860
460-138465-8	SB-10(10-12')	T	Solid	8260C	460-453860
460-138465-9	SB-11(1-3')	T	Solid	8260C	460-453860
460-138465-10	SB-11(10-12')	T	Solid	8260C	460-453860
460-138465-11	SB-12(1-3')	T	Solid	8260C	460-453860
460-138465-12	SB-12(10-12')	T	Solid	8260C	460-453860
460-138465-13	SB-13(1-3')	T	Solid	8260C	460-453860
460-138465-14	SB-13(10-12')	T	Solid	8260C	460-453860
Analysis Batch:460-454954					
LCS 460-454954/3	Lab Control Sample	T	Solid	8260C	
LCSD 460-454954/4	Lab Control Sample Duplicate	T	Solid	8260C	
MB 460-454954/7	Method Blank	T	Solid	8260C	
460-138465-3	SB-19(0-2')	T	Solid	8260C	460-453860

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 460-454194					
LCS 460-454194/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-454194/3-A	Lab Control Sample	T	Solid	3546	
MB 460-454194/1-A	Method Blank	T	Solid	3546	
460-138465-1	SB-18(0-2')	T	Solid	3546	
Prep Batch: 460-454195					
LCS 460-454195/2-A	Lab Control Sample	T	Solid	3546	
LCS 460-454195/3-A	Lab Control Sample	T	Solid	3546	
MB 460-454195/1-A	Method Blank	T	Solid	3546	
460-138465-2	SB-18(3-5')	T	Solid	3546	
460-138465-2MS	Matrix Spike	T	Solid	3546	
460-138465-2MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138465-3	SB-19(0-2')	T	Solid	3546	
460-138465-4	SB-19(3-5')	T	Solid	3546	
460-138465-5	SB-5(1-3')	T	Solid	3546	
460-138465-6	SB-5(10-12')	T	Solid	3546	
460-138465-7	SB-10(1-3')	T	Solid	3546	
460-138465-8	SB-10(10-12')	T	Solid	3546	
460-138465-9	SB-11(1-3')	T	Solid	3546	
460-138465-10	SB-11(10-12')	T	Solid	3546	
460-138465-11	SB-12(1-3')	T	Solid	3546	
460-138465-12	SB-12(10-12')	T	Solid	3546	
460-138465-13	SB-13(1-3')	T	Solid	3546	
460-138465-14	SB-13(10-12')	T	Solid	3546	
Analysis Batch:460-455086					
LCS 460-454195/2-A	Lab Control Sample	T	Solid	8270D	460-454195
LCS 460-454195/3-A	Lab Control Sample	T	Solid	8270D	460-454195
MB 460-454195/1-A	Method Blank	T	Solid	8270D	460-454195
460-138465-2	SB-18(3-5')	T	Solid	8270D	460-454195
460-138465-2MS	Matrix Spike	T	Solid	8270D	460-454195
460-138465-2MSD	Matrix Spike Duplicate	T	Solid	8270D	460-454195
460-138465-3	SB-19(0-2')	T	Solid	8270D	460-454195
460-138465-4	SB-19(3-5')	T	Solid	8270D	460-454195
460-138465-6	SB-5(10-12')	T	Solid	8270D	460-454195
460-138465-10	SB-11(10-12')	T	Solid	8270D	460-454195
460-138465-11	SB-12(1-3')	T	Solid	8270D	460-454195
460-138465-12	SB-12(10-12')	T	Solid	8270D	460-454195
460-138465-13	SB-13(1-3')	T	Solid	8270D	460-454195
460-138465-14	SB-13(10-12')	T	Solid	8270D	460-454195

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:460-455247					
LCS 460-454194/2-A	Lab Control Sample	T	Solid	8270D	460-454194
LCS 460-454194/3-A	Lab Control Sample	T	Solid	8270D	460-454194
MB 460-454194/1-A	Method Blank	T	Solid	8270D	460-454194
460-138465-1	SB-18(0-2')	T	Solid	8270D	460-454194
Analysis Batch:460-455418					
460-138465-7	SB-10(1-3')	T	Solid	8270D	460-454195
460-138465-8	SB-10(10-12')	T	Solid	8270D	460-454195
460-138465-9	SB-11(1-3')	T	Solid	8270D	460-454195
Analysis Batch:460-455506					
460-138465-5	SB-5(1-3')	T	Solid	8270D	460-454195

Report Basis
T = Total

GC VOA					
Prep Batch: 460-453878					
460-138465-1	SB-18(0-2')	T	Solid	5035	
Analysis Batch:460-455075					
LCS 460-455075/2	Lab Control Sample	T	Solid	8015D	
LCSD 460-455075/3	Lab Control Sample Duplicate	T	Solid	8015D	
MB 460-455075/4	Method Blank	T	Solid	8015D	
460-138465-1	SB-18(0-2')	T	Solid	8015D	460-453878

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-454105					
LCS 460-454105/2-A	Lab Control Sample	T	Solid	8151A	
MB 460-454105/1-A	Method Blank	T	Solid	8151A	
460-138369-F-1-F MS	Matrix Spike	T	Solid	8151A	
460-138369-F-1-G MSD	Matrix Spike Duplicate	T	Solid	8151A	
460-138465-10	SB-11(10-12')	T	Solid	8151A	
460-138465-11	SB-12(1-3')	T	Solid	8151A	
460-138465-12	SB-12(10-12')	T	Solid	8151A	
460-138465-13	SB-13(1-3')	T	Solid	8151A	
460-138465-14	SB-13(10-12')	T	Solid	8151A	
Prep Batch: 460-454134					
LCS 460-454134/2-A	Lab Control Sample	T	Solid	3546	
MB 460-454134/1-A	Method Blank	T	Solid	3546	
460-138465-1	SB-18(0-2')	T	Solid	3546	
460-138465-1MS	Matrix Spike	T	Solid	3546	
460-138465-1MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138465-2	SB-18(3-5')	T	Solid	3546	
460-138465-3	SB-19(0-2')	T	Solid	3546	
460-138465-4	SB-19(3-5')	T	Solid	3546	
460-138465-5	SB-5(1-3')	T	Solid	3546	
460-138465-6	SB-5(10-12')	T	Solid	3546	
460-138465-7	SB-10(1-3')	T	Solid	3546	
460-138465-8	SB-10(10-12')	T	Solid	3546	
460-138465-9	SB-11(1-3')	T	Solid	3546	
460-138465-10	SB-11(10-12')	T	Solid	3546	
460-138465-11	SB-12(1-3')	T	Solid	3546	
460-138465-12	SB-12(10-12')	T	Solid	3546	
460-138465-13	SB-13(1-3')	T	Solid	3546	
460-138465-14	SB-13(10-12')	T	Solid	3546	

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-454136					
LCS 460-454136/2-A	Lab Control Sample	T	Solid	3546	
MB 460-454136/1-A	Method Blank	T	Solid	3546	
460-138465-1	SB-18(0-2')	T	Solid	3546	
460-138465-1MS	Matrix Spike	T	Solid	3546	
460-138465-1MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138465-2	SB-18(3-5')	T	Solid	3546	
460-138465-3	SB-19(0-2')	T	Solid	3546	
460-138465-4	SB-19(3-5')	T	Solid	3546	
460-138465-5	SB-5(1-3')	T	Solid	3546	
460-138465-6	SB-5(10-12')	T	Solid	3546	
460-138465-7	SB-10(1-3')	T	Solid	3546	
460-138465-8	SB-10(10-12')	T	Solid	3546	
460-138465-9	SB-11(1-3')	T	Solid	3546	
460-138465-10	SB-11(10-12')	T	Solid	3546	
460-138465-11	SB-12(1-3')	T	Solid	3546	
460-138465-12	SB-12(10-12')	T	Solid	3546	
460-138465-13	SB-13(1-3')	T	Solid	3546	
460-138465-14	SB-13(10-12')	T	Solid	3546	
Analysis Batch:460-454193					
LCS 460-454134/2-A	Lab Control Sample	T	Solid	8081B	460-454134
MB 460-454134/1-A	Method Blank	T	Solid	8081B	460-454134
460-138465-1	SB-18(0-2')	T	Solid	8081B	460-454134
460-138465-1MS	Matrix Spike	T	Solid	8081B	460-454134
460-138465-1MSD	Matrix Spike Duplicate	T	Solid	8081B	460-454134
460-138465-2	SB-18(3-5')	T	Solid	8081B	460-454134
460-138465-3	SB-19(0-2')	T	Solid	8081B	460-454134
460-138465-4	SB-19(3-5')	T	Solid	8081B	460-454134
460-138465-5	SB-5(1-3')	T	Solid	8081B	460-454134
460-138465-6	SB-5(10-12')	T	Solid	8081B	460-454134
460-138465-7	SB-10(1-3')	T	Solid	8081B	460-454134
460-138465-8	SB-10(10-12')	T	Solid	8081B	460-454134
460-138465-9	SB-11(1-3')	T	Solid	8081B	460-454134
460-138465-10	SB-11(10-12')	T	Solid	8081B	460-454134
460-138465-11	SB-12(1-3')	T	Solid	8081B	460-454134
460-138465-12	SB-12(10-12')	T	Solid	8081B	460-454134
460-138465-13	SB-13(1-3')	T	Solid	8081B	460-454134
460-138465-14	SB-13(10-12')	T	Solid	8081B	460-454134

Client: AKRF Inc Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:460-454208					
LCS 460-454136/2-A	Lab Control Sample	T	Solid	8082A	460-454136
MB 460-454136/1-A	Method Blank	T	Solid	8082A	460-454136
460-138465-1	SB-18(0-2')	T	Solid	8082A	460-454136
460-138465-1MS	Matrix Spike	T	Solid	8082A	460-454136
460-138465-1MSD	Matrix Spike Duplicate	T	Solid	8082A	460-454136
460-138465-2	SB-18(3-5')	T	Solid	8082A	460-454136
460-138465-3	SB-19(0-2')	T	Solid	8082A	460-454136
460-138465-4	SB-19(3-5')	T	Solid	8082A	460-454136
460-138465-5	SB-5(1-3')	T	Solid	8082A	460-454136
460-138465-6	SB-5(10-12')	T	Solid	8082A	460-454136
460-138465-7	SB-10(1-3')	T	Solid	8082A	460-454136
460-138465-8	SB-10(10-12')	T	Solid	8082A	460-454136
460-138465-9	SB-11(1-3')	T	Solid	8082A	460-454136
460-138465-10	SB-11(10-12')	T	Solid	8082A	460-454136
460-138465-11	SB-12(1-3')	T	Solid	8082A	460-454136
460-138465-12	SB-12(10-12')	T	Solid	8082A	460-454136
460-138465-13	SB-13(1-3')	T	Solid	8082A	460-454136
460-138465-14	SB-13(10-12')	T	Solid	8082A	460-454136
Prep Batch: 460-454288					
LCS 460-454288/2-A	Lab Control Sample	T	Solid	8151A	
MB 460-454288/1-A	Method Blank	T	Solid	8151A	
460-138430-H-1-A MS	Matrix Spike	T	Solid	8151A	
460-138430-F-1-E MSD	Matrix Spike Duplicate	T	Solid	8151A	
460-138465-1	SB-18(0-2')	T	Solid	8151A	
460-138465-2	SB-18(3-5')	T	Solid	8151A	
460-138465-3	SB-19(0-2')	T	Solid	8151A	
460-138465-4	SB-19(3-5')	T	Solid	8151A	
460-138465-5	SB-5(1-3')	T	Solid	8151A	
460-138465-6	SB-5(10-12')	T	Solid	8151A	
460-138465-7	SB-10(1-3')	T	Solid	8151A	
460-138465-8	SB-10(10-12')	T	Solid	8151A	
460-138465-9	SB-11(1-3')	T	Solid	8151A	
Analysis Batch:460-454594					
LCS 460-454105/2-A	Lab Control Sample	T	Solid	8151A	460-454105
MB 460-454105/1-A	Method Blank	T	Solid	8151A	460-454105
460-138369-F-1-F MS	Matrix Spike	T	Solid	8151A	460-454105
460-138369-F-1-G MSD	Matrix Spike Duplicate	T	Solid	8151A	460-454105
460-138465-10	SB-11(10-12')	T	Solid	8151A	460-454105
460-138465-11	SB-12(1-3')	T	Solid	8151A	460-454105
460-138465-12	SB-12(10-12')	T	Solid	8151A	460-454105
460-138465-13	SB-13(1-3')	T	Solid	8151A	460-454105
460-138465-14	SB-13(10-12')	T	Solid	8151A	460-454105

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-454654					
LCS 460-454654/2-A	Lab Control Sample	T	Solid	3546	
MB 460-454654/1-A	Method Blank	T	Solid	3546	
460-138411-E-9-B MS	Matrix Spike	T	Solid	3546	
460-138411-E-9-C MSD	Matrix Spike Duplicate	T	Solid	3546	
460-138465-1	SB-18(0-2')	T	Solid	3546	
Analysis Batch:460-454751					
LCS 460-454288/2-A	Lab Control Sample	T	Solid	8151A	460-454288
MB 460-454288/1-A	Method Blank	T	Solid	8151A	460-454288
460-138430-H-1-A MS	Matrix Spike	T	Solid	8151A	460-454288
460-138430-F-1-E MSD	Matrix Spike Duplicate	T	Solid	8151A	460-454288
460-138465-1	SB-18(0-2')	T	Solid	8151A	460-454288
460-138465-2	SB-18(3-5')	T	Solid	8151A	460-454288
460-138465-3	SB-19(0-2')	T	Solid	8151A	460-454288
460-138465-4	SB-19(3-5')	T	Solid	8151A	460-454288
460-138465-5	SB-5(1-3')	T	Solid	8151A	460-454288
460-138465-6	SB-5(10-12')	T	Solid	8151A	460-454288
460-138465-7	SB-10(1-3')	T	Solid	8151A	460-454288
460-138465-8	SB-10(10-12')	T	Solid	8151A	460-454288
460-138465-9	SB-11(1-3')	T	Solid	8151A	460-454288
Analysis Batch:460-454764					
LCS 460-454654/2-A	Lab Control Sample	T	Solid	8015D	460-454654
MB 460-454654/1-A	Method Blank	T	Solid	8015D	460-454654
460-138411-E-9-B MS	Matrix Spike	T	Solid	8015D	460-454654
460-138411-E-9-C MSD	Matrix Spike Duplicate	T	Solid	8015D	460-454654
460-138465-1	SB-18(0-2')	T	Solid	8015D	460-454654

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-453879					
LCSSRM 460-453879/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-453879/1-A ^2	Method Blank	T	Solid	3050B	
460-138465-1	SB-18(0-2')	T	Solid	3050B	
460-138465-2	SB-18(3-5')	T	Solid	3050B	
460-138495-A-3-E DU	Duplicate	T	Solid	3050B	
460-138495-A-3-F MS	Matrix Spike	T	Solid	3050B	
Prep Batch: 460-453881					
LCSSRM 460-453881/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-453881/1-A ^2	Method Blank	T	Solid	3050B	
460-138430-A-1-D DU	Duplicate	T	Solid	3050B	
460-138430-G-1-A MS	Matrix Spike	T	Solid	3050B	
460-138465-3	SB-19(0-2')	T	Solid	3050B	
460-138465-4	SB-19(3-5')	T	Solid	3050B	
460-138465-5	SB-5(1-3')	T	Solid	3050B	
460-138465-6	SB-5(10-12')	T	Solid	3050B	
460-138465-7	SB-10(1-3')	T	Solid	3050B	
460-138465-8	SB-10(10-12')	T	Solid	3050B	
460-138465-9	SB-11(1-3')	T	Solid	3050B	
460-138465-10	SB-11(10-12')	T	Solid	3050B	
460-138465-11	SB-12(1-3')	T	Solid	3050B	
460-138465-12	SB-12(10-12')	T	Solid	3050B	
460-138465-13	SB-13(1-3')	T	Solid	3050B	
460-138465-14	SB-13(10-12')	T	Solid	3050B	

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:460-454076					
LCSSRM 460-453879/2-A	LCS-Certified Reference Material	T	Solid	6010C	460-453879
MB 460-453879/1-A ^2	Method Blank	T	Solid	6010C	460-453879
LCSSRM 460-453881/2-A	LCS-Certified Reference Material	T	Solid	6010C	460-453881
MB 460-453881/1-A ^2	Method Blank	T	Solid	6010C	460-453881
460-138430-A-1-D DU	Duplicate	T	Solid	6010C	460-453881
460-138430-G-1-A MS	Matrix Spike	T	Solid	6010C	460-453881
460-138465-1	SB-18(0-2')	T	Solid	6010C	460-453879
460-138465-2	SB-18(3-5')	T	Solid	6010C	460-453879
460-138465-3	SB-19(0-2')	T	Solid	6010C	460-453881
460-138465-4	SB-19(3-5')	T	Solid	6010C	460-453881
460-138465-5	SB-5(1-3')	T	Solid	6010C	460-453881
460-138465-6	SB-5(10-12')	T	Solid	6010C	460-453881
460-138465-7	SB-10(1-3')	T	Solid	6010C	460-453881
460-138465-8	SB-10(10-12')	T	Solid	6010C	460-453881
460-138465-9	SB-11(1-3')	T	Solid	6010C	460-453881
460-138465-10	SB-11(10-12')	T	Solid	6010C	460-453881
460-138465-11	SB-12(1-3')	T	Solid	6010C	460-453881
460-138465-12	SB-12(10-12')	T	Solid	6010C	460-453881
460-138465-13	SB-13(1-3')	T	Solid	6010C	460-453881
460-138465-14	SB-13(10-12')	T	Solid	6010C	460-453881
460-138495-A-3-E DU	Duplicate	T	Solid	6010C	460-453879
460-138495-A-3-F MS	Matrix Spike	T	Solid	6010C	460-453879
Prep Batch: 460-454708					
LCSSRM 460-454708/11-A ^4	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-454708/10-A	Method Blank	T	Solid	7471B	
460-138465-1	SB-18(0-2')	T	Solid	7471B	
460-138465-2	SB-18(3-5')	T	Solid	7471B	
460-138465-3	SB-19(0-2')	T	Solid	7471B	
460-138465-4	SB-19(3-5')	T	Solid	7471B	
460-138465-5	SB-5(1-3')	T	Solid	7471B	
460-138465-6	SB-5(10-12')	T	Solid	7471B	
460-138542-I-4-F DU	Duplicate	T	Solid	7471B	
460-138542-I-4-G MS	Matrix Spike	T	Solid	7471B	
Prep Batch: 460-454709					
LCSSRM 460-454709/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-454709/1-A	Method Blank	T	Solid	7471B	
460-138465-7	SB-10(1-3')	T	Solid	7471B	
460-138465-8	SB-10(10-12')	T	Solid	7471B	
460-138465-9	SB-11(1-3')	T	Solid	7471B	
460-138699-A-17-H DU ^400	Duplicate	T	Solid	7471B	
460-138699-A-17-I MS ^400	Matrix Spike	T	Solid	7471B	

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-454720					
LCSSRM 460-454720/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	
MB 460-454720/1-A	Method Blank	T	Solid	7471B	
460-138465-10	SB-11(10-12')	T	Solid	7471B	
460-138465-11	SB-12(1-3')	T	Solid	7471B	
460-138465-11DU	Duplicate	T	Solid	7471B	
460-138465-11MS	Matrix Spike	T	Solid	7471B	
460-138465-12	SB-12(10-12')	T	Solid	7471B	
460-138465-13	SB-13(1-3')	T	Solid	7471B	
460-138465-14	SB-13(10-12')	T	Solid	7471B	
Analysis Batch:460-454799					
LCSSRM 460-454708/11-A ^4	LCS-Certified Reference Material	T	Solid	7471B	460-454708
MB 460-454708/10-A	Method Blank	T	Solid	7471B	460-454708
LCSSRM 460-454709/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	460-454709
MB 460-454709/1-A	Method Blank	T	Solid	7471B	460-454709
LCSSRM 460-454720/2-A ^40	LCS-Certified Reference Material	T	Solid	7471B	460-454720
MB 460-454720/1-A	Method Blank	T	Solid	7471B	460-454720
460-138465-1	SB-18(0-2')	T	Solid	7471B	460-454708
460-138465-2	SB-18(3-5')	T	Solid	7471B	460-454708
460-138465-3	SB-19(0-2')	T	Solid	7471B	460-454708
460-138465-4	SB-19(3-5')	T	Solid	7471B	460-454708
460-138465-5	SB-5(1-3')	T	Solid	7471B	460-454708
460-138465-6	SB-5(10-12')	T	Solid	7471B	460-454708
460-138465-7	SB-10(1-3')	T	Solid	7471B	460-454709
460-138465-8	SB-10(10-12')	T	Solid	7471B	460-454709
460-138465-9	SB-11(1-3')	T	Solid	7471B	460-454709
460-138465-10	SB-11(10-12')	T	Solid	7471B	460-454720
460-138465-11	SB-12(1-3')	T	Solid	7471B	460-454720
460-138465-11DU	Duplicate	T	Solid	7471B	460-454720
460-138465-11MS	Matrix Spike	T	Solid	7471B	460-454720
460-138465-12	SB-12(10-12')	T	Solid	7471B	460-454720
460-138465-13	SB-13(1-3')	T	Solid	7471B	460-454720
460-138465-14	SB-13(10-12')	T	Solid	7471B	460-454720
460-138542-I-4-F DU	Duplicate	T	Solid	7471B	460-454708
460-138542-I-4-G MS	Matrix Spike	T	Solid	7471B	460-454708
460-138699-A-17-H DU ^400	Duplicate	T	Solid	7471B	460-454709
460-138699-A-17-I MS ^400	Matrix Spike	T	Solid	7471B	460-454709

Report Basis
T = Total

Client: AKRF Inc Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 480-371235					
LCSSRM 480-371235/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	
MB 480-371235/1-A	Method Blank	T	Solid	9012B	
460-138369-D-13-B MS	Matrix Spike	T	Solid	9012B	
460-138369-D-13-C MSD	Matrix Spike Duplicate	T	Solid	9012B	
460-138465-1	SB-18(0-2')	T	Solid	9012B	
Analysis Batch:480-371297					
LCSSRM 480-371235/2-A ^2	LCS-Certified Reference Material	T	Solid	9012B	480-371235
MB 480-371235/1-A	Method Blank	T	Solid	9012B	480-371235
460-138369-D-13-B MS	Matrix Spike	T	Solid	9012B	480-371235
460-138369-D-13-C MSD	Matrix Spike Duplicate	T	Solid	9012B	480-371235
460-138465-1	SB-18(0-2')	T	Solid	9012B	480-371235
Analysis Batch:460-454651					
460-138465-1	SB-18(0-2')	T	Solid	Moisture	
460-138465-2	SB-18(3-5')	T	Solid	Moisture	
460-138465-3	SB-19(0-2')	T	Solid	Moisture	
460-138465-4	SB-19(3-5')	T	Solid	Moisture	
460-138465-5	SB-5(1-3')	T	Solid	Moisture	
460-138465-6	SB-5(10-12')	T	Solid	Moisture	
460-138465-7	SB-10(1-3')	T	Solid	Moisture	
460-138465-8	SB-10(10-12')	T	Solid	Moisture	
460-138465-9	SB-11(1-3')	T	Solid	Moisture	
460-138465-10	SB-11(10-12')	T	Solid	Moisture	
460-138465-11	SB-12(1-3')	T	Solid	Moisture	
460-138465-12	SB-12(10-12')	T	Solid	Moisture	
460-138465-13	SB-13(1-3')	T	Solid	Moisture	
460-138465-14	SB-13(10-12')	T	Solid	Moisture	
460-138475-E-1 DU	Duplicate	T	Solid	Moisture	
Prep Batch: 460-454846					
LCSI 460-454846/3-A	Lab Control Sample Insoluble	T	Solid	3060A	
MB 460-454846/1-A	Method Blank	T	Solid	3060A	
460-138463-F-1-B DU	Duplicate	T	Solid	3060A	
460-138463-F-1-D MSI	Matrix Spike Insoluble	T	Solid	3060A	
460-138463-F-1-C MSS	Matrix Spike Soluble	T	Solid	3060A	
460-138465-1	SB-18(0-2')	T	Solid	3060A	
Analysis Batch:460-455014					
LCSI 460-454846/3-A	Lab Control Sample Insoluble	T	Solid	7196A	460-454846
MB 460-454846/1-A	Method Blank	T	Solid	7196A	460-454846
460-138463-F-1-B DU	Duplicate	T	Solid	7196A	460-454846
460-138463-F-1-D MSI	Matrix Spike Insoluble	T	Solid	7196A	460-454846
460-138463-F-1-C MSS	Matrix Spike Soluble	T	Solid	7196A	460-454846
460-138465-1	SB-18(0-2')	T	Solid	7196A	460-454846

Client: AKRF Inc

Job Number: 460-138465-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: AKRF Inc

Job Number: 460-138465-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	DBFM %Rec	TOL %Rec
460-138465-1	SB-18(0-2')	98	94	104	109
460-138465-2	SB-18(3-5')	96	92	102	106
460-138465-3	SB-19(0-2')	100	93	104	111
460-138465-4	SB-19(3-5')	91	84	97	100
460-138465-5	SB-5(1-3')	99	99	107	114
460-138465-6	SB-5(10-12')	90	89	98	101
460-138465-7	SB-10(1-3')	99	98	107	113
460-138465-8	SB-10(10-12')	96	93	104	108
460-138465-9	SB-11(1-3')	100	96	108	110
460-138465-10	SB-11(10-12')	94	91	98	107
460-138465-11	SB-12(1-3')	98	95	103	111
460-138465-12	SB-12(10-12')	92	91	98	105
460-138465-13	SB-13(1-3')	98	98	105	113
460-138465-14	SB-13(10-12')	96	95	103	108
MB 460-454778/8		98	96	103	107
MB 460-454954/7		97	97	104	113
LB3 460-453860/1-A		94	96	102	109
LCS 460-454778/5		97	96	103	111
LCS 460-454954/3		95	90	99	107
LCSD 460-454778/6		98	95	104	111
LCSD 460-454954/4		95	94	99	109

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	78-135
BFB = 4-Bromofluorobenzene	67-126
DBFM = Dibromofluoromethane (Surr)	61-149
TOL = Toluene-d8 (Surr)	73-121

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPHL %Rec
460-138465-1	SB-18(0-2')	74	66	53	59	55	97
460-138465-2	SB-18(3-5')	49	54	58	55	47	34
460-138465-3	SB-19(0-2')	66	57	51	52	56	58
460-138465-4	SB-19(3-5')	63	53	48	48	51	52
460-138465-5	SB-5(1-3')	58	38	39	38	42	62
460-138465-6	SB-5(10-12')	56	54	48	51	55	56
460-138465-7	SB-10(1-3')	69	61	53	64	58	71
460-138465-8	SB-10(10-12')	72	57	46	56	52	77
460-138465-9	SB-11(1-3')	68	63	54	61	57	74
460-138465-10	SB-11(10-12')	60	73	70	77	74	81
460-138465-11	SB-12(1-3')	65	61	59	64	62	68
460-138465-12	SB-12(10-12')	44	67	61	70	66	71
460-138465-13	SB-13(1-3')	54	63	60	66	64	69
460-138465-14	SB-13(10-12')	85	66	64	59	74	69
MB 460-454194/1-A		98	78	80	85	79	94
MB 460-454195/1-A		77	77	82	85	85	100
LCS 460-454194/2-A		111*	90	83	92	87	112*
LCS 460-454194/3-A		102	83	87	90	80	103
LCS 460-454195/2-A		86	80	82	85	83	96
LCS 460-454195/3-A		78	77	80	85	80	99
460-138465-2 MS	SB-18(3-5') MS	79	59	55	58	60	63
460-138465-2 MSD	SB-18(3-5') MSD	59	32*	23*	23*	29*	47

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol (Surr)	10-103
FBP = 2-Fluorobiphenyl	38-95
2FP = 2-Fluorophenol (Surr)	25-92
NBZ = Nitrobenzene-d5 (Surr)	37-94
PHL = Phenol-d5 (Surr)	32-91
TPHL = Terphenyl-d14 (Surr)	24-109

Client: AKRF Inc

Job Number: 460-138465-1

Surrogate Recovery Report

8015D Gasoline Range Organics (GRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TFT1 %Rec
460-138465-1	SB-18(0-2')	105
MB 460-455075/4		102
LCS 460-455075/2		112
LCSD 460-455075/3		107

Surrogate	Acceptance Limits
TFT = a,a,a-Trifluorotoluene	80-135

Client: AKRF Inc

Job Number: 460-138465-1

Surrogate Recovery Report

8015D Diesel Range Organics (DRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH %Rec
460-138465-1	SB-18(0-2')	71
MB 460-454654/1-A		55
LCS 460-454654/2-A		89
460-138411-E-9-B MS		93
460-138411-E-9-C MSD		72

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	25-132

Surrogate Recovery Report

8081B Organochlorine Pesticides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec	TCX1 %Rec	TCX2 %Rec
460-138465-1	SB-18(0-2')	123	116	118	119
460-138465-2	SB-18(3-5')	125	114	115	117
460-138465-3	SB-19(0-2')	108	112	99	102
460-138465-4	SB-19(3-5')	95	97	91	94
460-138465-5	SB-5(1-3')	114	110	113	114
460-138465-6	SB-5(10-12')	106	104	107	106
460-138465-7	SB-10(1-3')	124	117	121	121
460-138465-8	SB-10(10-12')	116	110	110	108
460-138465-9	SB-11(1-3')	115	109	111	112
460-138465-10	SB-11(10-12')	112	108	109	111
460-138465-11	SB-12(1-3')	118	118	116	117
460-138465-12	SB-12(10-12')	119	113	115	117
460-138465-13	SB-13(1-3')	116	113	113	114
460-138465-14	SB-13(10-12')	112	112	109	113
MB 460-454134/1-A		109	101	111	104
LCS 460-454134/2-A		108	99	103	100
460-138465-1 MS	SB-18(0-2') MS	90	106	105	113
460-138465-1 MSD	SB-18(0-2') MSD	108	111	115	120

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	50-150
TCX = Tetrachloro-m-xylene	47-150

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCBP1 %Rec	DCBP2 %Rec
460-138465-1	SB-18(0-2')	114	106
460-138465-2	SB-18(3-5')	111	109
460-138465-3	SB-19(0-2')	107	118
460-138465-4	SB-19(3-5')	96	95
460-138465-5	SB-5(1-3')	113	103
460-138465-6	SB-5(10-12')	97	95
460-138465-7	SB-10(1-3')	114	109
460-138465-8	SB-10(10-12')	108	112
460-138465-9	SB-11(1-3')	101	99
460-138465-10	SB-11(10-12')	108	109
460-138465-11	SB-12(1-3')	105	112
460-138465-12	SB-12(10-12')	113	104
460-138465-13	SB-13(1-3')	104	101
460-138465-14	SB-13(10-12')	96	97
MB 460-454136/1-A		106	103
LCS 460-454136/2-A		118	117
460-138465-1 MS	SB-18(0-2') MS	107	104
460-138465-1 MSD	SB-18(0-2') MSD	118	112

Surrogate	Acceptance Limits
DCBP = DCB Decachlorobiphenyl	35-150

Surrogate Recovery Report

8151A Herbicides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCPAA1 %Rec	DCPAA2 %Rec
460-138465-1	SB-18(0-2')	120	111
460-138465-2	SB-18(3-5')	122	104
460-138465-3	SB-19(0-2')	125	118
460-138465-4	SB-19(3-5')	115	118
460-138465-5	SB-5(1-3')	123	112
460-138465-6	SB-5(10-12')	125	111
460-138465-7	SB-10(1-3')	124	109
460-138465-8	SB-10(10-12')	124	111
460-138465-9	SB-11(1-3')	108	108
460-138465-10	SB-11(10-12')	121	112
460-138465-11	SB-12(1-3')	125	113
460-138465-12	SB-12(10-12')	120	109
460-138465-13	SB-13(1-3')	123	116
460-138465-14	SB-13(10-12')	135	126
MB 460-454105/1-A		121	125
MB 460-454288/1-A		125	115
LCS 460-454105/2-A		128	130
LCS 460-454288/2-A		124	129
460-138369-F-1-F MS		124	130
460-138430-H-1-A MS		129	134
460-138369-F-1-G MSD		126	133
460-138430-F-1-E MSD		126	119

Surrogate	Acceptance Limits
DCPAA = 2,4-Dichlorophenylacetic acid	80-141

Neutral Leach or MeOH Extraction Blank - Batch: 460-453860

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-453860/1-A	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	460-453860	Lab File ID:	K71747.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	08/08/2017 1710	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2038				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.000582	J	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138465-1

Neutral Leach or MeOH Extraction Blank - Batch: 460-453860

Method: 8260C
Preparation: 5035

Lab Sample ID:	LB3 460-453860/1-A	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	460-453860	Lab File ID:	K71747.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	08/08/2017 1710	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	08/03/2017 2038				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	78 - 135
4-Bromofluorobenzene	96	67 - 126
Dibromofluoromethane (Surr)	102	61 - 149
Toluene-d8 (Surr)	109	73 - 121

Method Blank TICs- Batch: 460-453860

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Method Blank - Batch: 460-454778

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454778/8	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71740.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 1425	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.000339	J	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454778

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454778/8	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71740.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 1425	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	78 - 135
4-Bromofluorobenzene	96	67 - 126
Dibromofluoromethane (Surr)	103	61 - 149
Toluene-d8 (Surr)	107	73 - 121

Method Blank TICs- Batch: 460-454778

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454778

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454778/5	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71737.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 1311	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454778/6	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71738.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 1338	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	83	107	80 - 125	25	30		
1,1,2,2-Tetrachloroethane	99	103	72 - 131	5	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	81	108	78 - 132	29	30		
1,1,2-Trichloroethane	92	102	76 - 124	10	30		
1,1-Dichloroethane	96	112	80 - 124	16	30		
1,1-Dichloroethene	92	118	79 - 132	25	30		
1,2,3-Trichlorobenzene	93	103	75 - 123	11	30		
1,2,4-Trichlorobenzene	88	102	74 - 124	15	30		
1,2,4-Trimethylbenzene	93	110	77 - 123	17	30		
1,2-Dibromo-3-Chloropropane	115	123	65 - 129	7	30		
1,2-Dichlorobenzene	97	107	80 - 121	10	30		
1,2-Dichloroethane	88	94	68 - 120	8	30		
1,2-Dichloropropane	96	108	77 - 124	12	30		
1,3,5-Trimethylbenzene	92	112	76 - 126	19	30		
1,3-Dichlorobenzene	87	99	79 - 124	13	30		
1,4-Dichlorobenzene	88	99	79 - 121	12	30		
1,4-Dioxane	121	118	67 - 150	2	30		
2-Butanone (MEK)	103	109	61 - 140	6	30		
2-Hexanone	90	94	78 - 120	5	30		
4-Isopropyltoluene	88	107	79 - 125	19	30		
4-Methyl-2-pentanone (MIBK)	90	94	80 - 120	5	30		
Acetone	88	93	75 - 120	5	30		
Benzene	99	115	75 - 127	16	30		
Bromoform	71	76	19 - 150	8	30		
Bromomethane	61	77	59 - 136	24	30		
Carbon disulfide	88	113	74 - 130	24	30		
Carbon tetrachloride	73	95	77 - 138	27	30	*	
Chlorobenzene	95	106	80 - 120	12	30		
Chlorobromomethane	91	100	80 - 125	9	30		
Chlorodibromomethane	81	85	67 - 143	4	30		
Chloroethane	63	82	50 - 139	26	30		
Chloroform	89	101	80 - 122	12	30		
Chloromethane	74	95	66 - 128	25	30		
cis-1,2-Dichloroethene	93	108	80 - 123	14	30		
cis-1,3-Dichloropropene	94	102	75 - 124	8	30		

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454778

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454778/5	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71737.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 1311	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454778/6	Analysis Batch:	460-454778	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71738.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 1338	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	84	114	67 - 135	30	30		
Dichlorobromomethane	80	89	76 - 129	11	30		
Dichlorodifluoromethane	94	132	72 - 127	34	30		*
Ethylbenzene	88	106	79 - 124	19	30		
Ethylene Dibromide	93	96	80 - 122	4	30		
Isopropylbenzene	89	109	80 - 125	21	30		
Methyl acetate	97	102	73 - 123	5	30		
Methyl tert-butyl ether	104	110	80 - 120	5	30		
Methylcyclohexane	81	112	71 - 137	32	30		*
Methylene Chloride	101	112	79 - 128	10	30		
m-Xylene & p-Xylene	92	110	79 - 121	18	30		
Naphthalene	108	116	76 - 120	8	30		
n-Butylbenzene	90	112	75 - 131	22	30		
N-Propylbenzene	92	112	75 - 132	20	30		
o-Xylene	94	109	79 - 123	15	30		
sec-Butylbenzene	87	111	78 - 130	23	30		
Styrene	96	108	78 - 123	12	30		
tert-Butylbenzene	88	108	77 - 123	20	30		
Tetrachloroethene	75	95	73 - 130	23	30		
Toluene	91	106	75 - 122	15	30		
trans-1,2-Dichloroethene	86	107	80 - 129	22	30		
trans-1,3-Dichloropropene	90	97	72 - 121	7	30		
Trichloroethene	85	103	79 - 122	19	30		
Trichlorofluoromethane	82	111	68 - 136	30	30		
Vinyl chloride	75	101	70 - 134	30	30		
Xylenes, Total	93	110	79 - 122	17	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	98	78 - 135
4-Bromofluorobenzene	96	95	67 - 126
Dibromofluoromethane (Surr)	103	104	61 - 149
Toluene-d8 (Surr)	111	111	73 - 121

Method Blank - Batch: 460-454954

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454954/7	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71768.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 0124	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	0.0010	U	0.00023	0.0010
1,1,2,2-Tetrachloroethane	0.0010	U	0.00021	0.0010
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.00030	0.0010
1,1,2-Trichloroethane	0.0010	U	0.00018	0.0010
1,1-Dichloroethane	0.0010	U	0.00021	0.0010
1,1-Dichloroethene	0.0010	U	0.00023	0.0010
1,2,3-Trichlorobenzene	0.0010	U	0.00018	0.0010
1,2,4-Trichlorobenzene	0.0010	U	0.000092	0.0010
1,2,4-Trimethylbenzene	0.0010	U	0.000094	0.0010
1,2-Dibromo-3-Chloropropane	0.0010	U	0.00046	0.0010
1,2-Dichlorobenzene	0.0010	U	0.00014	0.0010
1,2-Dichloroethane	0.0010	U	0.00030	0.0010
1,2-Dichloropropane	0.0010	U	0.00042	0.0010
1,3,5-Trimethylbenzene	0.0010	U	0.00012	0.0010
1,3-Dichlorobenzene	0.0010	U	0.00016	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00010	0.0010
1,4-Dioxane	0.020	U	0.0092	0.020
2-Butanone (MEK)	0.0050	U	0.0011	0.0050
2-Hexanone	0.0050	U	0.00078	0.0050
4-Isopropyltoluene	0.0010	U	0.000098	0.0010
4-Methyl-2-pentanone (MIBK)	0.0050	U	0.00066	0.0050
Acetone	0.0050	U	0.0038	0.0050
Benzene	0.0010	U	0.00026	0.0010
Bromoform	0.0010	U	0.00043	0.0010
Bromomethane	0.0010	U	0.00047	0.0010
Carbon disulfide	0.0010	U	0.00027	0.0010
Carbon tetrachloride	0.0010	U	0.00018	0.0010
Chlorobenzene	0.0010	U	0.00018	0.0010
Chlorobromomethane	0.0010	U	0.00028	0.0010
Chlorodibromomethane	0.0010	U	0.00019	0.0010
Chloroethane	0.0010	U	0.00052	0.0010
Chloroform	0.0010	U	0.00032	0.0010
Chloromethane	0.0010	U	0.00044	0.0010
cis-1,2-Dichloroethene	0.0010	U	0.00015	0.0010
cis-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Cyclohexane	0.0010	U	0.00022	0.0010
Dichlorobromomethane	0.0010	U	0.00026	0.0010
Dichlorodifluoromethane	0.0010	U	0.00034	0.0010
Ethylbenzene	0.0010	U	0.00020	0.0010
Ethylene Dibromide	0.0010	U	0.00018	0.0010
Isopropylbenzene	0.0010	U	0.00013	0.0010
Methyl acetate	0.0050	U	0.0043	0.0050
Methyl tert-butyl ether	0.0010	U	0.00013	0.0010
Methylcyclohexane	0.0010	U	0.00016	0.0010
Methylene Chloride	0.000393	J	0.00016	0.0010

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454954

Method: 8260C
Preparation: N/A

Lab Sample ID:	MB 460-454954/7	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71768.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 0124	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
m-Xylene & p-Xylene	0.0010	U	0.00017	0.0010
Naphthalene	0.0010	U	0.00019	0.0010
n-Butylbenzene	0.0010	U	0.00014	0.0010
N-Propylbenzene	0.0010	U	0.00018	0.0010
o-Xylene	0.0010	U	0.000095	0.0010
sec-Butylbenzene	0.0010	U	0.000088	0.0010
Styrene	0.0010	U	0.00012	0.0010
tert-Butylbenzene	0.0010	U	0.00012	0.0010
Tetrachloroethene	0.0010	U	0.00014	0.0010
Toluene	0.0010	U	0.00063	0.0010
trans-1,2-Dichloroethene	0.0010	U	0.00025	0.0010
trans-1,3-Dichloropropene	0.0010	U	0.00027	0.0010
Trichloroethene	0.0010	U	0.00014	0.0010
Trichlorofluoromethane	0.0010	U	0.00041	0.0010
Vinyl chloride	0.0010	U	0.00055	0.0010
Xylenes, Total	0.0020	U	0.00025	0.0020

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	78 - 135
4-Bromofluorobenzene	97	67 - 126
Dibromofluoromethane (Surr)	104	61 - 149
Toluene-d8 (Surr)	113	73 - 121

Method Blank TICs- Batch: 460-454954

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Tentatively Identified Compound		None	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454954

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454954/3	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71764.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 2350	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454954/4	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71765.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 0013	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
1,1,1-Trichloroethane	98	101	80 - 125	4	30		
1,1,2,2-Tetrachloroethane	101	104	72 - 131	3	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	103	105	78 - 132	3	30		
1,1,2-Trichloroethane	99	103	76 - 124	4	30		
1,1-Dichloroethane	104	109	80 - 124	5	30		
1,1-Dichloroethene	109	113	79 - 132	3	30		
1,2,3-Trichlorobenzene	93	100	75 - 123	7	30		
1,2,4-Trichlorobenzene	91	96	74 - 124	5	30		
1,2,4-Trimethylbenzene	103	108	77 - 123	5	30		
1,2-Dibromo-3-Chloropropane	114	121	65 - 129	6	30		
1,2-Dichlorobenzene	100	106	80 - 121	6	30		
1,2-Dichloroethane	90	94	68 - 120	4	30		
1,2-Dichloropropane	103	107	77 - 124	4	30		
1,3,5-Trimethylbenzene	105	108	76 - 126	4	30		
1,3-Dichlorobenzene	93	97	79 - 124	4	30		
1,4-Dichlorobenzene	93	98	79 - 121	5	30		
1,4-Dioxane	111	120	67 - 150	8	30		
2-Butanone (MEK)	101	110	61 - 140	9	30		
2-Hexanone	89	98	78 - 120	9	30		
4-Isopropyltoluene	102	106	79 - 125	5	30		
4-Methyl-2-pentanone (MIBK)	92	99	80 - 120	7	30		
Acetone	97	104	75 - 120	7	30		
Benzene	104	109	75 - 127	4	30		
Bromoform	68	73	19 - 150	6	30		
Bromomethane	64	63	59 - 136	3	30		
Carbon disulfide	102	106	74 - 130	3	30		
Carbon tetrachloride	87	90	77 - 138	4	30		
Chlorobenzene	100	106	80 - 120	6	30		
Chlorobromomethane	92	96	80 - 125	4	30		
Chlorodibromomethane	79	82	67 - 143	3	30		
Chloroethane	69	67	50 - 139	3	30		
Chloroform	95	98	80 - 122	3	30		
Chloromethane	85	84	66 - 128	1	30		
cis-1,2-Dichloroethene	100	104	80 - 123	4	30		
cis-1,3-Dichloropropene	95	99	75 - 124	5	30		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-454954

Method: 8260C
Preparation: N/A

LCS Lab Sample ID:	LCS 460-454954/3	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71764.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/08/2017 2350	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-454954/4	Analysis Batch:	460-454954	Instrument ID:	CVOAMS9
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	K71765.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 0013	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				5 mL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cyclohexane	107	112	67 - 135	5	30		
Dichlorobromomethane	84	87	76 - 129	4	30		
Dichlorodifluoromethane	115	115	72 - 127	0	30		
Ethylbenzene	99	105	79 - 124	6	30		
Ethylene Dibromide	92	96	80 - 122	5	30		
Isopropylbenzene	104	110	80 - 125	5	30		
Methyl acetate	101	104	73 - 123	3	30		
Methyl tert-butyl ether	103	110	80 - 120	7	30		
Methylcyclohexane	105	111	71 - 137	6	30		
Methylene Chloride	103	109	79 - 128	5	30		
m-Xylene & p-Xylene	104	109	79 - 121	5	30		
Naphthalene	107	112	76 - 120	5	30		
n-Butylbenzene	107	112	75 - 131	4	30		
N-Propylbenzene	107	112	75 - 132	4	30		
o-Xylene	102	108	79 - 123	5	30		
sec-Butylbenzene	104	109	78 - 130	4	30		
Styrene	101	106	78 - 123	5	30		
tert-Butylbenzene	101	104	77 - 123	3	30		
Tetrachloroethene	86	90	73 - 130	4	30		
Toluene	99	103	75 - 122	3	30		
trans-1,2-Dichloroethene	98	101	80 - 129	3	30		
trans-1,3-Dichloropropene	89	95	72 - 121	6	30		
Trichloroethene	97	100	79 - 122	3	30		
Trichlorofluoromethane	98	95	68 - 136	3	30		
Vinyl chloride	90	90	70 - 134	0	30		
Xylenes, Total	103	108	79 - 122	5	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	95	78 - 135
4-Bromofluorobenzene	90	94	67 - 126
Dibromofluoromethane (Surr)	99	99	61 - 149
Toluene-d8 (Surr)	107	109	73 - 121

Method Blank - Batch: 460-454194

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-454194/1-A	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-454194	Lab File ID:	X263197.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/10/2017 0604	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Method Blank - Batch: 460-454194

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-454194/1-A	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-454194	Lab File ID:	X263197.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/10/2017 0604	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	98	10 - 103
2-Fluorobiphenyl	78	38 - 95
2-Fluorophenol (Surr)	80	25 - 92
Nitrobenzene-d5 (Surr)	85	37 - 94
Phenol-d5 (Surr)	79	32 - 91
Terphenyl-d14 (Surr)	94	24 - 109

Method Blank TICs- Batch: 460-454194

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Aldol condensation product	2.61	0.860	A J

Lab Control Sample - Batch: 460-454194

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-454194/2-A	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-454194	Lab File ID:	X263196.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/10/2017 0541	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	3.01	90	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	2.87	86	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.72	82	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	3.60	108	60 - 114	
2,4,5-Trichlorophenol	3.33	3.09	93	60 - 106	
2,4,6-Trichlorophenol	3.33	3.27	98	62 - 110	
2,4-Dichlorophenol	3.33	3.01	90	61 - 103	
2,4-Dimethylphenol	3.33	2.98	90	63 - 101	
2,4-Dinitrophenol	6.67	7.51	113	56 - 122	
2,4-Dinitrotoluene	3.33	3.65	110	66 - 122	
2,6-Dinitrotoluene	3.33	3.40	102	70 - 114	
2-Chloronaphthalene	3.33	2.98	89	63 - 107	
2-Chlorophenol	3.33	2.88	86	62 - 97	
2-Methylnaphthalene	3.33	2.99	90	65 - 104	
2-Methylphenol	3.33	2.98	89	61 - 103	
2-Nitroaniline	3.33	3.13	94	57 - 114	
2-Nitrophenol	3.33	3.00	90	65 - 104	
3,3'-Dichlorobenzidine	3.33	2.51	75	18 - 88	
3-Nitroaniline	3.33	3.04	91	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	8.00	120	67 - 120	
4-Bromophenyl phenyl ether	3.33	3.18	95	59 - 122	
4-Chloro-3-methylphenol	3.33	3.20	96	62 - 111	
4-Chloroaniline	3.33	2.85	85	18 - 94	
4-Chlorophenyl phenyl ether	3.33	3.20	96	66 - 110	
4-Methylphenol	3.33	2.87	86	61 - 105	
4-Nitroaniline	3.33	3.26	98	49 - 118	
4-Nitrophenol	6.67	6.86	103	43 - 141	
Acenaphthene	3.33	3.09	93	62 - 108	
Acenaphthylene	3.33	3.14	94	67 - 107	
Acetophenone	3.33	3.01	90	60 - 109	
Anthracene	3.33	3.20	96	69 - 111	
Benzo[a]anthracene	3.33	3.28	98	68 - 110	
Benzo[a]pyrene	3.33	3.36	101	72 - 115	
Benzo[b]fluoranthene	3.33	3.44	103	69 - 119	
Benzo[g,h,i]perylene	3.33	3.17	95	54 - 128	
Benzo[k]fluoranthene	3.33	3.48	105	70 - 115	
Bis(2-chloroethoxy)methane	3.33	2.97	89	65 - 106	
Bis(2-chloroethyl)ether	3.33	2.85	86	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	3.60	108	63 - 125	
Butyl benzyl phthalate	3.33	3.70	111	65 - 125	
Carbazole	3.33	3.23	97	66 - 115	

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample - Batch: 460-454194

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-454194/2-A	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-454194	Lab File ID:	X263196.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/10/2017 0541	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	3.30	99	70 - 111	
Dibenz(a,h)anthracene	3.33	3.32	100	60 - 130	
Dibenzofuran	3.33	3.16	95	67 - 107	
Diethyl phthalate	3.33	3.53	106	66 - 117	
Dimethyl phthalate	3.33	3.37	101	68 - 112	
Di-n-butyl phthalate	3.33	3.51	105	67 - 119	
Di-n-octyl phthalate	3.33	4.03	121	57 - 138	
Fluoranthene	3.33	3.18	95	64 - 114	
Fluorene	3.33	3.24	97	66 - 110	
Hexachlorobenzene	3.33	3.39	102	57 - 128	
Hexachlorobutadiene	3.33	2.90	87	60 - 108	
Hexachlorocyclopentadiene	3.33	3.06	92	50 - 129	
Hexachloroethane	3.33	2.66	80	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	3.04	91	53 - 137	
Isophorone	3.33	3.14	94	68 - 111	
Naphthalene	3.33	2.89	87	65 - 102	
Nitrobenzene	3.33	2.85	86	66 - 108	
N-Nitrosodi-n-propylamine	3.33	3.10	93	63 - 117	
N-Nitrosodiphenylamine	3.33	3.23	97	65 - 114	
Pentachlorophenol	6.67	7.36	110	56 - 116	
Phenanthrene	3.33	3.19	96	68 - 111	
Phenol	3.33	2.81	84	58 - 103	
Pyrene	3.33	3.69	111	64 - 121	

Surrogate	% Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	111	*	10 - 103
2-Fluorobiphenyl	90		38 - 95
2-Fluorophenol (Surr)	83		25 - 92
Nitrobenzene-d5 (Surr)	92		37 - 94
Phenol-d5 (Surr)	87		32 - 91
Terphenyl-d14 (Surr)	112	*	24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample - Batch: 460-454194

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-454194/3-A	Analysis Batch:	460-455247	Instrument ID:	CBNAMS5
Client Matrix:	Solid	Prep Batch:	460-454194	Lab File ID:	X263198.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/10/2017 0628	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0808			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	7.17	108	62 - 137	
Benzaldehyde	6.67	6.61	99	52 - 113	
Caprolactam	6.67	7.59	114	53 - 148	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	102	10 - 103
2-Fluorobiphenyl	83	38 - 95
2-Fluorophenol (Surr)	87	25 - 92
Nitrobenzene-d5 (Surr)	90	37 - 94
Phenol-d5 (Surr)	80	32 - 91
Terphenyl-d14 (Surr)	103	24 - 109

Method Blank - Batch: 460-454195

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-454195/1-A	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19566.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 1319	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	0.33	U	0.028	0.33
1,2,4,5-Tetrachlorobenzene	0.33	U	0.025	0.33
2,2'-oxybis[1-chloropropane]	0.33	U	0.014	0.33
2,3,4,6-Tetrachlorophenol	0.33	U	0.031	0.33
2,4,5-Trichlorophenol	0.33	U	0.033	0.33
2,4,6-Trichlorophenol	0.13	U	0.0094	0.13
2,4-Dichlorophenol	0.13	U	0.0078	0.13
2,4-Dimethylphenol	0.33	U	0.073	0.33
2,4-Dinitrophenol	0.27	U	0.25	0.27
2,4-Dinitrotoluene	0.067	U	0.013	0.067
2,6-Dinitrotoluene	0.067	U	0.018	0.067
2-Chloronaphthalene	0.33	U	0.0075	0.33
2-Chlorophenol	0.33	U	0.0084	0.33
2-Methylnaphthalene	0.33	U	0.0073	0.33
2-Methylphenol	0.33	U	0.014	0.33
2-Nitroaniline	0.33	U	0.011	0.33
2-Nitrophenol	0.33	U	0.011	0.33
3,3'-Dichlorobenzidine	0.13	U	0.037	0.13
3-Nitroaniline	0.33	U	0.0098	0.33
4,6-Dinitro-2-methylphenol	0.27	U	0.088	0.27
4-Bromophenyl phenyl ether	0.33	U	0.010	0.33
4-Chloro-3-methylphenol	0.33	U	0.014	0.33
4-Chloroaniline	0.33	U	0.0085	0.33
4-Chlorophenyl phenyl ether	0.33	U	0.0099	0.33
4-Methylphenol	0.33	U	0.0090	0.33
4-Nitroaniline	0.33	U	0.013	0.33
4-Nitrophenol	0.67	U	0.16	0.67
Acenaphthene	0.33	U	0.0080	0.33
Acenaphthylene	0.33	U	0.0085	0.33
Acetophenone	0.33	U	0.0072	0.33
Anthracene	0.33	U	0.031	0.33
Atrazine	0.13	U	0.015	0.13
Benzaldehyde	0.33	U	0.025	0.33
Benzo[a]anthracene	0.033	U	0.028	0.033
Benzo[a]pyrene	0.033	U	0.010	0.033
Benzo[b]fluoranthene	0.033	U	0.013	0.033
Benzo[g,h,i]perylene	0.33	U	0.019	0.33
Benzo[k]fluoranthene	0.033	U	0.014	0.033
Bis(2-chloroethoxy)methane	0.33	U	0.010	0.33
Bis(2-chloroethyl)ether	0.033	U	0.0078	0.033
Bis(2-ethylhexyl) phthalate	0.33	U	0.013	0.33
Butyl benzyl phthalate	0.33	U	0.010	0.33
Caprolactam	0.33	U	0.024	0.33
Carbazole	0.33	U	0.0082	0.33
Chrysene	0.33	U	0.0090	0.33

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454195

Method: 8270D
Preparation: 3546

Lab Sample ID:	MB 460-454195/1-A	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19566.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 1319	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dibenz(a,h)anthracene	0.033	U	0.017	0.033
Dibenzofuran	0.33	U	0.010	0.33
Diethyl phthalate	0.33	U	0.0094	0.33
Dimethyl phthalate	0.33	U	0.0096	0.33
Di-n-butyl phthalate	0.33	U	0.0099	0.33
Di-n-octyl phthalate	0.33	U	0.017	0.33
Fluoranthene	0.33	U	0.0098	0.33
Fluorene	0.33	U	0.0072	0.33
Hexachlorobenzene	0.033	U	0.013	0.033
Hexachlorobutadiene	0.067	U	0.0093	0.067
Hexachlorocyclopentadiene	0.33	U	0.021	0.33
Hexachloroethane	0.033	U	0.012	0.033
Indeno[1,2,3-cd]pyrene	0.033	U	0.022	0.033
Isophorone	0.13	U	0.0071	0.13
Naphthalene	0.33	U	0.0084	0.33
Nitrobenzene	0.033	U	0.010	0.033
N-Nitrosodi-n-propylamine	0.033	U	0.011	0.033
N-Nitrosodiphenylamine	0.33	U	0.030	0.33
Pentachlorophenol	0.27	U	0.040	0.27
Phenanthrene	0.33	U	0.0088	0.33
Phenol	0.33	U	0.011	0.33
Pyrene	0.33	U	0.015	0.33

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	77	10 - 103
2-Fluorobiphenyl	77	38 - 95
2-Fluorophenol (Surr)	82	25 - 92
Nitrobenzene-d5 (Surr)	85	37 - 94
Phenol-d5 (Surr)	85	32 - 91
Terphenyl-d14 (Surr)	100	24 - 109

Method Blank TICs- Batch: 460-454195

Cas Number	Analyte	RT	Est. Result (mg	Qual
	Aldol condensation product	2.93	0.885	A J

Lab Control Sample - Batch: 460-454195

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-454195/2-A	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19567.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 1341	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	3.33	2.78	83	64 - 108	
1,2,4,5-Tetrachlorobenzene	3.33	2.85	85	57 - 112	
2,2'-oxybis[1-chloropropane]	3.33	2.62	79	39 - 122	
2,3,4,6-Tetrachlorophenol	3.33	2.79	84	60 - 114	
2,4,5-Trichlorophenol	3.33	2.65	79	60 - 106	
2,4,6-Trichlorophenol	3.33	2.89	87	62 - 110	
2,4-Dichlorophenol	3.33	2.68	80	61 - 103	
2,4-Dimethylphenol	3.33	2.69	81	63 - 101	
2,4-Dinitrophenol	6.67	6.30	95	56 - 122	
2,4-Dinitrotoluene	3.33	2.76	83	66 - 122	
2,6-Dinitrotoluene	3.33	2.94	88	70 - 114	
2-Chloronaphthalene	3.33	2.78	84	63 - 107	
2-Chlorophenol	3.33	2.69	81	62 - 97	
2-Methylnaphthalene	3.33	2.64	79	65 - 104	
2-Methylphenol	3.33	2.66	80	61 - 103	
2-Nitroaniline	3.33	2.85	85	57 - 114	
2-Nitrophenol	3.33	2.97	89	65 - 104	
3,3'-Dichlorobenzidine	3.33	2.15	65	18 - 88	
3-Nitroaniline	3.33	2.49	75	30 - 94	
4,6-Dinitro-2-methylphenol	6.67	6.78	102	67 - 120	
4-Bromophenyl phenyl ether	3.33	2.87	86	59 - 122	
4-Chloro-3-methylphenol	3.33	2.60	78	62 - 111	
4-Chloroaniline	3.33	2.24	67	18 - 94	
4-Chlorophenyl phenyl ether	3.33	2.61	78	66 - 110	
4-Methylphenol	3.33	2.75	83	61 - 105	
4-Nitroaniline	3.33	2.86	86	49 - 118	
4-Nitrophenol	6.67	5.34	80	43 - 141	
Acenaphthene	3.33	2.64	79	62 - 108	
Acenaphthylene	3.33	2.79	84	67 - 107	
Acetophenone	3.33	2.72	81	60 - 109	
Anthracene	3.33	2.84	85	69 - 111	
Benzo[a]anthracene	3.33	2.94	88	68 - 110	
Benzo[a]pyrene	3.33	3.21	96	72 - 115	
Benzo[b]fluoranthene	3.33	3.25	98	69 - 119	
Benzo[g,h,i]perylene	3.33	2.75	82	54 - 128	
Benzo[k]fluoranthene	3.33	3.18	95	70 - 115	
Bis(2-chloroethoxy)methane	3.33	2.69	81	65 - 106	
Bis(2-chloroethyl)ether	3.33	2.75	82	64 - 105	
Bis(2-ethylhexyl) phthalate	3.33	2.64	79	63 - 125	
Butyl benzyl phthalate	3.33	2.77	83	65 - 125	
Carbazole	3.33	2.85	85	66 - 115	

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample - Batch: 460-454195

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-454195/2-A	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19567.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 1341	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chrysene	3.33	2.81	84	70 - 111	
Dibenz(a,h)anthracene	3.33	2.78	83	60 - 130	
Dibenzofuran	3.33	2.72	82	67 - 107	
Diethyl phthalate	3.33	2.58	77	66 - 117	
Dimethyl phthalate	3.33	2.65	80	68 - 112	
Di-n-butyl phthalate	3.33	2.58	77	67 - 119	
Di-n-octyl phthalate	3.33	2.96	89	57 - 138	
Fluoranthene	3.33	2.56	77	64 - 114	
Fluorene	3.33	2.68	80	66 - 110	
Hexachlorobenzene	3.33	2.86	86	57 - 128	
Hexachlorobutadiene	3.33	2.68	80	60 - 108	
Hexachlorocyclopentadiene	3.33	3.21	96	50 - 129	
Hexachloroethane	3.33	2.63	79	63 - 99	
Indeno[1,2,3-cd]pyrene	3.33	3.26	98	53 - 137	
Isophorone	3.33	2.69	81	68 - 111	
Naphthalene	3.33	2.73	82	65 - 102	
Nitrobenzene	3.33	2.88	86	66 - 108	
N-Nitrosodi-n-propylamine	3.33	2.72	82	63 - 117	
N-Nitrosodiphenylamine	3.33	2.88	86	65 - 114	
Pentachlorophenol	6.67	5.14	77	56 - 116	
Phenanthrene	3.33	2.78	83	68 - 111	
Phenol	3.33	2.78	83	58 - 103	
Pyrene	3.33	3.17	95	64 - 121	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	86	10 - 103
2-Fluorobiphenyl	80	38 - 95
2-Fluorophenol (Surr)	82	25 - 92
Nitrobenzene-d5 (Surr)	85	37 - 94
Phenol-d5 (Surr)	83	32 - 91
Terphenyl-d14 (Surr)	96	24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample - Batch: 460-454195

Method: 8270D
Preparation: 3546

Lab Sample ID:	LCS 460-454195/3-A	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19568.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/09/2017 1402	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Atrazine	6.67	5.98	90	62 - 137	
Benzaldehyde	6.67	5.58	84	52 - 113	
Caprolactam	6.67	6.09	91	53 - 148	

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	78	10 - 103
2-Fluorobiphenyl	77	38 - 95
2-Fluorophenol (Surr)	80	25 - 92
Nitrobenzene-d5 (Surr)	85	37 - 94
Phenol-d5 (Surr)	80	32 - 91
Terphenyl-d14 (Surr)	99	24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454195

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138465-2	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19575.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0215 g
Analysis Date:	08/09/2017 1635			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138465-2	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19576.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0341 g
Analysis Date:	08/09/2017 1656			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	63	35	64 - 108	57	30	*	*
1,2,4,5-Tetrachlorobenzene	60	28	57 - 112	72	30		*
2,2'-oxybis[1-chloropropane]	54	19	39 - 122	94	30		*
2,3,4,6-Tetrachlorophenol	74	54	60 - 114	31	30		*
2,4,5-Trichlorophenol	65	47	60 - 106	32	30		*
2,4,6-Trichlorophenol	70	47	62 - 110	39	30		*
2,4-Dichlorophenol	64	38	61 - 103	52	30		*
2,4-Dimethylphenol	60	35	63 - 101	53	30	*	*
2,4-Dinitrophenol	76	57	56 - 122	28	30		
2,4-Dinitrotoluene	78	58	66 - 122	30	30		*
2,6-Dinitrotoluene	81	58	70 - 114	33	30		*
2-Chloronaphthalene	63	35	63 - 107	57	30		*
2-Chlorophenol	57	24	62 - 97	82	30	*	*
2-Methylnaphthalene	60	27	65 - 104	76	30	*	*
2-Methylphenol	60	30	61 - 103	67	30	*	*
2-Nitroaniline	74	50	57 - 114	38	30		*
2-Nitrophenol	64	26	65 - 104	84	30	*	*
3,3'-Dichlorobenzidine	44	22	18 - 88	66	30		*
3-Nitroaniline	69	43	30 - 94	47	30		*
4,6-Dinitro-2-methylphenol	81	57	67 - 120	34	30		*
4-Bromophenyl phenyl ether	70	48	59 - 122	38	30		*
4-Chloro-3-methylphenol	69	49	62 - 111	34	30		*
4-Chloroaniline	37	16	18 - 94	79	30		*
4-Chlorophenyl phenyl ether	68	48	66 - 110	34	30		*
4-Methylphenol	61	33	61 - 105	59	30		*
4-Nitroaniline	78	56	49 - 118	34	30		*
4-Nitrophenol	83	63	43 - 141	28	30		
Acenaphthene	64	40	62 - 108	47	30		*
Acenaphthylene	67	42	67 - 107	46	30		*
Acetophenone	60	25	60 - 109	83	30		*
Anthracene	70	50	69 - 111	33	30		*
Atrazine	74	49	62 - 137	40	30		*

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454195

Method: 8270D
Preparation: 3546

MS Lab Sample ID: 460-138465-2
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 08/09/2017 1635
Prep Date: 08/05/2017 0814
Leach Date: N/A

Analysis Batch: 460-455086
Prep Batch: 460-454195
Leach Batch: N/A

Instrument ID: CBNAMS12
Lab File ID: L19575.D
Initial Weight/Volume: 15.0215 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

MSD Lab Sample ID: 460-138465-2
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 08/09/2017 1656
Prep Date: 08/05/2017 0814
Leach Date: N/A

Analysis Batch: 460-455086
Prep Batch: 460-454195
Leach Batch: N/A

Instrument ID: CBNAMS12
Lab File ID: L19576.D
Initial Weight/Volume: 15.0341 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzaldehyde	54	20	52 - 113	90	30		*
Benzo[a]anthracene	75	53	68 - 110	34	30		*
Benzo[a]pyrene	80	56	72 - 115	35	30		*
Benzo[b]fluoranthene	85	59	69 - 119	36	30		*
Benzo[g,h,i]perylene	47	32	54 - 128	38	30	*	*
Benzo[k]fluoranthene	78	58	70 - 115	29	30		*
Bis(2-chloroethoxy)methane	56	19	65 - 106	97	30	*	*
Bis(2-chloroethyl)ether	56	22	64 - 105	87	30	*	*
Bis(2-ethylhexyl) phthalate	61	45	63 - 125	31	30	*	*
Butyl benzyl phthalate	62	46	65 - 125	31	30	*	*
Caprolactam	67	44	53 - 148	42	30		*
Carbazole	77	56	66 - 115	31	30		*
Chrysene	73	51	70 - 111	34	30		*
Dibenz(a,h)anthracene	56	39	60 - 130	36	30	*	*
Dibenzofuran	68	46	67 - 107	38	30		*
Diethyl phthalate	74	54	66 - 117	32	30		*
Dimethyl phthalate	73	52	68 - 112	34	30		*
Di-n-butyl phthalate	74	53	67 - 119	33	30		*
Di-n-octyl phthalate	65	48	57 - 138	29	30		*
Fluoranthene	78	56	64 - 114	32	30		*
Fluorene	71	50	66 - 110	35	30		*
Hexachlorobenzene	71	51	57 - 128	33	30		*
Hexachlorobutadiene	54	19	60 - 108	95	30	*	*
Hexachlorocyclopentadiene	11	0	50 - 129	NC	30	*	U *
Hexachloroethane	41	13	63 - 99	105	30	*	*
Indeno[1,2,3-cd]pyrene	69	49	53 - 137	35	30		*
Isophorone	55	23	68 - 111	70	30	*	*
Naphthalene	57	22	65 - 102	88	30	*	*
Nitrobenzene	47	18	66 - 108	90	30	*	*
N-Nitrosodi-n-propylamine	62	26	63 - 117	83	30	*	*
N-Nitrosodiphenylamine	60	36	65 - 114	49	30	*	*
Pentachlorophenol	63	49	56 - 116	25	30		*

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454195

Method: 8270D
Preparation: 3546

MS Lab Sample ID:	460-138465-2	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19575.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0215 g
Analysis Date:	08/09/2017 1635			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138465-2	Analysis Batch:	460-455086	Instrument ID:	CBNAMS12
Client Matrix:	Solid	Prep Batch:	460-454195	Lab File ID:	L19576.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0341 g
Analysis Date:	08/09/2017 1656			Final Weight/Volume:	1 mL
Prep Date:	08/05/2017 0814			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenanthrene	72	51	68 - 111	34	30		*
Phenol	61	29	58 - 103	71	30		*
Pyrene	64	45	64 - 121	34	30		*

Surrogate	MS % Rec	MSD % Rec		Acceptance Limits
2,4,6-Tribromophenol (Surr)	79	59		10 - 103
2-Fluorobiphenyl	59	32	*	38 - 95
2-Fluorophenol (Surr)	55	23	*	25 - 92
Nitrobenzene-d5 (Surr)	58	23	*	37 - 94
Phenol-d5 (Surr)	60	29	*	32 - 91
Terphenyl-d14 (Surr)	63	47		24 - 109

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-455075

Method: 8015D
Preparation: N/A

Lab Sample ID:	MB 460-455075/4	Analysis Batch:	460-455075	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107466.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 1244	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	RL	RL
GRO	2.5	U	2.5	2.5

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	102	80 - 135

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-455075

Method: 8015D
Preparation: N/A

LCS Lab Sample ID:	LCS 460-455075/2	Analysis Batch:	460-455075	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107464.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 1149	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 460-455075/3	Analysis Batch:	460-455075	Instrument ID:	CVOAGC1
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	VF107465.D
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/09/2017 1217	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
GRO	103	100	80 - 120	3	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	112	107	80 - 135

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454654

Method: 8015D
Preparation: 3546

Lab Sample ID:	MB 460-454654/1-A	Analysis Batch:	460-454764	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-454654	Lab File ID:	3F010459.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/08/2017 1535	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/07/2017 1810			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
#2 Diesel Fuel	6.7	U	1.1	6.7
C10-C44	8.7	U	1.1	8.7

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	55	25 - 132

Lab Control Sample - Batch: 460-454654

Method: 8015D
Preparation: 3546

Lab Sample ID:	LCS 460-454654/2-A	Analysis Batch:	460-454764	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-454654	Lab File ID:	3F010460.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0000 g
Analysis Date:	08/08/2017 1548	Units:	mg/Kg	Final Weight/Volume:	1 mL
Prep Date:	08/07/2017 1810			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C44	133	94.6	71	68 - 133	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	89	25 - 132

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454654

Method: 8015D
Preparation: 3546

MS Lab Sample ID:	460-138411-E-9-B MS	Analysis Batch:	460-454764	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-454654	Lab File ID:	3F010467.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0114 g
Analysis Date:	08/08/2017 1713			Final Weight/Volume:	1 mL
Prep Date:	08/07/2017 1810			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-138411-E-9-C MSD	Analysis Batch:	460-454764	Instrument ID:	CBNAGC3
Client Matrix:	Solid	Prep Batch:	460-454654	Lab File ID:	3F010468.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.0201 g
Analysis Date:	08/08/2017 1725			Final Weight/Volume:	1 mL
Prep Date:	08/07/2017 1810			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C44	7	-95	68 - 133	84	30	*	*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	93	72	25 - 132

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454134

Method: 8081B
Preparation: 3546

Lab Sample ID:	MB 460-454134/1-A	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911637.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 0849	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.0067	U	0.0011	0.0067
4,4'-DDE	0.0067	U	0.00079	0.0067
4,4'-DDT	0.0067	U	0.0012	0.0067
Aldrin	0.0067	U	0.0010	0.0067
alpha-BHC	0.0020	U	0.00068	0.0020
beta-BHC	0.0020	U	0.00075	0.0020
Chlordane (technical)	0.067	U	0.016	0.067
delta-BHC	0.0020	U	0.00041	0.0020
Dieldrin	0.0020	U	0.00087	0.0020
Endosulfan I	0.0067	U	0.0010	0.0067
Endosulfan II	0.0067	U	0.0017	0.0067
Endosulfan sulfate	0.0067	U	0.00084	0.0067
Endrin	0.0067	U	0.00096	0.0067
Endrin aldehyde	0.0067	U	0.0016	0.0067
Endrin ketone	0.0067	U	0.0013	0.0067
gamma-BHC (Lindane)	0.0020	U	0.00062	0.0020
Heptachlor	0.0067	U	0.00079	0.0067
Heptachlor epoxide	0.0067	U	0.0010	0.0067
Methoxychlor	0.0067	U	0.0015	0.0067
Toxaphene	0.067	U	0.024	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	109	50 - 150
Tetrachloro-m-xylene	111	47 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	101	50 - 150
Tetrachloro-m-xylene	104	47 - 150

Lab Control Sample - Batch: 460-454134 **Method: 8081B**
Preparation: 3546

Lab Sample ID:	LCS 460-454134/2-A	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911638.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 0902	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.132	99	64 - 129	
4,4'-DDE	0.133	0.139	104	65 - 129	
4,4'-DDT	0.133	0.131	98	59 - 124	
Aldrin	0.133	0.143	107	66 - 127	
alpha-BHC	0.133	0.149	112	69 - 131	
beta-BHC	0.133	0.143	108	69 - 127	
delta-BHC	0.133	0.145	108	64 - 129	
Dieldrin	0.133	0.141	106	65 - 128	
Endosulfan I	0.133	0.143	107	66 - 126	
Endosulfan II	0.133	0.142	107	64 - 124	
Endosulfan sulfate	0.133	0.134	100	62 - 123	
Endrin	0.133	0.131	98	58 - 126	
Endrin aldehyde	0.133	0.147	110	69 - 131	
Endrin ketone	0.133	0.145	109	62 - 125	
gamma-BHC (Lindane)	0.133	0.145	109	67 - 126	
Heptachlor	0.133	0.139	104	63 - 125	
Heptachlor epoxide	0.133	0.139	104	64 - 125	
Methoxychlor	0.133	0.122	92	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	108	50 - 150
Tetrachloro-m-xylene	103	47 - 150

Lab Control Sample - Batch: 460-454134 **Method: 8081B**
Preparation: 3546

Lab Sample ID:	LCS 460-454134/2-A	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911638.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 0902	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.133	0.131	98	64 - 129	
4,4'-DDE	0.133	0.129	97	65 - 129	
4,4'-DDT	0.133	0.123	92	59 - 124	
Aldrin	0.133	0.142	106	66 - 127	
alpha-BHC	0.133	0.146	109	69 - 131	
beta-BHC	0.133	0.142	106	69 - 127	

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample - Batch: 460-454134

Method: 8081B
Preparation: 3546

Lab Sample ID:	LCS 460-454134/2-A	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911638.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 0902	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
delta-BHC	0.133	0.139	104	64 - 129	
Dieldrin	0.133	0.139	104	65 - 128	
Endosulfan I	0.133	0.138	104	66 - 126	
Endosulfan II	0.133	0.132	99	64 - 124	
Endosulfan sulfate	0.133	0.133	99	62 - 123	
Endrin	0.133	0.128	96	58 - 126	
Endrin aldehyde	0.133	0.137	103	69 - 131	
Endrin ketone	0.133	0.145	109	62 - 125	
gamma-BHC (Lindane)	0.133	0.143	107	67 - 126	
Heptachlor	0.133	0.139	104	63 - 125	
Heptachlor epoxide	0.133	0.138	104	64 - 125	
Methoxychlor	0.133	0.117	88	56 - 123	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	99	50 - 150
Tetrachloro-m-xylene	100	47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454134

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-138465-1	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911640.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0001 g
Analysis Date:	08/05/2017 0927			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138465-1	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911641.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0362 g
Analysis Date:	08/05/2017 0940			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	115	125	64 - 129	8	30		
4,4'-DDE	115	124	65 - 129	7	30		
4,4'-DDT	112	125	59 - 124	11	30		*
Aldrin	113	123	66 - 127	8	30		
alpha-BHC	113	128	69 - 131	12	30		
beta-BHC	110	121	69 - 127	9	30		
delta-BHC	110	126	64 - 129	13	30		
Dieldrin	119	128	65 - 128	7	30		
Endosulfan I	112	122	66 - 126	8	30		
Endosulfan II	110	122	64 - 124	10	30		
Endosulfan sulfate	107	116	62 - 123	8	30		
Endrin	112	121	58 - 126	8	30		
Endrin aldehyde	107	117	69 - 131	8	30		
Endrin ketone	113	123	62 - 125	8	30		
gamma-BHC (Lindane)	112	125	67 - 126	11	30		
Heptachlor	108	120	63 - 125	10	30		
Heptachlor epoxide	110	119	64 - 125	8	30		
Methoxychlor	113	122	56 - 123	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	106	111	50 - 150
Tetrachloro-m-xylene	113	120	47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454134

Method: 8081B
Preparation: 3546

MS Lab Sample ID:	460-138465-1	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911640.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0001 g
Analysis Date:	08/05/2017 0927			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138465-1	Analysis Batch:	460-454193	Instrument ID:	CPESTGC5
Client Matrix:	Solid	Prep Batch:	460-454134	Lab File ID:	5F911641.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0362 g
Analysis Date:	08/05/2017 0940			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2113			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	113	120	64 - 129	5	30		
4,4'-DDE	107	120	65 - 129	11	30		
4,4'-DDT	111	119	59 - 124	7	30		
Aldrin	108	123	66 - 127	13	30		
alpha-BHC	113	127	69 - 131	11	30		
beta-BHC	110	120	69 - 127	8	30		
delta-BHC	109	120	64 - 129	10	30		
Dieldrin	111	124	65 - 128	11	30		
Endosulfan I	105	117	66 - 126	10	30		
Endosulfan II	109	113	64 - 124	4	30		
Endosulfan sulfate	105	114	62 - 123	8	30		
Endrin	108	119	58 - 126	9	30		
Endrin aldehyde	98	111	69 - 131	13	30		
Endrin ketone	111	119	62 - 125	7	30		
gamma-BHC (Lindane)	112	123	67 - 126	10	30		
Heptachlor	106	120	63 - 125	12	30		
Heptachlor epoxide	105	118	64 - 125	11	30		
Methoxychlor	113	121	56 - 123	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	90	108	50 - 150
Tetrachloro-m-xylene	105	115	47 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454136

Method: 8082A
Preparation: 3546

Lab Sample ID:	MB 460-454136/1-A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346857.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 1615	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	0.067	U	0.0089	0.067
Aroclor 1221	0.067	U	0.0089	0.067
Aroclor 1232	0.067	U	0.0089	0.067
Aroclor 1242	0.067	U	0.0089	0.067
Aroclor 1248	0.067	U	0.0089	0.067
Aroclor 1254	0.067	U	0.0092	0.067
Aroclor 1260	0.067	U	0.0092	0.067
Aroclor 1268	0.067	U	0.0092	0.067
Aroclor-1262	0.067	U	0.0092	0.067
Polychlorinated biphenyls, Total	0.067	U	0.0092	0.067

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	106	35 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	103	35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Lab Control Sample - Batch: 460-454136

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-454136/2-A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346858.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 1630	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.364	109	77 - 150	
Aroclor 1260	0.333	0.357	107	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	118	35 - 150

Lab Control Sample - Batch: 460-454136

Method: 8082A
Preparation: 3546

Lab Sample ID:	LCS 460-454136/2-A	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346858.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0000 g
Analysis Date:	08/05/2017 1630	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	0.333	0.351	105	77 - 150	
Aroclor 1260	0.333	0.348	104	79 - 150	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	117	35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454136

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-138465-1	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346860.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0011 g
Analysis Date:	08/05/2017 1659			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY
MSD Lab Sample ID:	460-138465-1	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346861.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0080 g
Analysis Date:	08/05/2017 1713			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	103	110	77 - 150	6	30		
Aroclor 1260	100	112	79 - 150	11	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	107	118	35 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454136

Method: 8082A
Preparation: 3546

MS Lab Sample ID:	460-138465-1	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346860.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0011 g
Analysis Date:	08/05/2017 1659			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY
MSD Lab Sample ID:	460-138465-1	Analysis Batch:	460-454208	Instrument ID:	CPESTGC11
Client Matrix:	Solid	Prep Batch:	460-454136	Lab File ID:	T1346861.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	+15.0080 g
Analysis Date:	08/05/2017 1713			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 2124			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	101	107	77 - 150	6	30		
Aroclor 1260	99	108	79 - 150	8	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	104	112	35 - 150

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454105

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 460-454105/1-A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146834.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/07/2017 1441	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	0.017	U	0.0078	0.017
2,4-D	0.017	U	0.0078	0.017
Silvex (2,4,5-TP)	0.017	U	0.011	0.017

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	125	80 - 141

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	121	80 - 141

Lab Control Sample - Batch: 460-454105

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-454105/2-A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146835.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/07/2017 1456	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.0971	117	53 - 134	
2,4-D	0.333	0.331	99	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.113	136	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	130	80 - 141

Lab Control Sample - Batch: 460-454105

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-454105/2-A	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146835.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/07/2017 1456	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.0913	110	53 - 134	
2,4-D	0.333	0.299	90	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.106	127	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	128	80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454105

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138369-F-1-F MS	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146836.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0411 g
Analysis Date:	08/07/2017 1510			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138369-F-1-G MSD	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146837.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0309 g
Analysis Date:	08/07/2017 1525			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	116	115	53 - 134	1	30		
2,4-D	98	105	39 - 119	7	30		E
Silvex (2,4,5-TP)	141	144	58 - 150	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	130	133	80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454105

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138369-F-1-F MS	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146836.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0411 g
Analysis Date:	08/07/2017 1510			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138369-F-1-G MSD	Analysis Batch:	460-454594	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454105	Lab File ID:	ZR146837.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0309 g
Analysis Date:	08/07/2017 1525			Final Weight/Volume:	10 mL
Prep Date:	08/04/2017 1801			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	105	108	53 - 134	3	30		
2,4-D	86	89	39 - 119	4	30		
Silvex (2,4,5-TP)	128	129	58 - 150	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	124	126	80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454288

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 460-454288/1-A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146864.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/08/2017 0839	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	0.017	U	0.0078	0.017
2,4-D	0.017	U	0.0078	0.017
Silvex (2,4,5-TP)	0.017	U	0.011	0.017

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	125	80 - 141

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	115	80 - 141

Lab Control Sample - Batch: 460-454288

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-454288/2-A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146865.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/08/2017 0854	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.0876	105	53 - 134	
2,4-D	0.333	0.307	92	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.101	121	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	129	80 - 141

Lab Control Sample - Batch: 460-454288

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 460-454288/2-A	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146865.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0000 g
Analysis Date:	08/08/2017 0854	Units:	mg/Kg	Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	0.0833	0.0854	102	53 - 134	
2,4-D	0.333	0.281	84	39 - 119	
Silvex (2,4,5-TP)	0.0833	0.0972	117	58 - 150	

Surrogate	% Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	124	80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454288

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138430-H-1-A MS	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146866.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0405 g
Analysis Date:	08/08/2017 0909			Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-138430-F-1-E MSD	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146867.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0411 g
Analysis Date:	08/08/2017 0924			Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	106	108	53 - 134	3	30		
2,4-D	84	86	39 - 119	2	30		
Silvex (2,4,5-TP)	135	123	58 - 150	9	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	134	126	80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-454288

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	460-138430-H-1-A MS	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146866.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0405 g
Analysis Date:	08/08/2017 0909			Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-138430-F-1-E MSD	Analysis Batch:	460-454751	Instrument ID:	CPESTGC3
Client Matrix:	Solid	Prep Batch:	460-454288	Lab File ID:	ZR146867.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0411 g
Analysis Date:	08/08/2017 0924			Final Weight/Volume:	10 mL
Prep Date:	08/05/2017 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	101	105	53 - 134	4	30		
2,4-D	72	75	39 - 119	5	30		
Silvex (2,4,5-TP)	114	120	58 - 150	5	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4-Dichlorophenylacetic acid	129	119	80 - 141

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-453879

Method: 6010C
Preparation: 3050B

Lab Sample ID:	MB 460-453879/1-A ^2	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453879	Lab File ID:	453908.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	08/04/2017 1139	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.24	2.0
Arsenic	1.5	U	0.37	1.5
Barium	20.0	U	1.6	20.0
Beryllium	0.20	U	0.023	0.20
Cadmium	0.40	U	0.060	0.40
Chromium	1.0	U	0.28	1.0
Cobalt	5.0	U	0.57	5.0
Copper	2.5	U	0.57	2.5
Lead	1.0	U	0.30	1.0
Manganese	1.5	U	0.16	1.5
Nickel	4.0	U	0.38	4.0
Selenium	2.0	U	0.61	2.0
Silver	1.0	U	0.15	1.0
Thallium	2.0	U	0.59	2.0
Vanadium	5.0	U	0.60	5.0
Zinc	3.0	U	0.26	3.0

Client: AKRF Inc

Job Number: 460-138465-1

LCS-Certified Reference Material - Batch: 460-453879

Method: 6010C
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-453879/2-A	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453879	Lab File ID:	453908.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	08/04/2017 1143	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	65.1	47.47	72.9	0.2 - 212.0	
Arsenic	147	132.6	90.2	83.0 - 117.0	
Barium	314	307.5	97.9	82.2 - 117.8	
Beryllium	53.4	53.60	100.4	82.8 - 117.2	
Cadmium	193	190.3	98.6	82.4 - 117.6	
Chromium	82.6	78.42	94.9	81.8 - 118.2	
Cobalt	81.3	83.88	103.2	83.4 - 116.6	
Copper	171	160.9	94.1	83.6 - 116.4	
Lead	92.3	85.76	92.9	82.8 - 117.0	
Manganese	222	214.5	96.6	82.0 - 118.0	
Nickel	137	141.4	103.2	82.5 - 118.2	
Selenium	187	179.5	96.0	79.1 - 121.4	
Silver	40.7	37.15	91.3	79.6 - 120.4	
Thallium	153	157.5	103.0	81.0 - 119.0	
Vanadium	86.6	83.52	96.4	77.6 - 122.4	
Zinc	189	194.7	103.0	79.9 - 120.1	

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike - Batch: 460-453879

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138495-A-3-F MS	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453879	Lab File ID:	453908.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.27 g
Analysis Date:	08/04/2017 1158	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	3.3	U	42.7	27.67	65	75 - 125	N
Arsenic	4.2		171	168.9	96	75 - 125	
Barium	24.5	J	171	199.7	103	75 - 125	
Beryllium	0.21	J	4.27	4.51	101	75 - 125	
Cadmium	0.65	U	4.27	4.35	102	75 - 125	
Chromium	12.1		17.1	37.54	149	75 - 125	N
Cobalt	6.0	J	42.7	51.51	107	75 - 125	
Copper	21.5		21.3	42.97	100	75 - 125	
Lead	8.2		42.7	52.02	103	75 - 125	
Manganese	236		42.7	273.6	87	75 - 125	4
Nickel	20.9		42.7	63.42	100	75 - 125	
Selenium	3.3	U	171	170.4	100	75 - 125	
Silver	1.6	U	4.27	4.34	102	75 - 125	
Thallium	3.3	U	171	185.5	109	75 - 125	
Vanadium	11.4		42.7	60.24	114	75 - 125	
Zinc	47.8		42.7	89.48	98	75 - 125	

Client: AKRF Inc

Job Number: 460-138465-1

Duplicate - Batch: 460-453879

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138495-A-3-E DU	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453879	Lab File ID:	453908.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.31 g
Analysis Date:	08/04/2017 1146	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	3.3	U	3.3	NC	20	U
Arsenic	4.2		3.70	13	20	
Barium	24.5	J	25.02	2	20	J
Beryllium	0.21	J	0.215	2	20	J
Cadmium	0.65	U	0.66	NC	20	U
Chromium	12.1		12.37	3	20	
Cobalt	6.0	J	6.16	2	20	J
Copper	21.5		22.02	2	20	
Lead	8.2		8.24	0.2	20	
Manganese	236		241.4	2	20	
Nickel	20.9		21.34	2	20	
Selenium	3.3	U	1.25	NC	20	J
Silver	1.6	U	1.7	NC	20	U
Thallium	3.3	U	3.3	NC	20	U
Vanadium	11.4		11.61	2	20	
Zinc	47.8		48.90	2	20	

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-453881

Method: 6010C
Preparation: 3050B

Lab Sample ID:	MB 460-453881/1-A ^2	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	08/04/2017 1354	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	2.0	U	0.24	2.0
Arsenic	1.5	U	0.37	1.5
Barium	20.0	U	1.6	20.0
Beryllium	0.20	U	0.023	0.20
Cadmium	0.40	U	0.060	0.40
Chromium	1.0	U	0.28	1.0
Cobalt	5.0	U	0.57	5.0
Copper	2.5	U	0.57	2.5
Lead	1.0	U	0.30	1.0
Manganese	1.5	U	0.16	1.5
Nickel	4.0	U	0.38	4.0
Selenium	2.0	U	0.61	2.0
Silver	1.0	U	0.15	1.0
Thallium	2.0	U	0.59	2.0
Vanadium	5.0	U	0.60	5.0
Zinc	3.0	U	0.26	3.0

Client: AKRF Inc

Job Number: 460-138465-1

LCS-Certified Reference Material - Batch: 460-453881

Method: 6010C
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-453881/2-A	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	08/04/2017 1358	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	65.1	54.26	83.3	0.2 - 212.0	
Arsenic	147	136.1	92.6	83.0 - 117.0	
Barium	314	319.0	101.6	82.2 - 117.8	
Beryllium	53.4	55.52	104.0	82.8 - 117.2	
Cadmium	193	201.2	104.2	82.4 - 117.6	
Chromium	82.6	80.69	97.7	81.8 - 118.2	
Cobalt	81.3	89.49	110.1	83.4 - 116.6	
Copper	171	164.5	96.2	83.6 - 116.4	
Lead	92.3	87.98	95.3	82.8 - 117.0	
Manganese	222	233.1	105.0	82.0 - 118.0	
Nickel	137	150.5	109.8	82.5 - 118.2	
Selenium	187	187.8	100.4	79.1 - 121.4	
Silver	40.7	37.78	92.8	79.6 - 120.4	
Thallium	153	164.1	107.2	81.0 - 119.0	
Vanadium	86.6	87.84	101.4	77.6 - 122.4	
Zinc	189	207.7	109.9	79.9 - 120.1	

Client: AKRF Inc

Job Number: 460-138465-1

Matrix Spike - Batch: 460-453881

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138430-G-1-A MS	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.35 g
Analysis Date:	08/04/2017 1413	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	4.1	J	68.5	37.24	48	75 - 125	N
Arsenic	843		274	1094	92	75 - 125	
Barium	53.9	J	274	308.8	93	75 - 125	
Beryllium	0.35	J	6.85	6.79	94	75 - 125	
Cadmium	0.95	J	6.85	7.23	92	75 - 125	
Chromium	16.9		27.4	43.68	98	75 - 125	
Cobalt	6.0	J	68.5	71.69	96	75 - 125	
Copper	65.1		34.3	96.16	91	75 - 125	
Lead	148		68.5	199.6	75	75 - 125	
Manganese	524		68.5	579.0	80	75 - 125	4
Nickel	15.8		68.5	78.37	91	75 - 125	
Selenium	2.3	J	274	244.3	88	75 - 125	
Silver	2.7	U	6.85	6.72	98	75 - 125	
Thallium	5.4	U	274	266.8	97	75 - 125	
Vanadium	15.4		68.5	81.31	96	75 - 125	
Zinc	734		68.5	768.1	50	75 - 125	4

Client: AKRF Inc

Job Number: 460-138465-1

Duplicate - Batch: 460-453881

Method: 6010C
Preparation: 3050B

Lab Sample ID:	460-138430-A-1-D DU	Analysis Batch:	460-454076	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-453881	Lab File ID:	453908.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.36 g
Analysis Date:	08/04/2017 1401	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/03/2017 2115				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	4.1	J	3.91	5	20	J
Arsenic	843		834.8	0.9	20	
Barium	53.9	J	53.70	0.5	20	J
Beryllium	0.35	J	0.328	6	20	J
Cadmium	0.95	J	0.932	2	20	J
Chromium	16.9		16.66	1	20	
Cobalt	6.0	J	6.11	1	20	J
Copper	65.1		64.96	0.3	20	
Lead	148		148.3	0.1	20	
Manganese	524		522.5	0.3	20	
Nickel	15.8		15.73	0.3	20	
Selenium	2.3	J	2.63	12	20	J
Silver	2.7	U	2.7	NC	20	U
Thallium	5.4	U	5.4	NC	20	U
Vanadium	15.4		15.10	2	20	
Zinc	734		730.4	0.5	20	

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454708

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-454708/10-A	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0806	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-454708

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-454708/11-	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0808	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	16.82	94.5	66.9 - 133.1	

Matrix Spike - Batch: 460-454708

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138542-I-4-G MS	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.62 g
Analysis Date:	08/08/2017 0813	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.073	0.0847	0.137	76	75 - 125	

Client: AKRF Inc

Job Number: 460-138465-1

Duplicate - Batch: 460-454708

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138542-I-4-F DU	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454708	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.62 g
Analysis Date:	08/08/2017 0812	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0338				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.073	0.0778	7	20	

Method Blank - Batch: 460-454709

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-454709/1-A	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0857	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-454709

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-454709/2-A	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0858	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	17.27	97.0	66.9 - 133.1	

Matrix Spike - Batch: 460-454709

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138699-A-17-I MS ^4	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	400	Leach Batch:	N/A	Initial Weight/Volume:	0.65 g
Analysis Date:	08/08/2017 1051	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	131	0.0843	176.1	54008	75 - 125	4

Client: AKRF Inc

Job Number: 460-138465-1

Duplicate - Batch: 460-454709

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138699-A-17-H DU ^	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454709	Lab File ID:	454708.CSV
Dilution:	400	Leach Batch:	N/A	Initial Weight/Volume:	0.65 g
Analysis Date:	08/08/2017 1046	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0406				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	131	126.1	4	20	

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 460-454720

Method: 7471B
Preparation: 7471B

Lab Sample ID:	MB 460-454720/1-A	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0951	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.017	U	0.011	0.017

LCS-Certified Reference Material - Batch: 460-454720

Method: 7471B
Preparation: 7471B

Lab Sample ID:	LCSSRM 460-454720/2-A	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	40	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	08/08/2017 0953	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	17.8	16.59	93.2	66.9 - 133.1	

Matrix Spike - Batch: 460-454720

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138465-11	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.65 g
Analysis Date:	08/08/2017 0958	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.049	0.0846	0.131	97	75 - 125	

Client: AKRF Inc

Job Number: 460-138465-1

Duplicate - Batch: 460-454720

Method: 7471B
Preparation: 7471B

Lab Sample ID:	460-138465-11	Analysis Batch:	460-454799	Instrument ID:	LEEMAN7
Client Matrix:	Solid	Prep Batch:	460-454720	Lab File ID:	454708.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.65 g
Analysis Date:	08/08/2017 0956	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/08/2017 0448				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.049	0.0556	12	20	

Method Blank - Batch: 460-454846

Method: 7196A
Preparation: 3060A

Lab Sample ID:	MB 460-454846/1-A	Analysis Batch:	460-455014	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454846	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/09/2017 1055	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/08/2017 1423				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium, hexavalent	2.0	U	0.40	2.0

Lab Control Sample Insoluble - Batch: 460-454846

Method: 7196A
Preparation: 3060A

Lab Sample ID:	LCSI 460-454846/3-A	Analysis Batch:	460-455014	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454846	Lab File ID:	N/A
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/09/2017 1055	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/08/2017 1423				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	708	769.4	109	80 - 120	

Matrix Spike Soluble - Batch: 460-454846

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138463-F-1-C MSS	Analysis Batch:	460-455014	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454846	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/09/2017 1055	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/08/2017 1423				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	2.3	U	46.7	40.59	87	75 - 125	

Matrix Spike Insoluble - Batch: 460-454846

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138463-F-1-D MSI	Analysis Batch:	460-455014	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454846	Lab File ID:	N/A
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/09/2017 1055	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/08/2017 1423				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	2.3	U	826	701.9	85	75 - 125	

Duplicate - Batch: 460-454846

Method: 7196A
Preparation: 3060A

Lab Sample ID:	460-138463-F-1-B DU	Analysis Batch:	460-455014	Instrument ID:	WetHexSpec
Client Matrix:	Solid	Prep Batch:	460-454846	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2.50 g
Analysis Date:	08/09/2017 1055	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	08/08/2017 1423				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chromium, hexavalent	2.3	U	2.3	NC	20	U

Client: AKRF Inc

Job Number: 460-138465-1

Method Blank - Batch: 480-371235

Method: 9012B
Preparation: 9012B

Lab Sample ID:	MB 480-371235/1-A	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5152 g
Analysis Date:	08/09/2017 1237	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.97	U	0.47	0.97

LCS-Certified Reference Material - Batch: 480-371235

Method: 9012B
Preparation: 9012B

Lab Sample ID:	LCSSRM 480-371235/2-A	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5181 g
Analysis Date:	08/09/2017 1238	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	86.4	75.08	86.9	29.1 - 119.2	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-371235

Method: 9012B
Preparation: 9012B

MS Lab Sample ID:	460-138369-D-13-B MS	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5090 g
Analysis Date:	08/09/2017 1241			Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

MSD Lab Sample ID:	460-138369-D-13-C MSD	Analysis Batch:	480-371297	Instrument ID:	LACHAT2
Client Matrix:	Solid	Prep Batch:	480-371235	Lab File ID:	OM_8-9-2017_11-59-07
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.5077 g
Analysis Date:	08/09/2017 1243			Final Weight/Volume:	50 mL
Prep Date:	08/09/2017 0850				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cyanide, Total	87	86	85 - 115	1	15		

Client: AKRF Inc

Job Number: 460-138465-1

Duplicate - Batch: 460-454651

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-138475-E-1 DU	Analysis Batch:	460-454651	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/07/2017 1750	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	13.5	13.1	2	20	
Percent Solids	86.5	86.9	0.4	20	

777 New Durham Road
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CHAIN OF CUSTODY / ANALYSIS REQUEST

08/14/2017

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Name (for report and invoice): Rebecca Wood	Samplers Name (Printed): Jacob Menken	Site/Project Identification: St. John Villa Phase II
Company: AKRF, INC.	P. O. #: 89215	State (Location of site): NJ ☐ NY ☒ Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: NY State: NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY: Project No:
Phone: 914-922-2362 Fax:		Job No: 158465

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	SVOC + TICs	Pest. Herb.	PCBs	TAL Metals	Cyanide	Hex. chrom.	Dioxins TPH			Sample Numbers
SB-19 (0-2')	8/2/17	1025	Soil	8	X	X	X	X	X	X	X	X			1
SB-19 (3-5')		1025		5	X	X	X	X	X	X					2
SB-19 (10-12')		1035		5	X	X	X	X	X	X					3
SB-19 (13-15')		1035		5	X	X	X	X	X	X					4
SB-5 (1-3')		1540		6	X	X	X	X	X	X					5
SB-5 (10-12')		1545		6	X	X	X	X	X	X					6
SB-10 (1-3')		1305		6	X	X	X	X	X	X					7
SB-10 (10-12')		1310		6	X	X	X	X	X	X					8
SB-11 (1-3')		1293		6	X	X	X	X	X	X					9
SB-11 (10-12')		1295		6	X	X	X	X	X	X					10

SHORT HOLD

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil:	1	1	1	1	1	1	1	1	1		
Water:											

Special Instructions: CAT. A, TAL + CP-51 Table 3

Water Metals Filtered (Yes/No)? _____

	Relinquished by	Company	Date / Time	Received by	Company
1)	Jacob Menken	AKRF	8/3/17 1120	1)	TAEDR
2)		TAEDR	8/3/17 1211	2)	8/3/17
3)				3)	
4)				4)	

450-138485 Chain of Custody

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), C

Massachusetts (M-NJ312), North Carolina (No. 578) DRG-24 NOCS

TAL - 8015 (0715)

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Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

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CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 2 of 2

Name (Jobreport and Invoice): Rebecca Kinal	Sampler's Name (Printed): Jack Meeker	Site/Project Identification: St. John Villa Phase II
Company: AKRF, INC.	P. O. #: 89215	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 440 Park Ave S.	Analysis Turnaround Time: Standard ☒	Regulatory Program: DKQP: ☐
City: NY State: NY	Rush Charges Authorized For: 1 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY: Project No:
Phone: 914-922-2362 Fax:		Job No: 138465

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	Metals + TAL	PCBs	Herb.	Pest.	TAL metals					Sample Numbers
SB-12 (1-3')	8/2/17	1145	Soil	6											11
SB-12 (10-12')	↓	1155	↓	6											12
SB-13 (1-3')		1615		6											13
SB-13 (10-12')	↓	1650	↓	6											14

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

	VOC	Metals + TAL	PCBs	Herb.	Pest.	TAL metals					
Soil:	1	1	1	1	1	1					
Water:											

Special Instructions: CAT. A, TCL + CP-51 Table 3

Water Metals Filtered (Yes/No)? _____

	Company	Date / Time		Company
Relinquished by 1) Jack Meeker	AKRF	8/3/17, 1120	Received by 1)	TAEdi
Relinquished by 2)	Company TAEdi	Date / Time 8/3/17 1241	Received by 2)	Company 8/3/17 1241
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL-0010 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

08/14/2017

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 138465

Number of Coolers: 1

IR Gun #: 8

Cooler Temperatures

	Raw	Corrected		Raw	Corrected		Raw	Corrected
Cooler #1:	2.4 °C	2.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-8)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: RC Date: 8/3/17

08/14/2017

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Haas, Melissa	Carrier Tracking No(s):	COC No: 460-49089.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: melissa.haas@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-138465-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 8/10/2017			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 46023897			
Project Name: St John Villa, #60215	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-18(0-2') (460-138465-1)	8/2/17	10:25 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[signature]	8/4/17 1800	DEL	[signature]	08/05/17 0900	TA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.4#1

08/14/2017

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138465-1

Login Number: 138465
List Number: 1
Creator: Rivera, Kenneth

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4°C, IR #9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	See NCM
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	See NCM
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 460-138465-1

Login Number: 138465
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 08/07/17 02:21 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4 #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

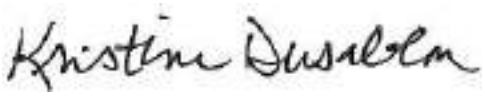
Job Number: 200-39613-1

SDG Number: 200-39613-1

Job Description: NYSCA Projects

For:
AKRF Inc
34 South Broadway
Suite 314
White Plains, NY 10601

Attention: Becky Kinal



Approved for release.
Kristine A Dusablon
Project Manager II
8/11/2017 4:36 PM

Kristine A Dusablon, Project Manager II
30 Community Drive, South Burlington, VT, 05403
(802)660-1990
kris.dusablon@testamericainc.com
08/11/2017

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: AKRF Inc

Project: NYSCA Projects

Report Number: 200-39613-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 08/05/2017; the samples arrived in good condition.

VOLATILE ORGANIC COMPOUNDS
Samples SV-1, SV-2, SV-3, SV-4 and SV-5 were analyzed for Volatile Organic Compounds in accordance with EPA Method TO-15. The samples were analyzed on 08/07/2017 and 08/08/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Client Sample ID: SV-1 — Lab Sample ID: 200-39613-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.28	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.23	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.57		0.20	0.029	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.55		0.20	0.026	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.052	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Benzene	0.58		0.20	0.028	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.22		0.20	0.0091	ppb v/v	1		TO-15	Total/NA
Toluene	0.65		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	2.0		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Chlorobenzene	0.033	J	0.20	0.025	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.32		0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.32	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.13	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.067	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.20		0.20	0.057	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.14	J	0.20	0.050	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.59	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.78	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	2.3		0.79	0.11	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	3.0		1.1	0.14	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.33	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Benzene	1.9		0.64	0.089	ug/m3	1		TO-15	Total/NA
Trichloroethene	1.2		1.1	0.049	ug/m3	1		TO-15	Total/NA
Toluene	2.4		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	13		1.4	0.066	ug/m3	1		TO-15	Total/NA
Chlorobenzene	0.15	J	0.92	0.12	ug/m3	1		TO-15	Total/NA
Ethylbenzene	1.4		0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	1.4	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.54	J	0.87	0.17	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.33	J	0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.96		0.98	0.28	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.82	J	1.2	0.30	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-2 — Lab Sample ID: 200-39613-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.097	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.028	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Benzene	0.14	J	0.20	0.028	ppb v/v	1		TO-15	Total/NA
Toluene	0.35		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.23		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.17	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.48	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.23		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.38		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.0		0.20	0.057	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.12	J	0.20	0.050	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.16	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-2 (Continued) — Lab Sample ID: 200-39613-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.34	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.18	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Benzene	0.44	J	0.64	0.089	ug/m3	1		TO-15	Total/NA
Toluene	1.3		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.6		1.4	0.066	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.75	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	2.1	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.98		0.87	0.17	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.9		0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	4.9		0.98	0.28	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.75	J	1.2	0.30	ug/m3	1		TO-15	Total/NA
Naphthalene	0.82	J	2.6	0.52	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-3 — Lab Sample ID: 200-39613-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.17	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.094	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.026	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Benzene	0.73		0.20	0.028	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.30		0.20	0.034	ppb v/v	1		TO-15	Total/NA
Toluene	1.6		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.10	J	0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.19	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.34	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.14	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.087	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.13	J	0.20	0.057	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.34	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.33	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.16	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Benzene	2.3		0.64	0.089	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethane	1.2		0.81	0.14	ug/m3	1		TO-15	Total/NA
Toluene	5.9		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.68	J	1.4	0.066	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.81	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	1.5	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	0.59	J	0.87	0.17	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.43	J	0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.62	J	0.98	0.28	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-4 — Lab Sample ID: 200-39613-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.30	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.069	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.044	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Benzene	0.18	J	0.20	0.028	ppb v/v	1		TO-15	Total/NA
Toluene	0.65		0.20	0.035	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-4 (Continued)

Lab Sample ID: 200-39613-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.27		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Chlorobenzene	0.025	J	0.20	0.025	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.98		0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	6.7		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	3.1		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	5.8		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	11		0.20	0.057	ppb v/v	1		TO-15	Total/NA
1,3-Dichlorobenzene	0.40		0.20	0.050	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.30	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.61	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.24	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.28	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Benzene	0.58	J	0.64	0.089	ug/m3	1		TO-15	Total/NA
Toluene	2.5		0.75	0.13	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.8		1.4	0.066	ug/m3	1		TO-15	Total/NA
Chlorobenzene	0.11	J	0.92	0.12	ug/m3	1		TO-15	Total/NA
Ethylbenzene	4.3		0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	29		2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	13		0.87	0.17	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	29		0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	54		0.98	0.28	ug/m3	1		TO-15	Total/NA
1,3-Dichlorobenzene	2.4		1.2	0.30	ug/m3	1		TO-15	Total/NA
Naphthalene	1.6	J	2.6	0.52	ug/m3	1		TO-15	Total/NA

Client Sample ID: SV-5

Lab Sample ID: 200-39613-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.24	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.13	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.035	J	0.20	0.029	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.034	J	0.20	0.026	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.055	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Benzene	0.16	J	0.20	0.028	ppb v/v	1		TO-15	Total/NA
Toluene	0.43		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.43		0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.11	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.50		0.50	0.077	ppb v/v	1		TO-15	Total/NA
Xylene, o-	0.35		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.30		0.20	0.040	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.82		0.20	0.057	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.12	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.49	J	1.0	0.33	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.43	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	0.14	J	0.79	0.11	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	0.19	J	1.1	0.14	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.34	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Benzene	0.50	J	0.64	0.089	ug/m3	1		TO-15	Total/NA
Toluene	1.6		0.75	0.13	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-5 (Continued)

Lab Sample ID: 200-39613-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.9		1.4	0.066	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.48	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
m,p-Xylene	2.2		2.2	0.33	ug/m3	1		TO-15	Total/NA
Xylene, o-	1.5		0.87	0.17	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.5		0.98	0.20	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	4.0		0.98	0.28	ug/m3	1		TO-15	Total/NA
Naphthalene	0.63	J	2.6	0.52	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-1

Date Collected: 08/03/17 10:00
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39613-1

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.28**	**J**	0.50	0.16	ppb v/v			08/07/17 21:21	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/07/17 21:21	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/07/17 21:21	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/07/17 21:21	1
Methylene Chloride	**0.23**	**J**	0.50	0.068	ppb v/v			08/07/17 21:21	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/07/17 21:21	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/07/17 21:21	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/07/17 21:21	1
cis-1,2-Dichloroethene	**0.57**		0.20	0.029	ppb v/v			08/07/17 21:21	1
1,1,1-Trichloroethane	**0.55**		0.20	0.026	ppb v/v			08/07/17 21:21	1
Carbon tetrachloride	**0.052**	**J**	0.20	0.011	ppb v/v			08/07/17 21:21	1
Benzene	**0.58**		0.20	0.028	ppb v/v			08/07/17 21:21	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/07/17 21:21	1
Trichloroethene	**0.22**		0.20	0.0091	ppb v/v			08/07/17 21:21	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/07/17 21:21	1
Toluene	**0.65**		0.20	0.035	ppb v/v			08/07/17 21:21	1
Tetrachloroethene	**2.0**		0.20	0.0098	ppb v/v			08/07/17 21:21	1
Chlorobenzene	**0.033**	**J**	0.20	0.025	ppb v/v			08/07/17 21:21	1
Ethylbenzene	**0.32**		0.20	0.034	ppb v/v			08/07/17 21:21	1
m,p-Xylene	**0.32**	**J**	0.50	0.077	ppb v/v			08/07/17 21:21	1
Xylene, o-	**0.13**	**J**	0.20	0.040	ppb v/v			08/07/17 21:21	1
1,3,5-Trimethylbenzene	**0.067**	**J**	0.20	0.040	ppb v/v			08/07/17 21:21	1
1,2,4-Trimethylbenzene	**0.20**		0.20	0.057	ppb v/v			08/07/17 21:21	1
1,3-Dichlorobenzene	**0.14**	**J**	0.20	0.050	ppb v/v			08/07/17 21:21	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/07/17 21:21	1
Naphthalene	0.10	U	0.50	0.10	ppb v/v			08/07/17 21:21	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.59**	**J**	1.0	0.33	ug/m3			08/07/17 21:21	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/07/17 21:21	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/07/17 21:21	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/07/17 21:21	1
Methylene Chloride	**0.78**	**J**	1.7	0.24	ug/m3			08/07/17 21:21	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/07/17 21:21	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/07/17 21:21	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/07/17 21:21	1
cis-1,2-Dichloroethene	**2.3**		0.79	0.11	ug/m3			08/07/17 21:21	1
1,1,1-Trichloroethane	**3.0**		1.1	0.14	ug/m3			08/07/17 21:21	1
Carbon tetrachloride	**0.33**	**J**	1.3	0.069	ug/m3			08/07/17 21:21	1
Benzene	**1.9**		0.64	0.089	ug/m3			08/07/17 21:21	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/07/17 21:21	1
Trichloroethene	**1.2**		1.1	0.049	ug/m3			08/07/17 21:21	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/07/17 21:21	1
Toluene	**2.4**		0.75	0.13	ug/m3			08/07/17 21:21	1
Tetrachloroethene	**13**		1.4	0.066	ug/m3			08/07/17 21:21	1
Chlorobenzene	**0.15**	**J**	0.92	0.12	ug/m3			08/07/17 21:21	1
Ethylbenzene	**1.4**		0.87	0.15	ug/m3			08/07/17 21:21	1
m,p-Xylene	**1.4**	**J**	2.2	0.33	ug/m3			08/07/17 21:21	1
Xylene, o-	**0.54**	**J**	0.87	0.17	ug/m3			08/07/17 21:21	1

Client Sample ID: SV-1

Lab Sample ID: 200-39613-1

Date Collected: 08/03/17 10:00
Matrix: Air
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**0.33**	**J**	0.98	0.20	ug/m3			08/07/17 21:21	1
1,2,4-Trimethylbenzene	**0.96**		0.98	0.28	ug/m3			08/07/17 21:21	1
1,3-Dichlorobenzene	**0.82**	**J**	1.2	0.30	ug/m3			08/07/17 21:21	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/07/17 21:21	1
Naphthalene	0.52	U	2.6	0.52	ug/m3			08/07/17 21:21	1

Client Sample ID: SV-2

Lab Sample ID: 200-39613-2

Date Collected: 08/03/17 10:25
Matrix: Air
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.16	U	0.50	0.16	ppb v/v			08/07/17 22:12	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/07/17 22:12	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/07/17 22:12	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/07/17 22:12	1
Methylene Chloride	**0.097**	**J**	0.50	0.068	ppb v/v			08/07/17 22:12	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/07/17 22:12	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/07/17 22:12	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/07/17 22:12	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/07/17 22:12	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/07/17 22:12	1
Carbon tetrachloride	**0.028**	**J**	0.20	0.011	ppb v/v			08/07/17 22:12	1
Benzene	**0.14**	**J**	0.20	0.028	ppb v/v			08/07/17 22:12	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/07/17 22:12	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/07/17 22:12	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/07/17 22:12	1
Toluene	**0.35**		0.20	0.035	ppb v/v			08/07/17 22:12	1
Tetrachloroethene	**0.23**		0.20	0.0098	ppb v/v			08/07/17 22:12	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/07/17 22:12	1
Ethylbenzene	**0.17**	**J**	0.20	0.034	ppb v/v			08/07/17 22:12	1
m,p-Xylene	**0.48**	**J**	0.50	0.077	ppb v/v			08/07/17 22:12	1
Xylene, o-	**0.23**		0.20	0.040	ppb v/v			08/07/17 22:12	1
1,3,5-Trimethylbenzene	**0.38**		0.20	0.040	ppb v/v			08/07/17 22:12	1
1,2,4-Trimethylbenzene	**1.0**		0.20	0.057	ppb v/v			08/07/17 22:12	1
1,3-Dichlorobenzene	**0.12**	**J**	0.20	0.050	ppb v/v			08/07/17 22:12	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/07/17 22:12	1
Naphthalene	**0.16**	**J**	0.50	0.10	ppb v/v			08/07/17 22:12	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.33	U	1.0	0.33	ug/m3			08/07/17 22:12	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/07/17 22:12	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/07/17 22:12	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/07/17 22:12	1
Methylene Chloride	**0.34**	**J**	1.7	0.24	ug/m3			08/07/17 22:12	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/07/17 22:12	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/07/17 22:12	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/07/17 22:12	1

Client Sample ID: SV-2

Lab Sample ID: 200-39613-2

Date Collected: 08/03/17 10:25
Matrix: Air
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/07/17 22:12	1
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/07/17 22:12	1
Carbon tetrachloride	**0.18**	**J**	1.3	0.069	ug/m3			08/07/17 22:12	1
Benzene	**0.44**	**J**	0.64	0.089	ug/m3			08/07/17 22:12	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/07/17 22:12	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/07/17 22:12	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/07/17 22:12	1
Toluene	**1.3**		0.75	0.13	ug/m3			08/07/17 22:12	1
Tetrachloroethene	**1.6**		1.4	0.066	ug/m3			08/07/17 22:12	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/07/17 22:12	1
Ethylbenzene	**0.75**	**J**	0.87	0.15	ug/m3			08/07/17 22:12	1
m,p-Xylene	**2.1**	**J**	2.2	0.33	ug/m3			08/07/17 22:12	1
Xylene, o-	**0.98**		0.87	0.17	ug/m3			08/07/17 22:12	1
1,3,5-Trimethylbenzene	**1.9**		0.98	0.20	ug/m3			08/07/17 22:12	1
1,2,4-Trimethylbenzene	**4.9**		0.98	0.28	ug/m3			08/07/17 22:12	1
1,3-Dichlorobenzene	**0.75**	**J**	1.2	0.30	ug/m3			08/07/17 22:12	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/07/17 22:12	1
Naphthalene	**0.82**	**J**	2.6	0.52	ug/m3			08/07/17 22:12	1

Client Sample ID: SV-3

Lab Sample ID: 200-39613-3

Date Collected: 08/03/17 12:00
Matrix: Air
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.17**	**J**	0.50	0.16	ppb v/v			08/07/17 23:02	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/07/17 23:02	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/07/17 23:02	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/07/17 23:02	1
Methylene Chloride	**0.094**	**J**	0.50	0.068	ppb v/v			08/07/17 23:02	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/07/17 23:02	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/07/17 23:02	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/07/17 23:02	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/07/17 23:02	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/07/17 23:02	1
Carbon tetrachloride	**0.026**	**J**	0.20	0.011	ppb v/v			08/07/17 23:02	1
Benzene	**0.73**		0.20	0.028	ppb v/v			08/07/17 23:02	1
1,2-Dichloroethane	**0.30**		0.20	0.034	ppb v/v			08/07/17 23:02	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/07/17 23:02	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/07/17 23:02	1
Toluene	**1.6**		0.20	0.035	ppb v/v			08/07/17 23:02	1
Tetrachloroethene	**0.10**	**J**	0.20	0.0098	ppb v/v			08/07/17 23:02	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/07/17 23:02	1
Ethylbenzene	**0.19**	**J**	0.20	0.034	ppb v/v			08/07/17 23:02	1
m,p-Xylene	**0.34**	**J**	0.50	0.077	ppb v/v			08/07/17 23:02	1
Xylene, o-	**0.14**	**J**	0.20	0.040	ppb v/v			08/07/17 23:02	1
1,3,5-Trimethylbenzene	**0.087**	**J**	0.20	0.040	ppb v/v			08/07/17 23:02	1
1,2,4-Trimethylbenzene	**0.13**	**J**	0.20	0.057	ppb v/v			08/07/17 23:02	1

Client Sample ID: SV-3

Lab Sample ID: 200-39613-3

Date Collected: 08/03/17 12:00
Matrix: Air
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.050	U	0.20	0.050	ppb v/v			08/07/17 23:02	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/07/17 23:02	1
Naphthalene	0.10	U	0.50	0.10	ppb v/v			08/07/17 23:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.34**	**J**	1.0	0.33	ug/m3			08/07/17 23:02	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/07/17 23:02	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/07/17 23:02	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/07/17 23:02	1
Methylene Chloride	**0.33**	**J**	1.7	0.24	ug/m3			08/07/17 23:02	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/07/17 23:02	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/07/17 23:02	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/07/17 23:02	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/07/17 23:02	1
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/07/17 23:02	1
Carbon tetrachloride	**0.16**	**J**	1.3	0.069	ug/m3			08/07/17 23:02	1
Benzene	**2.3**		0.64	0.089	ug/m3			08/07/17 23:02	1
1,2-Dichloroethane	**1.2**		0.81	0.14	ug/m3			08/07/17 23:02	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/07/17 23:02	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/07/17 23:02	1
Toluene	**5.9**		0.75	0.13	ug/m3			08/07/17 23:02	1
Tetrachloroethene	**0.68**	**J**	1.4	0.066	ug/m3			08/07/17 23:02	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/07/17 23:02	1
Ethylbenzene	**0.81**	**J**	0.87	0.15	ug/m3			08/07/17 23:02	1
m,p-Xylene	**1.5**	**J**	2.2	0.33	ug/m3			08/07/17 23:02	1
Xylene, o-	**0.59**	**J**	0.87	0.17	ug/m3			08/07/17 23:02	1
1,3,5-Trimethylbenzene	**0.43**	**J**	0.98	0.20	ug/m3			08/07/17 23:02	1
1,2,4-Trimethylbenzene	**0.62**	**J**	0.98	0.28	ug/m3			08/07/17 23:02	1
1,3-Dichlorobenzene	0.30	U	1.2	0.30	ug/m3			08/07/17 23:02	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/07/17 23:02	1
Naphthalene	0.52	U	2.6	0.52	ug/m3			08/07/17 23:02	1

Client Sample ID: SV-4

Lab Sample ID: 200-39613-4

Date Collected: 08/03/17 11:00
Matrix: Air
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.30**	**J**	0.50	0.16	ppb v/v			08/07/17 23:53	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/07/17 23:53	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/07/17 23:53	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/07/17 23:53	1
Methylene Chloride	**0.069**	**J**	0.50	0.068	ppb v/v			08/07/17 23:53	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/07/17 23:53	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/07/17 23:53	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/07/17 23:53	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/07/17 23:53	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/07/17 23:53	1

Client Sample ID: SV-4

Date Collected: 08/03/17 11:00
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39613-4

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	**0.044**	**J**	0.20	0.011	ppb v/v			08/07/17 23:53	1
Benzene	**0.18**	**J**	0.20	0.028	ppb v/v			08/07/17 23:53	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/07/17 23:53	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/07/17 23:53	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/07/17 23:53	1
Toluene	**0.65**		0.20	0.035	ppb v/v			08/07/17 23:53	1
Tetrachloroethene	**0.27**		0.20	0.0098	ppb v/v			08/07/17 23:53	1
Chlorobenzene	**0.025**	**J**	0.20	0.025	ppb v/v			08/07/17 23:53	1
Ethylbenzene	**0.98**		0.20	0.034	ppb v/v			08/07/17 23:53	1
m,p-Xylene	**6.7**		0.50	0.077	ppb v/v			08/07/17 23:53	1
Xylene, o-	**3.1**		0.20	0.040	ppb v/v			08/07/17 23:53	1
1,3,5-Trimethylbenzene	**5.8**		0.20	0.040	ppb v/v			08/07/17 23:53	1
1,2,4-Trimethylbenzene	**11**		0.20	0.057	ppb v/v			08/07/17 23:53	1
1,3-Dichlorobenzene	**0.40**		0.20	0.050	ppb v/v			08/07/17 23:53	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/07/17 23:53	1
Naphthalene	**0.30**	**J**	0.50	0.10	ppb v/v			08/07/17 23:53	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.61**	**J**	1.0	0.33	ug/m3			08/07/17 23:53	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/07/17 23:53	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/07/17 23:53	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/07/17 23:53	1
Methylene Chloride	**0.24**	**J**	1.7	0.24	ug/m3			08/07/17 23:53	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/07/17 23:53	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/07/17 23:53	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/07/17 23:53	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/07/17 23:53	1
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/07/17 23:53	1
Carbon tetrachloride	**0.28**	**J**	1.3	0.069	ug/m3			08/07/17 23:53	1
Benzene	**0.58**	**J**	0.64	0.089	ug/m3			08/07/17 23:53	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/07/17 23:53	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/07/17 23:53	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/07/17 23:53	1
Toluene	**2.5**		0.75	0.13	ug/m3			08/07/17 23:53	1
Tetrachloroethene	**1.8**		1.4	0.066	ug/m3			08/07/17 23:53	1
Chlorobenzene	**0.11**	**J**	0.92	0.12	ug/m3			08/07/17 23:53	1
Ethylbenzene	**4.3**		0.87	0.15	ug/m3			08/07/17 23:53	1
m,p-Xylene	**29**		2.2	0.33	ug/m3			08/07/17 23:53	1
Xylene, o-	**13**		0.87	0.17	ug/m3			08/07/17 23:53	1
1,3,5-Trimethylbenzene	**29**		0.98	0.20	ug/m3			08/07/17 23:53	1
1,2,4-Trimethylbenzene	**54**		0.98	0.28	ug/m3			08/07/17 23:53	1
1,3-Dichlorobenzene	**2.4**		1.2	0.30	ug/m3			08/07/17 23:53	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/07/17 23:53	1
Naphthalene	**1.6**	**J**	2.6	0.52	ug/m3			08/07/17 23:53	1

Client Sample ID: SV-5

Date Collected: 08/03/17 11:30
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39613-5

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.24**	**J**	0.50	0.16	ppb v/v			08/08/17 00:43	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/08/17 00:43	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/08/17 00:43	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/08/17 00:43	1
Methylene Chloride	**0.13**	**J**	0.50	0.068	ppb v/v			08/08/17 00:43	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/08/17 00:43	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/08/17 00:43	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/08/17 00:43	1
cis-1,2-Dichloroethene	**0.035**	**J**	0.20	0.029	ppb v/v			08/08/17 00:43	1
1,1,1-Trichloroethane	**0.034**	**J**	0.20	0.026	ppb v/v			08/08/17 00:43	1
Carbon tetrachloride	**0.055**	**J**	0.20	0.011	ppb v/v			08/08/17 00:43	1
Benzene	**0.16**	**J**	0.20	0.028	ppb v/v			08/08/17 00:43	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/08/17 00:43	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/08/17 00:43	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/08/17 00:43	1
Toluene	**0.43**		0.20	0.035	ppb v/v			08/08/17 00:43	1
Tetrachloroethene	**0.43**		0.20	0.0098	ppb v/v			08/08/17 00:43	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/08/17 00:43	1
Ethylbenzene	**0.11**	**J**	0.20	0.034	ppb v/v			08/08/17 00:43	1
m,p-Xylene	**0.50**		0.50	0.077	ppb v/v			08/08/17 00:43	1
Xylene, o-	**0.35**		0.20	0.040	ppb v/v			08/08/17 00:43	1
1,3,5-Trimethylbenzene	**0.30**		0.20	0.040	ppb v/v			08/08/17 00:43	1
1,2,4-Trimethylbenzene	**0.82**		0.20	0.057	ppb v/v			08/08/17 00:43	1
1,3-Dichlorobenzene	0.050	U	0.20	0.050	ppb v/v			08/08/17 00:43	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/08/17 00:43	1
Naphthalene	**0.12**	**J**	0.50	0.10	ppb v/v			08/08/17 00:43	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.49**	**J**	1.0	0.33	ug/m3			08/08/17 00:43	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/08/17 00:43	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/08/17 00:43	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/08/17 00:43	1
Methylene Chloride	**0.43**	**J**	1.7	0.24	ug/m3			08/08/17 00:43	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/08/17 00:43	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/08/17 00:43	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/08/17 00:43	1
cis-1,2-Dichloroethene	**0.14**	**J**	0.79	0.11	ug/m3			08/08/17 00:43	1
1,1,1-Trichloroethane	**0.19**	**J**	1.1	0.14	ug/m3			08/08/17 00:43	1
Carbon tetrachloride	**0.34**	**J**	1.3	0.069	ug/m3			08/08/17 00:43	1
Benzene	**0.50**	**J**	0.64	0.089	ug/m3			08/08/17 00:43	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/08/17 00:43	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/08/17 00:43	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/08/17 00:43	1
Toluene	**1.6**		0.75	0.13	ug/m3			08/08/17 00:43	1
Tetrachloroethene	**2.9**		1.4	0.066	ug/m3			08/08/17 00:43	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/08/17 00:43	1
Ethylbenzene	**0.48**	**J**	0.87	0.15	ug/m3			08/08/17 00:43	1
m,p-Xylene	**2.2**		2.2	0.33	ug/m3			08/08/17 00:43	1
Xylene, o-	**1.5**		0.87	0.17	ug/m3			08/08/17 00:43	1

Client Sample ID: SV-5

Date Collected: 08/03/17 11:30
Date Received: 08/05/17 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-39613-5

Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.5**		0.98	0.20	ug/m3			08/08/17 00:43	1
1,2,4-Trimethylbenzene	**4.0**		0.98	0.28	ug/m3			08/08/17 00:43	1
1,3-Dichlorobenzene	0.30	U	1.2	0.30	ug/m3			08/08/17 00:43	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/08/17 00:43	1
Naphthalene	**0.63**	**J**	2.6	0.52	ug/m3			08/08/17 00:43	1

Default Detection Limits

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.20	0.026	ppb v/v	TO-15
1,1,1-Trichloroethane	1.1	0.14	ug/m3	TO-15
1,1-Dichloroethane	0.20	0.017	ppb v/v	TO-15
1,1-Dichloroethane	0.81	0.069	ug/m3	TO-15
1,1-Dichloroethene	0.20	0.035	ppb v/v	TO-15
1,1-Dichloroethene	0.79	0.14	ug/m3	TO-15
1,2,4-Trimethylbenzene	0.20	0.057	ppb v/v	TO-15
1,2,4-Trimethylbenzene	0.98	0.28	ug/m3	TO-15
1,2-Dichlorobenzene	0.20	0.045	ppb v/v	TO-15
1,2-Dichlorobenzene	1.2	0.27	ug/m3	TO-15
1,2-Dichloroethane	0.20	0.034	ppb v/v	TO-15
1,2-Dichloroethane	0.81	0.14	ug/m3	TO-15
1,2-Dichloropropane	0.20	0.035	ppb v/v	TO-15
1,2-Dichloropropane	0.92	0.16	ug/m3	TO-15
1,3,5-Trimethylbenzene	0.20	0.040	ppb v/v	TO-15
1,3,5-Trimethylbenzene	0.98	0.20	ug/m3	TO-15
1,3-Dichlorobenzene	0.20	0.050	ppb v/v	TO-15
1,3-Dichlorobenzene	1.2	0.30	ug/m3	TO-15
Benzene	0.20	0.028	ppb v/v	TO-15
Benzene	0.64	0.089	ug/m3	TO-15
Carbon tetrachloride	0.20	0.011	ppb v/v	TO-15
Carbon tetrachloride	1.3	0.069	ug/m3	TO-15
Chlorobenzene	0.20	0.025	ppb v/v	TO-15
Chlorobenzene	0.92	0.12	ug/m3	TO-15
Chloroethane	0.50	0.13	ppb v/v	TO-15
Chloroethane	1.3	0.34	ug/m3	TO-15
Chloromethane	0.50	0.16	ppb v/v	TO-15
Chloromethane	1.0	0.33	ug/m3	TO-15
cis-1,2-Dichloroethene	0.20	0.029	ppb v/v	TO-15
cis-1,2-Dichloroethene	0.79	0.11	ug/m3	TO-15
Ethylbenzene	0.20	0.034	ppb v/v	TO-15
Ethylbenzene	0.87	0.15	ug/m3	TO-15
m,p-Xylene	0.50	0.077	ppb v/v	TO-15
m,p-Xylene	2.2	0.33	ug/m3	TO-15
Methyl tert-butyl ether	0.20	0.041	ppb v/v	TO-15
Methyl tert-butyl ether	0.72	0.15	ug/m3	TO-15
Methylene Chloride	0.50	0.068	ppb v/v	TO-15
Methylene Chloride	1.7	0.24	ug/m3	TO-15
Naphthalene	0.50	0.10	ppb v/v	TO-15
Naphthalene	2.6	0.52	ug/m3	TO-15
Tetrachloroethene	0.20	0.0098	ppb v/v	TO-15
Tetrachloroethene	1.4	0.066	ug/m3	TO-15
Toluene	0.20	0.035	ppb v/v	TO-15
Toluene	0.75	0.13	ug/m3	TO-15
trans-1,2-Dichloroethene	0.20	0.050	ppb v/v	TO-15
trans-1,2-Dichloroethene	0.79	0.20	ug/m3	TO-15
Trichloroethene	0.20	0.0091	ppb v/v	TO-15
Trichloroethene	1.1	0.049	ug/m3	TO-15
Vinyl chloride	0.20	0.018	ppb v/v	TO-15
Vinyl chloride	0.51	0.046	ug/m3	TO-15
Xylene, o-	0.20	0.040	ppb v/v	TO-15
Xylene, o-	0.87	0.17	ug/m3	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-119430/7
Matrix: Air
Analysis Batch: 119430

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.16	U	0.50	0.16	ppb v/v			08/07/17 18:00	1
Vinyl chloride	0.018	U	0.20	0.018	ppb v/v			08/07/17 18:00	1
Chloroethane	0.13	U	0.50	0.13	ppb v/v			08/07/17 18:00	1
1,1-Dichloroethene	0.035	U	0.20	0.035	ppb v/v			08/07/17 18:00	1
Methylene Chloride	0.068	U	0.50	0.068	ppb v/v			08/07/17 18:00	1
Methyl tert-butyl ether	0.041	U	0.20	0.041	ppb v/v			08/07/17 18:00	1
trans-1,2-Dichloroethene	0.050	U	0.20	0.050	ppb v/v			08/07/17 18:00	1
1,1-Dichloroethane	0.017	U	0.20	0.017	ppb v/v			08/07/17 18:00	1
cis-1,2-Dichloroethene	0.029	U	0.20	0.029	ppb v/v			08/07/17 18:00	1
1,1,1-Trichloroethane	0.026	U	0.20	0.026	ppb v/v			08/07/17 18:00	1
Carbon tetrachloride	0.011	U	0.20	0.011	ppb v/v			08/07/17 18:00	1
Benzene	0.028	U	0.20	0.028	ppb v/v			08/07/17 18:00	1
1,2-Dichloroethane	0.034	U	0.20	0.034	ppb v/v			08/07/17 18:00	1
Trichloroethene	0.0091	U	0.20	0.0091	ppb v/v			08/07/17 18:00	1
1,2-Dichloropropane	0.035	U	0.20	0.035	ppb v/v			08/07/17 18:00	1
Toluene	0.035	U	0.20	0.035	ppb v/v			08/07/17 18:00	1
Tetrachloroethene	0.0098	U	0.20	0.0098	ppb v/v			08/07/17 18:00	1
Chlorobenzene	0.025	U	0.20	0.025	ppb v/v			08/07/17 18:00	1
Ethylbenzene	0.034	U	0.20	0.034	ppb v/v			08/07/17 18:00	1
m,p-Xylene	0.077	U	0.50	0.077	ppb v/v			08/07/17 18:00	1
Xylene, o-	0.040	U	0.20	0.040	ppb v/v			08/07/17 18:00	1
1,3,5-Trimethylbenzene	0.040	U	0.20	0.040	ppb v/v			08/07/17 18:00	1
1,2,4-Trimethylbenzene	0.057	U	0.20	0.057	ppb v/v			08/07/17 18:00	1
1,3-Dichlorobenzene	0.050	U	0.20	0.050	ppb v/v			08/07/17 18:00	1
1,2-Dichlorobenzene	0.045	U	0.20	0.045	ppb v/v			08/07/17 18:00	1
Naphthalene	0.10	U	0.50	0.10	ppb v/v			08/07/17 18:00	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.33	U	1.0	0.33	ug/m3			08/07/17 18:00	1
Vinyl chloride	0.046	U	0.51	0.046	ug/m3			08/07/17 18:00	1
Chloroethane	0.34	U	1.3	0.34	ug/m3			08/07/17 18:00	1
1,1-Dichloroethene	0.14	U	0.79	0.14	ug/m3			08/07/17 18:00	1
Methylene Chloride	0.24	U	1.7	0.24	ug/m3			08/07/17 18:00	1
Methyl tert-butyl ether	0.15	U	0.72	0.15	ug/m3			08/07/17 18:00	1
trans-1,2-Dichloroethene	0.20	U	0.79	0.20	ug/m3			08/07/17 18:00	1
1,1-Dichloroethane	0.069	U	0.81	0.069	ug/m3			08/07/17 18:00	1
cis-1,2-Dichloroethene	0.11	U	0.79	0.11	ug/m3			08/07/17 18:00	1
1,1,1-Trichloroethane	0.14	U	1.1	0.14	ug/m3			08/07/17 18:00	1
Carbon tetrachloride	0.069	U	1.3	0.069	ug/m3			08/07/17 18:00	1
Benzene	0.089	U	0.64	0.089	ug/m3			08/07/17 18:00	1
1,2-Dichloroethane	0.14	U	0.81	0.14	ug/m3			08/07/17 18:00	1
Trichloroethene	0.049	U	1.1	0.049	ug/m3			08/07/17 18:00	1
1,2-Dichloropropane	0.16	U	0.92	0.16	ug/m3			08/07/17 18:00	1
Toluene	0.13	U	0.75	0.13	ug/m3			08/07/17 18:00	1
Tetrachloroethene	0.066	U	1.4	0.066	ug/m3			08/07/17 18:00	1
Chlorobenzene	0.12	U	0.92	0.12	ug/m3			08/07/17 18:00	1
Ethylbenzene	0.15	U	0.87	0.15	ug/m3			08/07/17 18:00	1
m,p-Xylene	0.33	U	2.2	0.33	ug/m3			08/07/17 18:00	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-119430/7
Matrix: Air
Analysis Batch: 119430

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene, o-	0.17	U	0.87	0.17	ug/m3			08/07/17 18:00	1
1,3,5-Trimethylbenzene	0.20	U	0.98	0.20	ug/m3			08/07/17 18:00	1
1,2,4-Trimethylbenzene	0.28	U	0.98	0.28	ug/m3			08/07/17 18:00	1
1,3-Dichlorobenzene	0.30	U	1.2	0.30	ug/m3			08/07/17 18:00	1
1,2-Dichlorobenzene	0.27	U	1.2	0.27	ug/m3			08/07/17 18:00	1
Naphthalene	0.52	U	2.6	0.52	ug/m3			08/07/17 18:00	1

Lab Sample ID: LCS 200-119430/6
Matrix: Air
Analysis Batch: 119430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	8.29		ppb v/v		83	57 - 126
Vinyl chloride	10.0	7.77		ppb v/v		78	62 - 125
Chloroethane	10.0	7.89		ppb v/v		79	65 - 125
1,1-Dichloroethene	10.0	7.27		ppb v/v		73	67 - 127
Methylene Chloride	10.0	8.12		ppb v/v		81	62 - 122
Methyl tert-butyl ether	10.0	7.86		ppb v/v		79	67 - 127
trans-1,2-Dichloroethene	10.0	8.33		ppb v/v		83	72 - 132
1,1-Dichloroethane	10.0	7.78		ppb v/v		78	66 - 126
cis-1,2-Dichloroethene	10.0	7.50		ppb v/v		75	67 - 127
1,1,1-Trichloroethane	10.0	8.10		ppb v/v		81	70 - 130
Carbon tetrachloride	10.0	8.03		ppb v/v		80	62 - 143
Benzene	10.0	7.96		ppb v/v		80	67 - 127
1,2-Dichloroethane	10.0	8.51		ppb v/v		85	67 - 132
Trichloroethene	10.0	7.68		ppb v/v		77	68 - 128
1,2-Dichloropropane	10.0	8.27		ppb v/v		83	67 - 127
Toluene	10.0	8.78		ppb v/v		88	67 - 127
Tetrachloroethene	10.0	7.84		ppb v/v		78	70 - 130
Chlorobenzene	10.0	8.37		ppb v/v		84	68 - 128
Ethylbenzene	10.0	8.69		ppb v/v		87	68 - 128
m,p-Xylene	20.0	16.9		ppb v/v		84	68 - 128
Xylene, o-	10.0	8.29		ppb v/v		83	67 - 127
1,3,5-Trimethylbenzene	10.0	8.66		ppb v/v		87	65 - 125
1,2,4-Trimethylbenzene	10.0	8.84		ppb v/v		88	65 - 125
1,3-Dichlorobenzene	10.0	8.65		ppb v/v		87	67 - 127
1,2-Dichlorobenzene	10.0	8.61		ppb v/v		86	67 - 127
Naphthalene	10.0	7.02		ppb v/v		70	50 - 121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	21	17.1		ug/m3		83	57 - 126
Vinyl chloride	26	19.9		ug/m3		78	62 - 125
Chloroethane	26	20.8		ug/m3		79	65 - 125
1,1-Dichloroethene	40	28.8		ug/m3		73	67 - 127
Methylene Chloride	35	28.2		ug/m3		81	62 - 122
Methyl tert-butyl ether	36	28.3		ug/m3		79	67 - 127
trans-1,2-Dichloroethene	40	33.0		ug/m3		83	72 - 132
1,1-Dichloroethane	40	31.5		ug/m3		78	66 - 126

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-119430/6
Matrix: Air
Analysis Batch: 119430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	40	29.7		ug/m3		75	67 - 127
1,1,1-Trichloroethane	55	44.2		ug/m3		81	70 - 130
Carbon tetrachloride	63	50.5		ug/m3		80	62 - 143
Benzene	32	25.4		ug/m3		80	67 - 127
1,2-Dichloroethane	40	34.4		ug/m3		85	67 - 132
Trichloroethene	54	41.3		ug/m3		77	68 - 128
1,2-Dichloropropane	46	38.2		ug/m3		83	67 - 127
Toluene	38	33.1		ug/m3		88	67 - 127
Tetrachloroethene	68	53.2		ug/m3		78	70 - 130
Chlorobenzene	46	38.6		ug/m3		84	68 - 128
Ethylbenzene	43	37.7		ug/m3		87	68 - 128
m,p-Xylene	87	73.3		ug/m3		84	68 - 128
Xylene, o-	43	36.0		ug/m3		83	67 - 127
1,3,5-Trimethylbenzene	49	42.6		ug/m3		87	65 - 125
1,2,4-Trimethylbenzene	49	43.5		ug/m3		88	65 - 125
1,3-Dichlorobenzene	60	52.0		ug/m3		87	67 - 127
1,2-Dichlorobenzene	60	51.8		ug/m3		86	67 - 127
Naphthalene	52	36.8		ug/m3		70	50 - 121

QC Association Summary

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Air - GC/MS VOA

Analysis Batch: 119430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-39613-1	SV-1	Total/NA	Air	TO-15	
200-39613-2	SV-2	Total/NA	Air	TO-15	
200-39613-3	SV-3	Total/NA	Air	TO-15	
200-39613-4	SV-4	Total/NA	Air	TO-15	
200-39613-5	SV-5	Total/NA	Air	TO-15	
MB 200-119430/7	Method Blank	Total/NA	Air	TO-15	
LCS 200-119430/6	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Client Sample ID: SV-1
Date Collected: 08/03/17 10:00
Date Received: 08/05/17 09:30

Lab Sample ID: 200-39613-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	119430	08/07/17 21:21	K1P	TAL BUR

Client Sample ID: SV-2
Date Collected: 08/03/17 10:25
Date Received: 08/05/17 09:30

Lab Sample ID: 200-39613-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	119430	08/07/17 22:12	K1P	TAL BUR

Client Sample ID: SV-3
Date Collected: 08/03/17 12:00
Date Received: 08/05/17 09:30

Lab Sample ID: 200-39613-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	119430	08/07/17 23:02	K1P	TAL BUR

Client Sample ID: SV-4
Date Collected: 08/03/17 11:00
Date Received: 08/05/17 09:30

Lab Sample ID: 200-39613-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	119430	08/07/17 23:53	K1P	TAL BUR

Client Sample ID: SV-5
Date Collected: 08/03/17 11:30
Date Received: 08/05/17 09:30

Lab Sample ID: 200-39613-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	119430	08/08/17 00:43	K1P	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Laboratory: TestAmerica Burlington

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10391	04-01-18

Method Summary

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: AKRF Inc
Project/Site: NYSCA Projects

TestAmerica Job ID: 200-39613-1
SDG: 200-39613-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-39613-1	SV-1	Air	08/03/17 10:00	08/05/17 09:30
200-39613-2	SV-2	Air	08/03/17 10:25	08/05/17 09:30
200-39613-3	SV-3	Air	08/03/17 12:00	08/05/17 09:30
200-39613-4	SV-4	Air	08/03/17 11:00	08/05/17 09:30
200-39613-5	SV-5	Air	08/03/17 11:30	08/05/17 09:30

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Instrument ID: CHX.i Analysis Batch Number: 118373

Lab Sample ID: IC 200-118373/4 Client Sample ID:

Date Analyzed: 07/10/17 15:17 Lab File ID: 25833_04.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	8.61	Baseline	daiglep	07/11/17 09:49
Tetrachloroethene	16.71	Baseline	daiglep	07/11/17 08:43

Lab Sample ID: IC 200-118373/5 Client Sample ID:

Date Analyzed: 07/10/17 16:07 Lab File ID: 25833_05.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Cyclohexane	10.60	Baseline	daiglep	07/11/17 08:44
1,1,1-Trichloroethane	10.66	Baseline	daiglep	07/11/17 08:45
Benzene	11.42	Baseline	daiglep	07/11/17 08:45

Lab Sample ID: IC 200-118373/7 Client Sample ID:

Date Analyzed: 07/10/17 17:48 Lab File ID: 25833_07.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	26.78	Baseline	daiglep	07/11/17 09:53

Lab Sample ID: IC 200-118373/9 Client Sample ID:

Date Analyzed: 07/10/17 19:28 Lab File ID: 25833_09.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Cyclohexane	10.61	Missed Peak	daiglep	07/11/17 08:48

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Instrument ID: CHX.i Analysis Batch Number: 118373

Lab Sample ID: IC 200-118373/11 Client Sample ID:

Date Analyzed: 07/10/17 21:09 Lab File ID: 25833_11.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	5.73	Split Peak	daiglep	07/11/17 08:50
Ethyl ether	5.78	Split Peak	daiglep	07/11/17 08:50

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Instrument ID: CHX.i Analysis Batch Number: 119430

Lab Sample ID: 200-39613-1 Client Sample ID: SV-1

Date Analyzed: 08/07/17 21:21 Lab File ID: 26252-11.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	12.80	Assign Peak	puangmalee k	08/08/17 14:27

Lab Sample ID: 200-39613-2 Client Sample ID: SV-2

Date Analyzed: 08/07/17 22:12 Lab File ID: 26252-12.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene	11.42	Assign Peak	puangmalee k	08/08/17 14:29

Lab Sample ID: 200-39613-3 Client Sample ID: SV-3

Date Analyzed: 08/07/17 23:02 Lab File ID: 26252-13.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon tetrachloride	10.92	Assign Peak	puangmalee k	08/08/17 14:30

Lab Sample ID: 200-39613-4 Client Sample ID: SV-4

Date Analyzed: 08/07/17 23:53 Lab File ID: 26252-14.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloroethene	16.71	Assign Peak	puangmalee k	08/08/17 14:32

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Instrument ID: CHX.i Analysis Batch Number: 119430

Lab Sample ID: 200-39613-5 Client Sample ID: SV-5

Date Analyzed: 08/08/17 00:43 Lab File ID: 26252-15.D GC Column: RTX-624 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	10.65	Assign Peak	puangmalee k	08/08/17 14:34

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ATTO15CAL1w_00174	08/19/17	05/30/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00141	155 mL	1,1,1-Trichloroethane	0.20044 ppb v/v
							1,1,2,2-Tetrachloroethane	0.20044 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.20044 ppb v/v
							1,1,2-Trichloroethane	0.20044 ppb v/v
							1,1-Dichloroethane	0.20044 ppb v/v
							1,1-Dichloroethene	0.20044 ppb v/v
							1,2,3-Trichlorobenzene	0.20044 ppb v/v
							1,2,3-Trichloropropane	0.20044 ppb v/v
							1,2,4-Trichlorobenzene	0.20044 ppb v/v
							1,2,4-Trimethylbenzene	0.20044 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20044 ppb v/v
							1,2-Dichlorobenzene	0.20044 ppb v/v
							1,2-Dichloroethane	0.20044 ppb v/v
							1,2-Dichloropropane	0.20044 ppb v/v
							1,3,5-Trimethylbenzene	0.20044 ppb v/v
							1,3-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dichlorobenzene	0.20044 ppb v/v
							1,4-Dioxane	0.20044 ppb v/v
							2-Butanone (MEK)	0.20044 ppb v/v
							2-Chlorotoluene	0.20044 ppb v/v
							2-Hexanone	0.20044 ppb v/v
							2-Methyl-2-propanol	0.20044 ppb v/v
							2-Methylbutane	0.20044 ppb v/v
							3-Chloro-1-propene	0.20044 ppb v/v
							4-Ethyltoluene	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	0.20044 ppb v/v
							4-Methyl-2-pentanone (MIBK)	0.20044 ppb v/v
							Acetone	0.20044 ppb v/v
							Acetonitrile	0.20044 ppb v/v
							Acrolein	0.20044 ppb v/v
							Acrylonitrile	0.20044 ppb v/v
							Alpha Methyl Styrene	0.20044 ppb v/v
							Benzene	0.20044 ppb v/v
							Benzyl chloride	0.20044 ppb v/v
							Bromoform	0.20044 ppb v/v
							Bromomethane	0.20044 ppb v/v
							Butadiene	0.20044 ppb v/v
							Butane	0.20044 ppb v/v
							Carbon disulfide	0.20044 ppb v/v
							Carbon tetrachloride	0.20044 ppb v/v
							Chlorobenzene	0.20044 ppb v/v
							Chlorodibromomethane	0.20044 ppb v/v
							Chlorodifluoromethane	0.20044 ppb v/v
							Chloroethane	0.20044 ppb v/v
							Chloroform	0.20044 ppb v/v
							Chloromethane	0.20044 ppb v/v
							cis-1,2-Dichloroethene	0.20044 ppb v/v
							cis-1,3-Dichloropropene	0.20044 ppb v/v
							Cyclohexane	0.20044 ppb v/v
							Dibromomethane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	0.20044 ppb v/v
							Dichlorodifluoromethane	0.20044 ppb v/v
							Dodecane	0.20044 ppb v/v
							Ethyl acetate	0.20044 ppb v/v
							Ethyl ether	0.20044 ppb v/v
							Ethylbenzene	0.20044 ppb v/v
							Ethylene Dibromide	0.20044 ppb v/v
							Hexachlorobutadiene	0.20044 ppb v/v
							Hexane	0.20044 ppb v/v
							Isooctane	0.20044 ppb v/v
							Isopropyl alcohol	0.20044 ppb v/v
							Isopropylbenzene	0.20044 ppb v/v
							m,p-Xylene	0.400879 ppb v/v
							Methyl methacrylate	0.20044 ppb v/v
							Methyl tert-butyl ether	0.20044 ppb v/v
							Methylene Chloride	0.20044 ppb v/v
							n-Butanol	0.20044 ppb v/v
							n-Butylbenzene	0.20044 ppb v/v
							n-Decane	0.20044 ppb v/v
							n-Heptane	0.20044 ppb v/v
							n-Nonane	0.20044 ppb v/v
							n-Octane	0.20044 ppb v/v
							N-Propylbenzene	0.20044 ppb v/v
							Naphthalene	0.20044 ppb v/v
							Pentane	0.20044 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	0.20044 ppb v/v
							sec-Butylbenzene	0.20044 ppb v/v
							Styrene	0.20044 ppb v/v
							tert-Butylbenzene	0.20044 ppb v/v
							Tetrachloroethene	0.20044 ppb v/v
							Tetrahydrofuran	0.20044 ppb v/v
							Toluene	0.20044 ppb v/v
							trans-1,2-Dichloroethene	0.20044 ppb v/v
							trans-1,3-Dichloropropene	0.20044 ppb v/v
							Trichloroethene	0.20044 ppb v/v
							Trichlorofluoromethane	0.20044 ppb v/v
							Undecane	0.20044 ppb v/v
							Vinyl acetate	0.20044 ppb v/v
							Vinyl bromide	0.20044 ppb v/v
							Vinyl chloride	0.20044 ppb v/v
							Xylene, o-	0.20044 ppb v/v
							Ethanol	0.400944 ppb v/v
.ATTO15CAL6w_00141	08/19/17	05/26/17	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00092	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2-Butanone (MEK)	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Hexanone	19.9961 ppb v/v
							2-Methyl-2-propanol	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloro-1-propene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (MIBK)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl chloride	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Butadiene	19.9961 ppb v/v
							Butane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodibromomethane	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorobromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Ethylene Dibromide	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexane	19.9961 ppb v/v
							Isooctane	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							Isopropylbenzene	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							N-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl bromide	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00084	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00008	09/05/18		Chem Service, Lot 5301900		(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL2w_00239	08/19/17	05/30/17	Zero Air, Lot 12	15.463 L	ATTO15CAL6w_00141	387 mL	1,1,1-Trichloroethane	0.500453 ppb v/v
							1,1,2,2-Tetrachloroethane	0.500453 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.500453 ppb v/v
							1,1,2-Trichloroethane	0.500453 ppb v/v
							1,1-Dichloroethane	0.500453 ppb v/v
							1,1-Dichloroethene	0.500453 ppb v/v
							1,2,3-Trichlorobenzene	0.500453 ppb v/v
							1,2,3-Trichloropropane	0.500453 ppb v/v
							1,2,4-Trichlorobenzene	0.500453 ppb v/v
							1,2,4-Trimethylbenzene	0.500453 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.500453 ppb v/v
							1,2-Dichlorobenzene	0.500453 ppb v/v
							1,2-Dichloroethane	0.500453 ppb v/v
							1,2-Dichloropropane	0.500453 ppb v/v
							1,3,5-Trimethylbenzene	0.500453 ppb v/v
							1,3-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dichlorobenzene	0.500453 ppb v/v
							1,4-Dioxane	0.500453 ppb v/v

REAGENT TRACEABILITY SUMMARY

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Butanone (MEK)	0.500453 ppb v/v
							2-Chlorotoluene	0.500453 ppb v/v
							2-Hexanone	0.500453 ppb v/v
							2-Methyl-2-propanol	0.500453 ppb v/v
							2-Methylbutane	0.500453 ppb v/v
							3-Chloro-1-propene	0.500453 ppb v/v
							4-Ethyltoluene	0.500453 ppb v/v
							4-Isopropyltoluene	0.500453 ppb v/v
							4-Methyl-2-pentanone (MIBK)	0.500453 ppb v/v
							Acetone	0.500453 ppb v/v
							Acetonitrile	0.500453 ppb v/v
							Acrolein	0.500453 ppb v/v
							Acrylonitrile	0.500453 ppb v/v
							Alpha Methyl Styrene	0.500453 ppb v/v
							Benzene	0.500453 ppb v/v
							Benzyl chloride	0.500453 ppb v/v
							Bromoform	0.500453 ppb v/v
							Bromomethane	0.500453 ppb v/v
							Butadiene	0.500453 ppb v/v
							Butane	0.500453 ppb v/v
							Carbon disulfide	0.500453 ppb v/v
							Carbon tetrachloride	0.500453 ppb v/v
							Chlorobenzene	0.500453 ppb v/v
							Chlorodibromomethane	0.500453 ppb v/v
							Chlorodifluoromethane	0.500453 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	0.500453 ppb v/v
							Chloroform	0.500453 ppb v/v
							Chloromethane	0.500453 ppb v/v
							cis-1,2-Dichloroethene	0.500453 ppb v/v
							cis-1,3-Dichloropropene	0.500453 ppb v/v
							Cyclohexane	0.500453 ppb v/v
							Dibromomethane	0.500453 ppb v/v
							Dichlorobromomethane	0.500453 ppb v/v
							Dichlorodifluoromethane	0.500453 ppb v/v
							Dodecane	0.500453 ppb v/v
							Ethyl acetate	0.500453 ppb v/v
							Ethyl ether	0.500453 ppb v/v
							Ethylbenzene	0.500453 ppb v/v
							Ethylene Dibromide	0.500453 ppb v/v
							Hexachlorobutadiene	0.500453 ppb v/v
							Hexane	0.500453 ppb v/v
							Isooctane	0.500453 ppb v/v
							Isopropyl alcohol	0.500453 ppb v/v
							Isopropylbenzene	0.500453 ppb v/v
							m,p-Xylene	1.00091 ppb v/v
							Methyl methacrylate	0.500453 ppb v/v
							Methyl tert-butyl ether	0.500453 ppb v/v
							Methylene Chloride	0.500453 ppb v/v
							n-Butanol	0.500453 ppb v/v
							n-Butylbenzene	0.500453 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	0.500453 ppb v/v
							n-Heptane	0.500453 ppb v/v
							n-Nonane	0.500453 ppb v/v
							n-Octane	0.500453 ppb v/v
							N-Propylbenzene	0.500453 ppb v/v
							Naphthalene	0.500453 ppb v/v
							Pentane	0.500453 ppb v/v
							Propene	0.500453 ppb v/v
							sec-Butylbenzene	0.500453 ppb v/v
							Styrene	0.500453 ppb v/v
							tert-Butylbenzene	0.500453 ppb v/v
							Tetrachloroethene	0.500453 ppb v/v
							Tetrahydrofuran	0.500453 ppb v/v
							Toluene	0.500453 ppb v/v
							trans-1,2-Dichloroethene	0.500453 ppb v/v
							trans-1,3-Dichloropropene	0.500453 ppb v/v
							Trichloroethene	0.500453 ppb v/v
							Trichlorofluoromethane	0.500453 ppb v/v
							Undecane	0.500453 ppb v/v
							Vinyl acetate	0.500453 ppb v/v
							Vinyl bromide	0.500453 ppb v/v
							Vinyl chloride	0.500453 ppb v/v
							Xylene, o-	0.500453 ppb v/v
							Ethanol	5.01064 ppb v/v
					ATTO15EthCALw_00084	124 mL	Ethanol	5.01064 ppb v/v

REAGENT TRACEABILITY SUMMARY

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ATTO15CAL6w_00141	08/19/17	05/26/17	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00092	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2-Butanone (MEK)	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Hexanone	19.9961 ppb v/v
							2-Methyl-2-propanol	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloro-1-propene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (MIBK)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Butadiene	19.9961 ppb v/v
							Butane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodibromomethane	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Ethylene Dibromide	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Hexane	19.9961 ppb v/v
							Isooctane	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							Isopropylbenzene	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							N-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl bromide	19.9961 ppb v/v
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00084	1237 mL	Ethanol	39.9987 ppb v/v
..ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
...ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
..ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
...ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL3w_00184	08/19/17	05/26/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00092	386 mL	1,1,1-Trichloroethane	4.99256 ppb v/v
							1,1,2,2-Tetrachloroethane	4.99256 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	4.99256 ppb v/v
							1,1,2-Trichloroethane	4.99256 ppb v/v
							1,1-Dichloroethane	4.99256 ppb v/v
							1,1-Dichloroethene	4.99256 ppb v/v
							1,2,3-Trichlorobenzene	4.99256 ppb v/v
							1,2,3-Trichloropropane	4.99256 ppb v/v
							1,2,4-Trichlorobenzene	4.99256 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	4.99256 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.99256 ppb v/v
							1,2-Dichlorobenzene	4.99256 ppb v/v
							1,2-Dichloroethane	4.99256 ppb v/v
							1,2-Dichloropropane	4.99256 ppb v/v
							1,3,5-Trimethylbenzene	4.99256 ppb v/v
							1,3-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dichlorobenzene	4.99256 ppb v/v
							1,4-Dioxane	4.99256 ppb v/v
							2-Butanone (MEK)	4.99256 ppb v/v
							2-Chlorotoluene	4.99256 ppb v/v
							2-Hexanone	4.99256 ppb v/v
							2-Methyl-2-propanol	4.99256 ppb v/v
							2-Methylbutane	4.99256 ppb v/v
							3-Chloro-1-propene	4.99256 ppb v/v
							4-Ethyltoluene	4.99256 ppb v/v
							4-Isopropyltoluene	4.99256 ppb v/v
							4-Methyl-2-pentanone (MIBK)	4.99256 ppb v/v
							Acetone	4.99256 ppb v/v
							Acetonitrile	4.99256 ppb v/v
							Acrolein	4.99256 ppb v/v
							Acrylonitrile	4.99256 ppb v/v
							Alpha Methyl Styrene	4.99256 ppb v/v
							Benzene	4.99256 ppb v/v
							Benzyl chloride	4.99256 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	4.99256 ppb v/v
							Bromomethane	4.99256 ppb v/v
							Butadiene	4.99256 ppb v/v
							Butane	4.99256 ppb v/v
							Carbon disulfide	4.99256 ppb v/v
							Carbon tetrachloride	4.99256 ppb v/v
							Chlorobenzene	4.99256 ppb v/v
							Chlorodibromomethane	4.99256 ppb v/v
							Chlorodifluoromethane	4.99256 ppb v/v
							Chloroethane	4.99256 ppb v/v
							Chloroform	4.99256 ppb v/v
							Chloromethane	4.99256 ppb v/v
							cis-1,2-Dichloroethene	4.99256 ppb v/v
							cis-1,3-Dichloropropene	4.99256 ppb v/v
							Cyclohexane	4.99256 ppb v/v
							Dibromomethane	4.99256 ppb v/v
							Dichlorobromomethane	4.99256 ppb v/v
							Dichlorodifluoromethane	4.99256 ppb v/v
							Dodecane	4.99256 ppb v/v
							Ethyl acetate	4.99256 ppb v/v
							Ethyl ether	4.99256 ppb v/v
							Ethylbenzene	4.99256 ppb v/v
							Ethylene Dibromide	4.99256 ppb v/v
							Hexachlorobutadiene	4.99256 ppb v/v
							Hexane	4.99256 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isooctane	4.99256 ppb v/v
							Isopropyl alcohol	4.99256 ppb v/v
							Isopropylbenzene	4.99256 ppb v/v
							m,p-Xylene	9.98513 ppb v/v
							Methyl methacrylate	4.99256 ppb v/v
							Methyl tert-butyl ether	4.99256 ppb v/v
							Methylene Chloride	4.99256 ppb v/v
							n-Butanol	4.99256 ppb v/v
							n-Butylbenzene	4.99256 ppb v/v
							n-Decane	4.99256 ppb v/v
							n-Heptane	4.99256 ppb v/v
							n-Nonane	4.99256 ppb v/v
							n-Octane	4.99256 ppb v/v
							N-Propylbenzene	4.99256 ppb v/v
							Naphthalene	4.99256 ppb v/v
							Pentane	4.99256 ppb v/v
							Propene	4.99256 ppb v/v
							sec-Butylbenzene	4.99256 ppb v/v
							Styrene	4.99256 ppb v/v
							tert-Butylbenzene	4.99256 ppb v/v
							Tetrachloroethene	4.99256 ppb v/v
							Tetrahydrofuran	4.99256 ppb v/v
							Toluene	4.99256 ppb v/v
							trans-1,2-Dichloroethene	4.99256 ppb v/v
							trans-1,3-Dichloropropene	4.99256 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	4.99256 ppb v/v
							Trichlorofluoromethane	4.99256 ppb v/v
							Undecane	4.99256 ppb v/v
							Vinyl acetate	4.99256 ppb v/v
							Vinyl bromide	4.99256 ppb v/v
							Vinyl chloride	4.99256 ppb v/v
							Xylene, o-	4.99256 ppb v/v
					ATTO15EthCALw_00084	309 mL	Ethanol	9.99159 ppb v/v
.ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL4w_00620	08/19/17	05/26/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00092	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1,2,2-Tetrachloroethane	9.99806 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	9.99806 ppb v/v
							1,1,2-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,3-Trichlorobenzene	9.99806 ppb v/v
							1,2,3-Trichloropropane	9.99806 ppb v/v
							1,2,4-Trichlorobenzene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dichlorobenzene	9.99806 ppb v/v
							1,4-Dioxane	9.99806 ppb v/v
							2-Butanone (MEK)	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	9.99806 ppb v/v
							2-Hexanone	9.99806 ppb v/v
							2-Methyl-2-propanol	9.99806 ppb v/v
							2-Methylbutane	9.99806 ppb v/v
							3-Chloro-1-propene	9.99806 ppb v/v
							4-Ethyltoluene	9.99806 ppb v/v
							4-Isopropyltoluene	9.99806 ppb v/v
							4-Methyl-2-pentanone (MIBK)	9.99806 ppb v/v
							Acetone	9.99806 ppb v/v
							Acetonitrile	9.99806 ppb v/v
							Acrolein	9.99806 ppb v/v
							Acrylonitrile	9.99806 ppb v/v
							Alpha Methyl Styrene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Benzyl chloride	9.99806 ppb v/v
							Bromoform	9.99806 ppb v/v
							Bromomethane	9.99806 ppb v/v
							Butadiene	9.99806 ppb v/v
							Butane	9.99806 ppb v/v
							Carbon disulfide	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chlorodibromomethane	9.99806 ppb v/v
							Chlorodifluoromethane	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							cis-1,3-Dichloropropene	9.99806 ppb v/v
							Cyclohexane	9.99806 ppb v/v
							Dibromomethane	9.99806 ppb v/v
							Dichlorobromomethane	9.99806 ppb v/v
							Dichlorodifluoromethane	9.99806 ppb v/v
							Dodecane	9.99806 ppb v/v
							Ethyl acetate	9.99806 ppb v/v
							Ethyl ether	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							Ethylene Dibromide	9.99806 ppb v/v
							Hexachlorobutadiene	9.99806 ppb v/v
							Hexane	9.99806 ppb v/v
							Isooctane	9.99806 ppb v/v
							Isopropyl alcohol	9.99806 ppb v/v
							Isopropylbenzene	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl methacrylate	9.99806 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							n-Butanol	9.99806 ppb v/v
							n-Butylbenzene	9.99806 ppb v/v
							n-Decane	9.99806 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Heptane	9.99806 ppb v/v
							n-Nonane	9.99806 ppb v/v
							n-Octane	9.99806 ppb v/v
							N-Propylbenzene	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Pentane	9.99806 ppb v/v
							Propene	9.99806 ppb v/v
							sec-Butylbenzene	9.99806 ppb v/v
							Styrene	9.99806 ppb v/v
							tert-Butylbenzene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Tetrahydrofuran	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							trans-1,3-Dichloropropene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Trichlorofluoromethane	9.99806 ppb v/v
							Undecane	9.99806 ppb v/v
							Vinyl acetate	9.99806 ppb v/v
							Vinyl bromide	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
					ATTO15EthCALw_00084	464 mL	Ethanol	15.0036 ppb v/v
.ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL5w_00067	08/19/17	05/26/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00092	1160 mL	1,1,1-Trichloroethane	15.0036 ppb v/v
							1,1,2,2-Tetrachloroethane	15.0036 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	15.0036 ppb v/v
							1,1,2-Trichloroethane	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	15.0036 ppb v/v
							1,1-Dichloroethene	15.0036 ppb v/v
							1,2,3-Trichlorobenzene	15.0036 ppb v/v
							1,2,3-Trichloropropane	15.0036 ppb v/v
							1,2,4-Trichlorobenzene	15.0036 ppb v/v
							1,2,4-Trimethylbenzene	15.0036 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	15.0036 ppb v/v
							1,2-Dichlorobenzene	15.0036 ppb v/v
							1,2-Dichloroethane	15.0036 ppb v/v
							1,2-Dichloropropane	15.0036 ppb v/v
							1,3,5-Trimethylbenzene	15.0036 ppb v/v
							1,3-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dichlorobenzene	15.0036 ppb v/v
							1,4-Dioxane	15.0036 ppb v/v
							2-Butanone (MEK)	15.0036 ppb v/v
							2-Chlorotoluene	15.0036 ppb v/v
							2-Hexanone	15.0036 ppb v/v
							2-Methyl-2-propanol	15.0036 ppb v/v
							2-Methylbutane	15.0036 ppb v/v
							3-Chloro-1-propene	15.0036 ppb v/v
							4-Ethyltoluene	15.0036 ppb v/v
							4-Isopropyltoluene	15.0036 ppb v/v
							4-Methyl-2-pentanone (MIBK)	15.0036 ppb v/v
							Acetone	15.0036 ppb v/v
							Acetonitrile	15.0036 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrolein	15.0036 ppb v/v
							Acrylonitrile	15.0036 ppb v/v
							Alpha Methyl Styrene	15.0036 ppb v/v
							Benzene	15.0036 ppb v/v
							Benzyl chloride	15.0036 ppb v/v
							Bromoform	15.0036 ppb v/v
							Bromomethane	15.0036 ppb v/v
							Butadiene	15.0036 ppb v/v
							Butane	15.0036 ppb v/v
							Carbon disulfide	15.0036 ppb v/v
							Carbon tetrachloride	15.0036 ppb v/v
							Chlorobenzene	15.0036 ppb v/v
							Chlorodibromomethane	15.0036 ppb v/v
							Chlorodifluoromethane	15.0036 ppb v/v
							Chloroethane	15.0036 ppb v/v
							Chloroform	15.0036 ppb v/v
							Chloromethane	15.0036 ppb v/v
							cis-1,2-Dichloroethene	15.0036 ppb v/v
							cis-1,3-Dichloropropene	15.0036 ppb v/v
							Cyclohexane	15.0036 ppb v/v
							Dibromomethane	15.0036 ppb v/v
							Dichlorobromomethane	15.0036 ppb v/v
							Dichlorodifluoromethane	15.0036 ppb v/v
							Dodecane	15.0036 ppb v/v
							Ethyl acetate	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	15.0036 ppb v/v
							Ethylbenzene	15.0036 ppb v/v
							Ethylene Dibromide	15.0036 ppb v/v
							Hexachlorobutadiene	15.0036 ppb v/v
							Hexane	15.0036 ppb v/v
							Isooctane	15.0036 ppb v/v
							Isopropyl alcohol	15.0036 ppb v/v
							Isopropylbenzene	15.0036 ppb v/v
							m,p-Xylene	30.0071 ppb v/v
							Methyl methacrylate	15.0036 ppb v/v
							Methyl tert-butyl ether	15.0036 ppb v/v
							Methylene Chloride	15.0036 ppb v/v
							n-Butanol	15.0036 ppb v/v
							n-Butylbenzene	15.0036 ppb v/v
							n-Decane	15.0036 ppb v/v
							n-Heptane	15.0036 ppb v/v
							n-Nonane	15.0036 ppb v/v
							n-Octane	15.0036 ppb v/v
							N-Propylbenzene	15.0036 ppb v/v
							Naphthalene	15.0036 ppb v/v
							Pentane	15.0036 ppb v/v
							Propene	15.0036 ppb v/v
							sec-Butylbenzene	15.0036 ppb v/v
							Styrene	15.0036 ppb v/v
							tert-Butylbenzene	15.0036 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	15.0036 ppb v/v
							Tetrahydrofuran	15.0036 ppb v/v
							Toluene	15.0036 ppb v/v
							trans-1,2-Dichloroethene	15.0036 ppb v/v
							trans-1,3-Dichloropropene	15.0036 ppb v/v
							Trichloroethene	15.0036 ppb v/v
							Trichlorofluoromethane	15.0036 ppb v/v
							Undecane	15.0036 ppb v/v
							Vinyl acetate	15.0036 ppb v/v
							Vinyl bromide	15.0036 ppb v/v
							Vinyl chloride	15.0036 ppb v/v
							Xylene, o-	15.0036 ppb v/v
					ATTO15EthCALw_00084	620 mL	Ethanol	20.0479 ppb v/v
.ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL6w_00142	08/19/17	05/26/17	Zero Air, Lot 13	15.463 L	ATTO15CALSTKi_00092	1546 mL	1,1,1-Trichloroethane	19.9961 ppb v/v
							1,1,2,2-Tetrachloroethane	19.9961 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	19.9961 ppb v/v
							1,1,2-Trichloroethane	19.9961 ppb v/v
							1,1-Dichloroethane	19.9961 ppb v/v
							1,1-Dichloroethene	19.9961 ppb v/v
							1,2,3-Trichlorobenzene	19.9961 ppb v/v
							1,2,3-Trichloropropane	19.9961 ppb v/v
							1,2,4-Trichlorobenzene	19.9961 ppb v/v
							1,2,4-Trimethylbenzene	19.9961 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	19.9961 ppb v/v
							1,2-Dichlorobenzene	19.9961 ppb v/v
							1,2-Dichloroethane	19.9961 ppb v/v
							1,2-Dichloropropane	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	19.9961 ppb v/v
							1,3-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dichlorobenzene	19.9961 ppb v/v
							1,4-Dioxane	19.9961 ppb v/v
							2-Butanone (MEK)	19.9961 ppb v/v
							2-Chlorotoluene	19.9961 ppb v/v
							2-Hexanone	19.9961 ppb v/v
							2-Methyl-2-propanol	19.9961 ppb v/v
							2-Methylbutane	19.9961 ppb v/v
							3-Chloro-1-propene	19.9961 ppb v/v
							4-Ethyltoluene	19.9961 ppb v/v
							4-Isopropyltoluene	19.9961 ppb v/v
							4-Methyl-2-pentanone (MIBK)	19.9961 ppb v/v
							Acetone	19.9961 ppb v/v
							Acetonitrile	19.9961 ppb v/v
							Acrolein	19.9961 ppb v/v
							Acrylonitrile	19.9961 ppb v/v
							Alpha Methyl Styrene	19.9961 ppb v/v
							Benzene	19.9961 ppb v/v
							Benzyl chloride	19.9961 ppb v/v
							Bromoform	19.9961 ppb v/v
							Bromomethane	19.9961 ppb v/v
							Butadiene	19.9961 ppb v/v
							Butane	19.9961 ppb v/v
							Carbon disulfide	19.9961 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	19.9961 ppb v/v
							Chlorobenzene	19.9961 ppb v/v
							Chlorodibromomethane	19.9961 ppb v/v
							Chlorodifluoromethane	19.9961 ppb v/v
							Chloroethane	19.9961 ppb v/v
							Chloroform	19.9961 ppb v/v
							Chloromethane	19.9961 ppb v/v
							cis-1,2-Dichloroethene	19.9961 ppb v/v
							cis-1,3-Dichloropropene	19.9961 ppb v/v
							Cyclohexane	19.9961 ppb v/v
							Dibromomethane	19.9961 ppb v/v
							Dichlorobromomethane	19.9961 ppb v/v
							Dichlorodifluoromethane	19.9961 ppb v/v
							Dodecane	19.9961 ppb v/v
							Ethyl acetate	19.9961 ppb v/v
							Ethyl ether	19.9961 ppb v/v
							Ethylbenzene	19.9961 ppb v/v
							Ethylene Dibromide	19.9961 ppb v/v
							Hexachlorobutadiene	19.9961 ppb v/v
							Hexane	19.9961 ppb v/v
							Isooctane	19.9961 ppb v/v
							Isopropyl alcohol	19.9961 ppb v/v
							Isopropylbenzene	19.9961 ppb v/v
							m,p-Xylene	39.9922 ppb v/v
							Methyl methacrylate	19.9961 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	19.9961 ppb v/v
							Methylene Chloride	19.9961 ppb v/v
							n-Butanol	19.9961 ppb v/v
							n-Butylbenzene	19.9961 ppb v/v
							n-Decane	19.9961 ppb v/v
							n-Heptane	19.9961 ppb v/v
							n-Nonane	19.9961 ppb v/v
							n-Octane	19.9961 ppb v/v
							N-Propylbenzene	19.9961 ppb v/v
							Naphthalene	19.9961 ppb v/v
							Pentane	19.9961 ppb v/v
							Propene	19.9961 ppb v/v
							sec-Butylbenzene	19.9961 ppb v/v
							Styrene	19.9961 ppb v/v
							tert-Butylbenzene	19.9961 ppb v/v
							Tetrachloroethene	19.9961 ppb v/v
							Tetrahydrofuran	19.9961 ppb v/v
							Toluene	19.9961 ppb v/v
							trans-1,2-Dichloroethene	19.9961 ppb v/v
							trans-1,3-Dichloropropene	19.9961 ppb v/v
							Trichloroethene	19.9961 ppb v/v
							Trichlorofluoromethane	19.9961 ppb v/v
							Undecane	19.9961 ppb v/v
							Vinyl acetate	19.9961 ppb v/v
							Vinyl bromide	19.9961 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	19.9961 ppb v/v
							Xylene, o-	19.9961 ppb v/v
					ATTO15EthCALw_00084	1237 mL	Ethanol	39.9987 ppb v/v
.ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17	Spectra Gases, Lot cc-90855			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15CAL7w_00069	08/19/17	05/26/17	Zero Air, Lot 12	15.463 L	ATTO15CALSTKi_00092	3092 mL	1,1,1-Trichloroethane	39.9922 ppb v/v
							1,1,2,2-Tetrachloroethane	39.9922 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	39.9922 ppb v/v
							1,1,2-Trichloroethane	39.9922 ppb v/v
							1,1-Dichloroethane	39.9922 ppb v/v
							1,1-Dichloroethene	39.9922 ppb v/v
							1,2,3-Trichlorobenzene	39.9922 ppb v/v
							1,2,3-Trichloropropane	39.9922 ppb v/v
							1,2,4-Trichlorobenzene	39.9922 ppb v/v
							1,2,4-Trimethylbenzene	39.9922 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	39.9922 ppb v/v
							1,2-Dichlorobenzene	39.9922 ppb v/v
							1,2-Dichloroethane	39.9922 ppb v/v
							1,2-Dichloropropane	39.9922 ppb v/v
							1,3,5-Trimethylbenzene	39.9922 ppb v/v
							1,3-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dichlorobenzene	39.9922 ppb v/v
							1,4-Dioxane	39.9922 ppb v/v
							2-Butanone (MEK)	39.9922 ppb v/v
							2-Chlorotoluene	39.9922 ppb v/v
							2-Hexanone	39.9922 ppb v/v
							2-Methyl-2-propanol	39.9922 ppb v/v
							2-Methylbutane	39.9922 ppb v/v
							3-Chloro-1-propene	39.9922 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Ethyltoluene	39.9922 ppb v/v
							4-Isopropyltoluene	39.9922 ppb v/v
							4-Methyl-2-pentanone (MIBK)	39.9922 ppb v/v
							Acetone	39.9922 ppb v/v
							Acetonitrile	39.9922 ppb v/v
							Acrolein	39.9922 ppb v/v
							Acrylonitrile	39.9922 ppb v/v
							Alpha Methyl Styrene	39.9922 ppb v/v
							Benzene	39.9922 ppb v/v
							Benzyl chloride	39.9922 ppb v/v
							Bromoform	39.9922 ppb v/v
							Bromomethane	39.9922 ppb v/v
							Butadiene	39.9922 ppb v/v
							Butane	39.9922 ppb v/v
							Carbon disulfide	39.9922 ppb v/v
							Carbon tetrachloride	39.9922 ppb v/v
							Chlorobenzene	39.9922 ppb v/v
							Chlorodibromomethane	39.9922 ppb v/v
							Chlorodifluoromethane	39.9922 ppb v/v
							Chloroethane	39.9922 ppb v/v
							Chloroform	39.9922 ppb v/v
							Chloromethane	39.9922 ppb v/v
							cis-1,2-Dichloroethene	39.9922 ppb v/v
							cis-1,3-Dichloropropene	39.9922 ppb v/v
							Cyclohexane	39.9922 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	39.9922 ppb v/v
							Dichlorobromomethane	39.9922 ppb v/v
							Dichlorodifluoromethane	39.9922 ppb v/v
							Dodecane	39.9922 ppb v/v
							Ethyl acetate	39.9922 ppb v/v
							Ethyl ether	39.9922 ppb v/v
							Ethylbenzene	39.9922 ppb v/v
							Ethylene Dibromide	39.9922 ppb v/v
							Hexachlorobutadiene	39.9922 ppb v/v
							Hexane	39.9922 ppb v/v
							Isooctane	39.9922 ppb v/v
							Isopropyl alcohol	39.9922 ppb v/v
							Isopropylbenzene	39.9922 ppb v/v
							m,p-Xylene	79.9845 ppb v/v
							Methyl methacrylate	39.9922 ppb v/v
							Methyl tert-butyl ether	39.9922 ppb v/v
							Methylene Chloride	39.9922 ppb v/v
							n-Butanol	39.9922 ppb v/v
							n-Butylbenzene	39.9922 ppb v/v
							n-Decane	39.9922 ppb v/v
							n-Heptane	39.9922 ppb v/v
							n-Nonane	39.9922 ppb v/v
							n-Octane	39.9922 ppb v/v
							N-Propylbenzene	39.9922 ppb v/v
							Naphthalene	39.9922 ppb v/v

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SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentane	39.9922 ppb v/v
							Propene	39.9922 ppb v/v
							sec-Butylbenzene	39.9922 ppb v/v
							Styrene	39.9922 ppb v/v
							tert-Butylbenzene	39.9922 ppb v/v
							Tetrachloroethene	39.9922 ppb v/v
							Tetrahydrofuran	39.9922 ppb v/v
							Toluene	39.9922 ppb v/v
							trans-1,2-Dichloroethene	39.9922 ppb v/v
							trans-1,3-Dichloropropene	39.9922 ppb v/v
							Trichloroethene	39.9922 ppb v/v
							Trichlorofluoromethane	39.9922 ppb v/v
							Undecane	39.9922 ppb v/v
							Vinyl acetate	39.9922 ppb v/v
							Vinyl bromide	39.9922 ppb v/v
							Vinyl chloride	39.9922 ppb v/v
							Xylene, o-	39.9922 ppb v/v
					ATTO15EthCALw_00084	3092 mL	Ethanol	99.9806 ppb v/v
.ATTO15CALSTKi_00092	08/19/17	05/19/17	Zero Air, Lot 13	37.5 L	ATTO15CALs_00026	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1,2,2-Tetrachloroethane	200 ppb v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ppb v/v
							1,1,2-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,3-Trichlorobenzene	200 ppb v/v
							1,2,3-Trichloropropane	200 ppb v/v
							1,2,4-Trichlorobenzene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							1,4-Dichlorobenzene	200 ppb v/v
							1,4-Dioxane	200 ppb v/v
							2-Butanone (MEK)	200 ppb v/v
							2-Chlorotoluene	200 ppb v/v
							2-Hexanone	200 ppb v/v
							2-Methyl-2-propanol	200 ppb v/v
							2-Methylbutane	200 ppb v/v
							3-Chloro-1-propene	200 ppb v/v
							4-Ethyltoluene	200 ppb v/v
							4-Isopropyltoluene	200 ppb v/v
							4-Methyl-2-pentanone (MIBK)	200 ppb v/v
							Acetone	200 ppb v/v
							Acetonitrile	200 ppb v/v
							Acrolein	200 ppb v/v
							Acrylonitrile	200 ppb v/v
							Alpha Methyl Styrene	200 ppb v/v
							Benzene	200 ppb v/v
							Benzyl chloride	200 ppb v/v
							Bromoform	200 ppb v/v
							Bromomethane	200 ppb v/v
							Butadiene	200 ppb v/v
							Butane	200 ppb v/v
							Carbon disulfide	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chlorodibromomethane	200 ppb v/v
							Chlorodifluoromethane	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloroform	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							cis-1,3-Dichloropropene	200 ppb v/v
							Cyclohexane	200 ppb v/v
							Dibromomethane	200 ppb v/v
							Dichlorobromomethane	200 ppb v/v
							Dichlorodifluoromethane	200 ppb v/v
							Dodecane	200 ppb v/v
							Ethyl acetate	200 ppb v/v
							Ethyl ether	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							Ethylene Dibromide	200 ppb v/v
							Hexachlorobutadiene	200 ppb v/v
							Hexane	200 ppb v/v
							Isooctane	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropyl alcohol	200 ppb v/v
							Isopropylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl methacrylate	200 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							n-Butanol	200 ppb v/v
							n-Butylbenzene	200 ppb v/v
							n-Decane	200 ppb v/v
							n-Heptane	200 ppb v/v
							n-Nonane	200 ppb v/v
							n-Octane	200 ppb v/v
							N-Propylbenzene	200 ppb v/v
							Naphthalene	200 ppb v/v
							Pentane	200 ppb v/v
							Propene	200 ppb v/v
							sec-Butylbenzene	200 ppb v/v
							Styrene	200 ppb v/v
							tert-Butylbenzene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Tetrahydrofuran	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							trans-1,3-Dichloropropene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Trichlorofluoromethane	200 ppb v/v
							Undecane	200 ppb v/v
							Vinyl acetate	200 ppb v/v
							Vinyl bromide	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15CALs_00026	12/19/17		Spectra Gases, Lot cc-90855		(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1,2,2-Tetrachloroethane	1 ppm v/v
							1,1,2-Trichloro-1,2,2-trifluoroethane	1 ppm v/v
							1,1,2-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,3-Trichlorobenzene	1 ppm v/v
							1,2,3-Trichloropropane	1 ppm v/v
							1,2,4-Trichlorobenzene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1 ppm v/v
							1,4-Dichlorobenzene	1 ppm v/v
							1,4-Dioxane	1 ppm v/v
							2-Butanone (MEK)	1 ppm v/v
							2-Chlorotoluene	1 ppm v/v
							2-Hexanone	1 ppm v/v
							2-Methyl-2-propanol	1 ppm v/v
							2-Methylbutane	1 ppm v/v
							3-Chloro-1-propene	1 ppm v/v
							4-Ethyltoluene	1 ppm v/v
							4-Isopropyltoluene	1 ppm v/v
							4-Methyl-2-pentanone (MIBK)	1 ppm v/v
							Acetone	1 ppm v/v
							Acetonitrile	1 ppm v/v
							Acrolein	1 ppm v/v
							Acrylonitrile	1 ppm v/v
							Alpha Methyl Styrene	1 ppm v/v
							Benzene	1 ppm v/v
							Benzyl chloride	1 ppm v/v
							Bromoform	1 ppm v/v
							Bromomethane	1 ppm v/v
							Butadiene	1 ppm v/v
							Butane	1 ppm v/v
							Carbon disulfide	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chlorodibromomethane	1 ppm v/v
							Chlorodifluoromethane	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloroform	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							cis-1,3-Dichloropropene	1 ppm v/v
							Cyclohexane	1 ppm v/v
							Dibromomethane	1 ppm v/v
							Dichlorobromomethane	1 ppm v/v
							Dichlorodifluoromethane	1 ppm v/v
							Dodecane	1 ppm v/v
							Ethyl acetate	1 ppm v/v
							Ethyl ether	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							Ethylene Dibromide	1 ppm v/v
							Hexachlorobutadiene	1 ppm v/v
							Hexane	1 ppm v/v
							Isooctane	1 ppm v/v
							Isopropyl alcohol	1 ppm v/v
							Isopropylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	1 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							n-Butanol	1 ppm v/v
							n-Butylbenzene	1 ppm v/v
							n-Decane	1 ppm v/v
							n-Heptane	1 ppm v/v
							n-Nonane	1 ppm v/v
							n-Octane	1 ppm v/v
							N-Propylbenzene	1 ppm v/v
							Naphthalene	1 ppm v/v
							Pentane	1 ppm v/v
							Propene	1 ppm v/v
							sec-Butylbenzene	1 ppm v/v
							Styrene	1 ppm v/v
							tert-Butylbenzene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Tetrahydrofuran	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							trans-1,3-Dichloropropene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Trichlorofluoromethane	1 ppm v/v
							Undecane	1 ppm v/v
							Vinyl acetate	1 ppm v/v
							Vinyl bromide	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
.ATTO15EthCALw_00084	08/26/17	05/26/17	Zero Air, Lot 12	37.5 ppb	ATTO15EthCALs_00008	18.75 uL	Ethanol	500 ppb v/v
..ATTO15EthCALs_00008	09/05/18	Chem Service, Lot 5301900			(Purchased Reagent)		Ethanol	1 mL/mL
ATTO15LCSW_00698	08/18/17	05/26/17	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00084	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v
							1,2-Dichloropropane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
.ATTO15LCSSTKi_00084	08/18/17	05/18/17	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00020	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							Benzene	200 ppb v/v
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							Ethylbenzene	200 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m,p-Xylene	400 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							Naphthalene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15LCSs_00020	12/19/17	Spectra Gases, Lot CC-250179			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							Benzene	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							Naphthalene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
ATTO15LCSW_00699	08/18/17	05/26/17	Zero Air, Lot 13	15.463 L	ATTO15LCSSTKi_00084	773 mL	1,1,1-Trichloroethane	9.99806 ppb v/v
							1,1-Dichloroethane	9.99806 ppb v/v
							1,1-Dichloroethene	9.99806 ppb v/v
							1,2,4-Trimethylbenzene	9.99806 ppb v/v
							1,2-Dichlorobenzene	9.99806 ppb v/v
							1,2-Dichloroethane	9.99806 ppb v/v

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	9.99806 ppb v/v
							1,3,5-Trimethylbenzene	9.99806 ppb v/v
							1,3-Dichlorobenzene	9.99806 ppb v/v
							Benzene	9.99806 ppb v/v
							Carbon tetrachloride	9.99806 ppb v/v
							Chlorobenzene	9.99806 ppb v/v
							Chloroethane	9.99806 ppb v/v
							Chloromethane	9.99806 ppb v/v
							cis-1,2-Dichloroethene	9.99806 ppb v/v
							Ethylbenzene	9.99806 ppb v/v
							m,p-Xylene	19.9961 ppb v/v
							Methyl tert-butyl ether	9.99806 ppb v/v
							Methylene Chloride	9.99806 ppb v/v
							Naphthalene	9.99806 ppb v/v
							Tetrachloroethene	9.99806 ppb v/v
							Toluene	9.99806 ppb v/v
							trans-1,2-Dichloroethene	9.99806 ppb v/v
							Trichloroethene	9.99806 ppb v/v
							Vinyl chloride	9.99806 ppb v/v
							Xylene, o-	9.99806 ppb v/v
.ATTO15LCSSTKi_00084	08/18/17	05/18/17	Zero Air, Lot 12	37.5 L	ATTO15LCSs_00020	7500 mL	1,1,1-Trichloroethane	200 ppb v/v
							1,1-Dichloroethane	200 ppb v/v
							1,1-Dichloroethene	200 ppb v/v
							1,2,4-Trimethylbenzene	200 ppb v/v
							1,2-Dichlorobenzene	200 ppb v/v
							1,2-Dichloroethane	200 ppb v/v
							1,2-Dichloropropane	200 ppb v/v
							1,3,5-Trimethylbenzene	200 ppb v/v
							1,3-Dichlorobenzene	200 ppb v/v
							Benzene	200 ppb v/v

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	200 ppb v/v
							Chlorobenzene	200 ppb v/v
							Chloroethane	200 ppb v/v
							Chloromethane	200 ppb v/v
							cis-1,2-Dichloroethene	200 ppb v/v
							Ethylbenzene	200 ppb v/v
							m,p-Xylene	400 ppb v/v
							Methyl tert-butyl ether	200 ppb v/v
							Methylene Chloride	200 ppb v/v
							Naphthalene	200 ppb v/v
							Tetrachloroethene	200 ppb v/v
							Toluene	200 ppb v/v
							trans-1,2-Dichloroethene	200 ppb v/v
							Trichloroethene	200 ppb v/v
							Vinyl chloride	200 ppb v/v
							Xylene, o-	200 ppb v/v
..ATTO15LCSs_00020	12/19/17	Spectra Gases, Lot CC-250179			(Purchased Reagent)		1,1,1-Trichloroethane	1 ppm v/v
							1,1-Dichloroethane	1 ppm v/v
							1,1-Dichloroethene	1 ppm v/v
							1,2,4-Trimethylbenzene	1 ppm v/v
							1,2-Dichlorobenzene	1 ppm v/v
							1,2-Dichloroethane	1 ppm v/v
							1,2-Dichloropropane	1 ppm v/v
							1,3,5-Trimethylbenzene	1 ppm v/v
							1,3-Dichlorobenzene	1 ppm v/v
							Benzene	1 ppm v/v
							Carbon tetrachloride	1 ppm v/v
							Chlorobenzene	1 ppm v/v
							Chloroethane	1 ppm v/v
							Chloromethane	1 ppm v/v
							cis-1,2-Dichloroethene	1 ppm v/v
							Ethylbenzene	1 ppm v/v
							m,p-Xylene	2 ppm v/v
							Methyl tert-butyl ether	1 ppm v/v
							Methylene Chloride	1 ppm v/v
							Naphthalene	1 ppm v/v
							Tetrachloroethene	1 ppm v/v
							Toluene	1 ppm v/v
							trans-1,2-Dichloroethene	1 ppm v/v
							Trichloroethene	1 ppm v/v
							Vinyl chloride	1 ppm v/v
							Xylene, o-	1 ppm v/v
ATTO15XISs_00002	06/13/21	Sprectra, Lot CC-143437			(Purchased Reagent)		1,4-Difluorobenzene	100 ppb v/v
							Chlorobenzene-d5	100 ppb v/v
							Chlorobromomethane	100 ppb v/v

Reagent

ATTO15CALs_00026

Standard 1003117 was compared o the ISO certified standard in Knoxville in Chrom work list 23318 on instrument C.

Reagent

ATTO15EthCALs_00008

CHEMSERVICE INC.

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9321 • 1-610-692-3026 • Fax 1-610-692-3729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Ethyl alcohol

CATALOG NUMBER	N-11685-1G
LOT NUMBER	5301900
DATE CERTIFIED	07/21/15
EXPIRATION DATE	07/31/21
CAS NUMBER	64-17-5
MOLECULAR FORMULA	C2H6O
MOLECULAR WEIGHT	46.07
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only
ISO GUIDE 34 CERTIFIED	( )

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell
CMMTC

600 Tower Lane • P.O. Box 905 • West Chester, PA 19381-0905
1-800-452-9994 • 1-610-692-7026 • Fax 1-610-692-8999
info@chemservice.com • www.commarsure.com

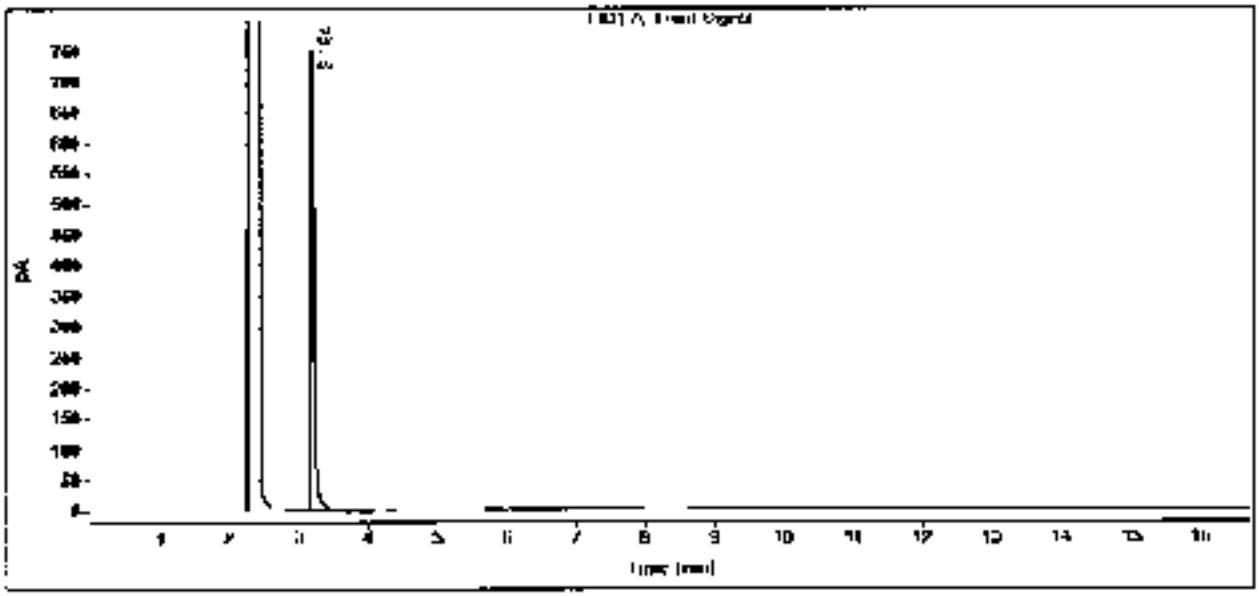
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\0715\SIG1006941.D

Sample name: N-11886

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	7/21/2015 10:30:34 AM	**Location:**	Vial 5
Acq. method.	MIX1.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.184	BB	0.0537	2394.4050	741.5187	100.0000
		Sum	2394.4050		

Reagent

ATTO15LCSs_00020

Standard 1003120 was compared o the ISO certified standard in Knoxville in Chrom
work list 23318 on instrument C.

Reagent

ATTO15XISs_00002

THE LINDE GROUP

Linde

SHIPPED TO: Test America Inc
30 Community Drive Suite 11
South Burlington, VT 05403

PAGE: 1 of 1

CERTIFICATE OF ANALYSIS

Sales#:	113956387	**Cylinder Size:**	152 (8" X 47.5")
Production#:	1375442	**Cylinder # :**	CC-143437
Certification Date:	May-04 2015	**Cylinder Pressure:**	2000 psig
P.O.# :	2544671	**Cylinder Valve:**	CGA 350 / Steel
Blend Type:	CERTIFIED	**Cylinder Volume:**	29.5 Liter
Material#:	24088974	**Cylinder Material:**	Aluminum
Traceability:	NIST by weight	**Gas Volume:**	4000 Liters
Expiration Date:	May-04-2017	**Blend Tolerance:**	10% Relative
Do NOT use under:	150 psig	**Analytical Accuracy:**	5% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	CERTIFIED CONC
Bromochloromethane	74-97-5	100 ppb	108 ppb
1,4 Difluorobenzene	540-36-3	100 ppb	110 ppb
Chlorobenzene-d5	3114-55-4	100 ppb	110 ppb
4 Bromofluorobenzene	460-00-4	100 ppb	105 ppb
Nitrogen	7727-37-9	Balance	Balance

ANALYST: Justin Kutz

DATE: May-04-2015

Linde Gas North America LLC

(908) 379-9700 Main (908) 379-9740 Fax
www.Lindeus.com

Method TO15

Volatile Organic Compounds (GC/MS) by Method TO15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Matrix: Air Level: Low Lab File ID: 26252-06.D

Lab ID: LCS 200-119430/6 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.29	83	57-126	
Vinyl chloride	10.0	7.77	78	62-125	
Chloroethane	10.0	7.89	79	65-125	
1,1-Dichloroethene	10.0	7.27	73	67-127	
Methylene Chloride	10.0	8.12	81	62-122	
Methyl tert-butyl ether	10.0	7.86	79	67-127	
trans-1,2-Dichloroethene	10.0	8.33	83	72-132	
1,1-Dichloroethane	10.0	7.78	78	66-126	
cis-1,2-Dichloroethene	10.0	7.50	75	67-127	
1,1,1-Trichloroethane	10.0	8.10	81	70-130	
Carbon tetrachloride	10.0	8.03	80	62-143	
Benzene	10.0	7.96	80	67-127	
1,2-Dichloroethane	10.0	8.51	85	67-132	
Trichloroethene	10.0	7.68	77	68-128	
1,2-Dichloropropane	10.0	8.27	83	67-127	
Toluene	10.0	8.78	88	67-127	
Tetrachloroethene	10.0	7.84	78	70-130	
Chlorobenzene	10.0	8.37	84	68-128	
Ethylbenzene	10.0	8.69	87	68-128	
m,p-Xylene	20.0	16.9	84	68-128	
Xylene, o-	10.0	8.29	83	67-127	
1,3,5-Trimethylbenzene	10.0	8.66	87	65-125	
1,2,4-Trimethylbenzene	10.0	8.84	88	65-125	
1,3-Dichlorobenzene	10.0	8.65	87	67-127	
1,2-Dichlorobenzene	10.0	8.61	86	67-127	
Naphthalene	10.0	7.02	70	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab File ID: 26252-07.D Lab Sample ID: MB 200-119430/7

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHX.i Date Analyzed: 08/07/2017 18:00

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-119430/6	26252-06.D	08/07/2017 17:09
SV-1	200-39613-1	26252-11.D	08/07/2017 21:21
SV-2	200-39613-2	26252-12.D	08/07/2017 22:12
SV-3	200-39613-3	26252-13.D	08/07/2017 23:02
SV-4	200-39613-4	26252-14.D	08/07/2017 23:53
SV-5	200-39613-5	26252-15.D	08/08/2017 00:43

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab File ID: 25833_01.D BFB Injection Date: 07/10/2017

Instrument ID: CHX.i BFB Injection Time: 12:41

Analysis Batch No.: 118373

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.4	
75	30.0 - 66.0% of mass 95	48.7	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.7	(0.9) 1
174	50.0 - 120.0% of mass 95	77.3	
175	4.0 - 9.0 % of mass 174	5.6	(7.2) 1
176	93.0 - 101.0% of mass 174	75.1	(97.2) 1
177	5.0 - 9.0% of mass 176	4.7	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-118373/4	25833_04.D	07/10/2017	15:17
	IC 200-118373/5	25833_05.D	07/10/2017	16:07
	IC 200-118373/6	25833_06.D	07/10/2017	16:58
	IC 200-118373/7	25833_07.D	07/10/2017	17:48
	ICIS 200-118373/8	25833_08.D	07/10/2017	18:38
	IC 200-118373/9	25833_09.D	07/10/2017	19:28
	IC 200-118373/10	25833_10.D	07/10/2017	20:19
	IC 200-118373/11	25833_11.D	07/10/2017	21:09
	ICV 200-118373/15	25833_15.D	07/11/2017	00:30

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab File ID: 26252_01.D BFB Injection Date: 08/07/2017

Instrument ID: CHX.i BFB Injection Time: 11:31

Analysis Batch No.: 119430

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	23.0	
75	30.0 - 66.0% of mass 95	52.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.8	(1.0) 1
174	50.0 - 120.0% of mass 95	75.4	
175	4.0 - 9.0 % of mass 174	5.5	(7.3) 1
176	93.0 - 101.0% of mass 174	73.4	(97.2) 1
177	5.0 - 9.0% of mass 176	4.7	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-119430/5	26252-05.D	08/07/2017	16:19
	LCS 200-119430/6	26252-06.D	08/07/2017	17:09
	MB 200-119430/7	26252-07.D	08/07/2017	18:00
SV-1	200-39613-1	26252-11.D	08/07/2017	21:21
SV-2	200-39613-2	26252-12.D	08/07/2017	22:12
SV-3	200-39613-3	26252-13.D	08/07/2017	23:02
SV-4	200-39613-4	26252-14.D	08/07/2017	23:53
SV-5	200-39613-5	26252-15.D	08/08/2017	00:43

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Sample No.: ICIS 200-118373/8 Date Analyzed: 07/10/2017 18:38

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25833_08.D Heated Purge: (Y/N) N

Calibration ID: 37504

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		263752	10.24	1460225	12.33	1369325	18.65
UPPER LIMIT		369253	10.57	2044315	12.66	1917055	18.98
LOWER LIMIT		158251	9.91	876135	12.00	821595	18.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-118373/15		278127	10.24	1551870	12.33	1393390	18.66

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Sample No.: CCVIS 200-119430/5 Date Analyzed: 08/07/2017 16:19

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 26252-05.D Heated Purge: (Y/N) N

Calibration ID: 37504

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		200002	10.23	1132066	12.32	1052156	18.65
UPPER LIMIT		280003	10.56	1584892	12.65	1473018	18.98
LOWER LIMIT		120001	9.90	679240	11.99	631294	18.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-119430/6		166680	10.23	908872	12.32	763866	18.65
MB 200-119430/7		189321	10.23	1079273	12.32	961216	18.64
200-39613-1	SV-1	137544	10.23	747858	12.32	654448	18.64
200-39613-2	SV-2	141594	10.23	777045	12.32	682798	18.64
200-39613-3	SV-3	145156	10.23	794794	12.32	744190	18.65
200-39613-4	SV-4	151314	10.23	827545	12.32	747582	18.65
200-39613-5	SV-5	164002	10.23	925942	12.32	779997	18.65

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-1 Lab Sample ID: 200-39613-1

Matrix: Air Lab File ID: 26252-11.D

Analysis Method: TO-15 Date Collected: 08/03/2017 10:00

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 21:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.28	J	0.50	0.16
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
75-09-2	Methylene Chloride	84.93	0.23	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	0.57		0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	0.55		0.20	0.026
56-23-5	Carbon tetrachloride	153.81	0.052	J	0.20	0.011
71-43-2	Benzene	78.11	0.58		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
79-01-6	Trichloroethene	131.39	0.22		0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
108-88-3	Toluene	92.14	0.65		0.20	0.035
127-18-4	Tetrachloroethene	165.83	2.0		0.20	0.0098
108-90-7	Chlorobenzene	112.56	0.033	J	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.32		0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.32	J	0.50	0.077
95-47-6	Xylene, o-	106.17	0.13	J	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.067	J	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.20		0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	0.14	J	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
91-20-3	Naphthalene	128.17	0.10	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-1 Lab Sample ID: 200-39613-1

Matrix: Air Lab File ID: 26252-11.D

Analysis Method: TO-15 Date Collected: 08/03/2017 10:00

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 21:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.59	J	1.0	0.33
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
75-09-2	Methylene Chloride	84.93	0.78	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
156-59-2	cis-1,2-Dichloroethene	96.94	2.3		0.79	0.11
71-55-6	1,1,1-Trichloroethane	133.41	3.0		1.1	0.14
56-23-5	Carbon tetrachloride	153.81	0.33	J	1.3	0.069
71-43-2	Benzene	78.11	1.9		0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
79-01-6	Trichloroethene	131.39	1.2		1.1	0.049
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
108-88-3	Toluene	92.14	2.4		0.75	0.13
127-18-4	Tetrachloroethene	165.83	13		1.4	0.066
108-90-7	Chlorobenzene	112.56	0.15	J	0.92	0.12
100-41-4	Ethylbenzene	106.17	1.4		0.87	0.15
179601-23-1	m,p-Xylene	106.17	1.4	J	2.2	0.33
95-47-6	Xylene, o-	106.17	0.54	J	0.87	0.17
108-67-8	1,3,5-Trimethylbenzene	120.20	0.33	J	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.96		0.98	0.28
541-73-1	1,3-Dichlorobenzene	147.00	0.82	J	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
91-20-3	Naphthalene	128.17	0.52	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D
Lims ID: 200-39613-A-1
Client ID: SV-1
Sample Type: Client
Inject. Date: 07-Aug-2017 21:21:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-011
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:28:14 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:28:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.509	3.515	-0.006	98	4473	0.2849	
7 Vinyl chloride	62		3.739				ND	
11 Chloroethane	64		4.676				ND	
21 1,1-Dichloroethene	96		6.216				ND	
27 Methylene Chloride	49	7.275	7.286	-0.011	97	4394	0.2258	
29 Methyl tert-butyl ether	73		7.698				ND	
31 trans-1,2-Dichloroethene	61		7.720				ND	
34 1,1-Dichloroethane	63		8.608				ND	
37 cis-1,2-Dichloroethene	96	9.742	9.752	-0.010	97	9751	0.5687	
* 40 Chlorobromomethane	128	10.228	10.234	-0.006	95	137544	10.0	
44 1,1,1-Trichloroethane	97	10.646	10.651	-0.005	95	18802	0.5452	
45 Carbon tetrachloride	117	10.892	10.908	-0.016	52	1739	0.0518	
47 Benzene	78	11.405	11.411	-0.006	98	34529	0.5801	
48 1,2-Dichloroethane	62		11.620				ND	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	747858	10.0	
53 Trichloroethene	95	12.802	12.802	-0.005	40	5456	0.2157	M
54 1,2-Dichloropropane	63		13.412				ND	
65 Toluene	92	15.583	15.584	-0.001	93	26278	0.6461	
68 Tetrachloroethene	166	16.702	16.707	-0.005	94	60800	1.96	
* 74 Chlorobenzene-d5	117	18.644	18.649	-0.005	91	654448	10.0	
75 Chlorobenzene	112	18.708	18.713	-0.005	76	1753	0.0328	
76 Ethylbenzene	91	18.874	18.874	0.000	99	29797	0.3219	
78 m-Xylene & p-Xylene	106	19.136	19.141	-0.005	0	11174	0.3217	
79 o-Xylene	106	20.029	20.035	-0.006	97	4254	0.1250	
90 1,3,5-Trimethylbenzene	105	21.891	21.891	0.000	91	5575	0.0669	
93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	98	16400	0.1959	
96 1,3-Dichlorobenzene	146	22.987	22.988	-0.001	97	7429	0.1372	
101 1,2-Dichlorobenzene	146		23.683				ND	
105 Naphthalene	128	26.764	26.765	-0.001	98	6228	0.0688	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

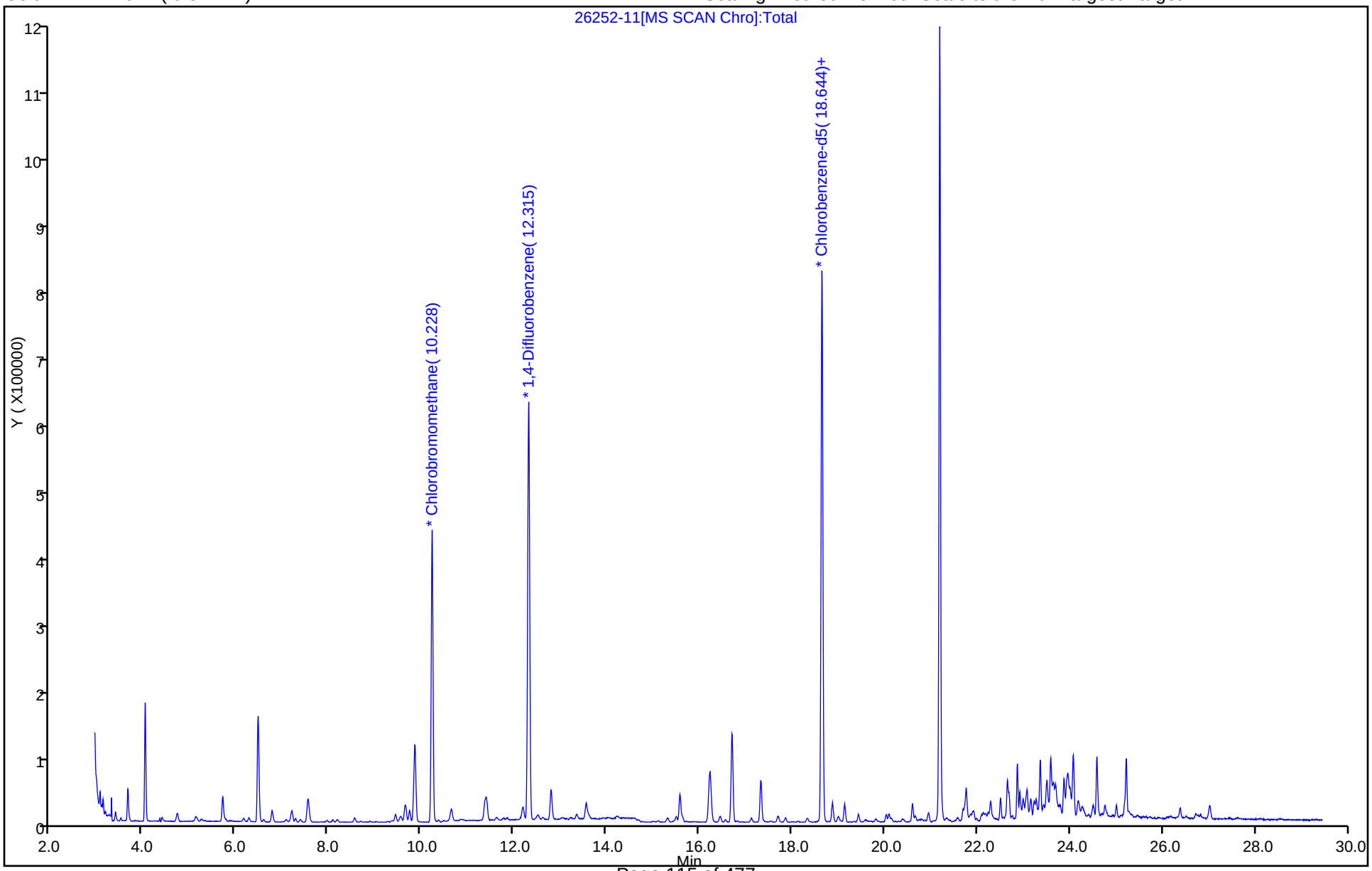
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1	Worklist Smp#:	11
Client ID:	SV-1				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



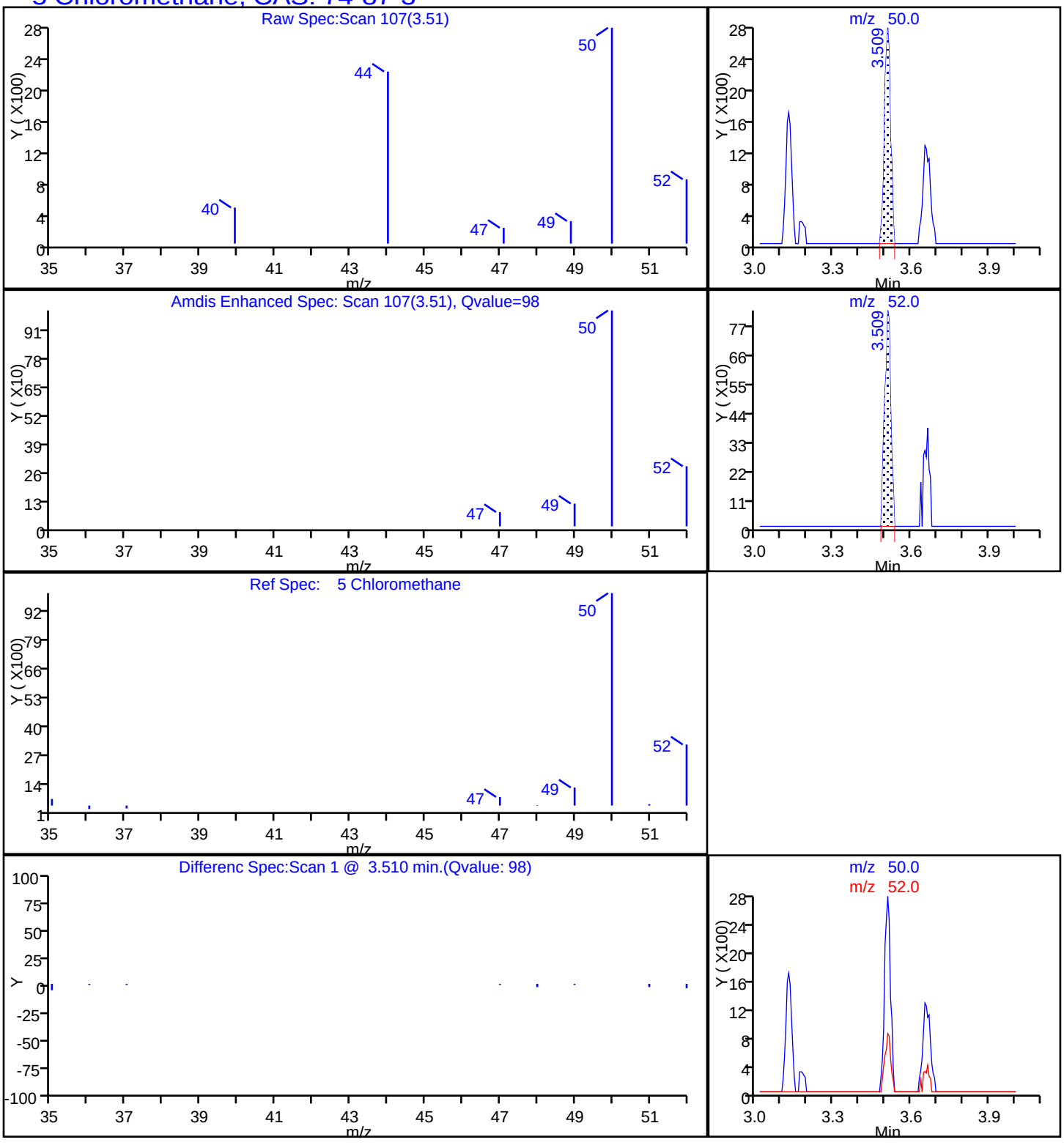
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



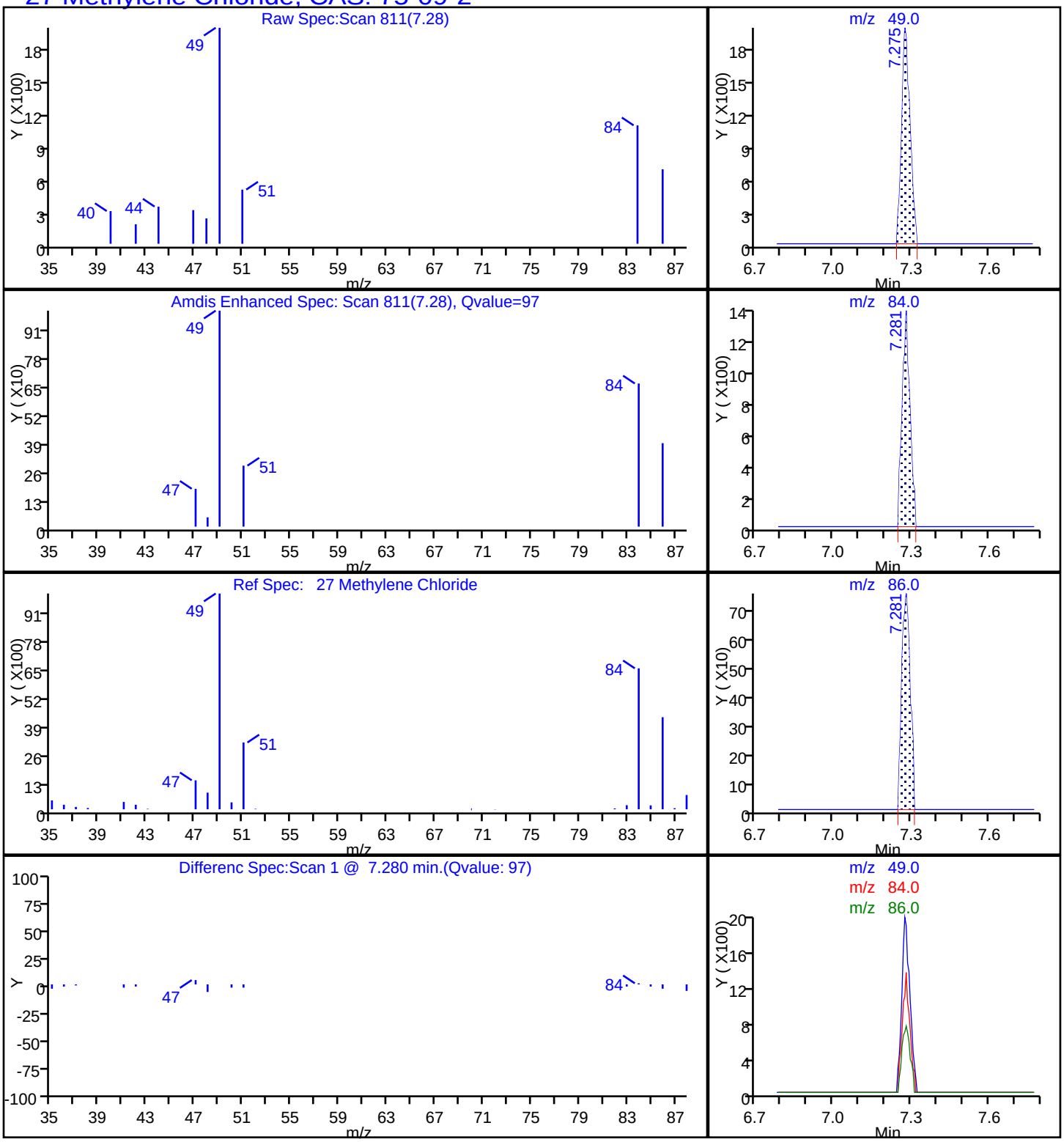
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



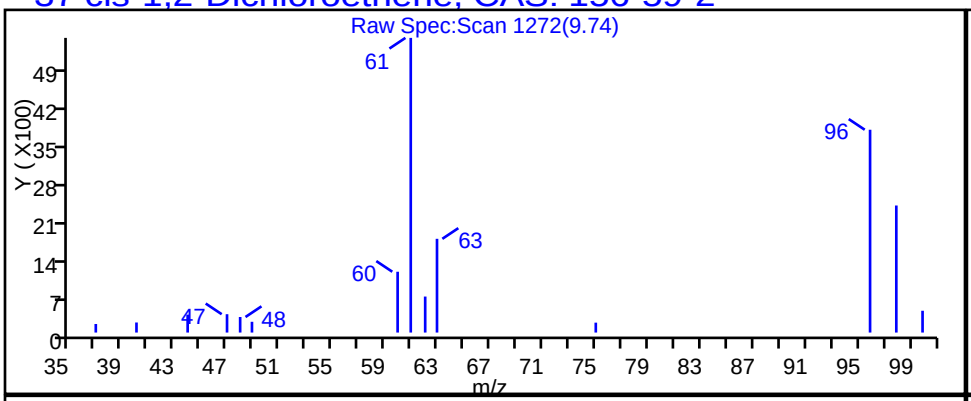
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

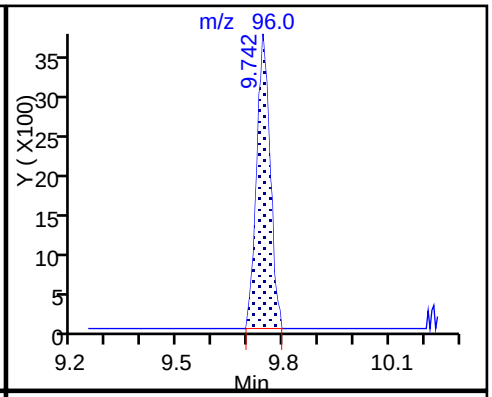
TestAmerica Burlington

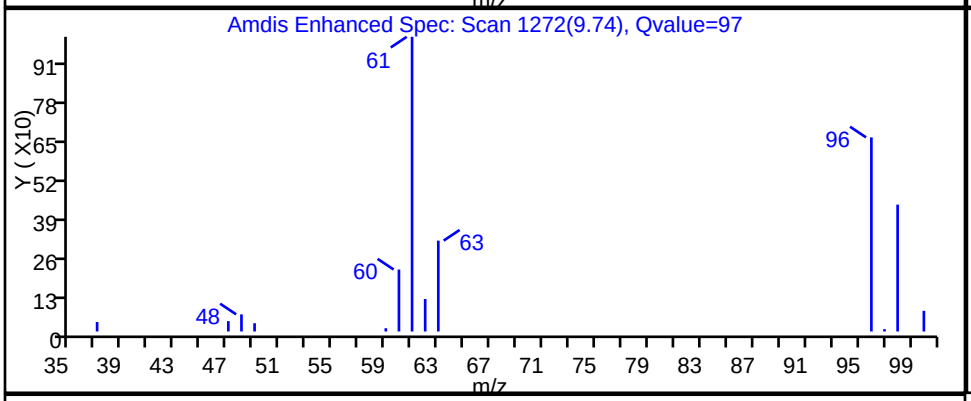
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

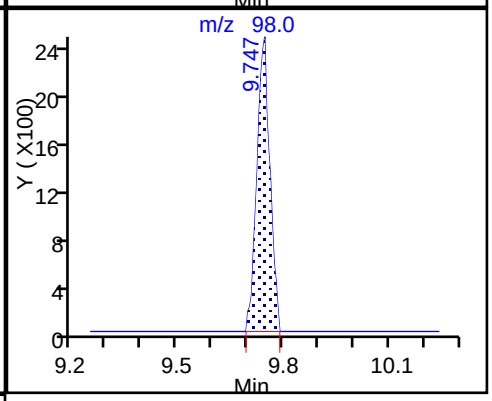
Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

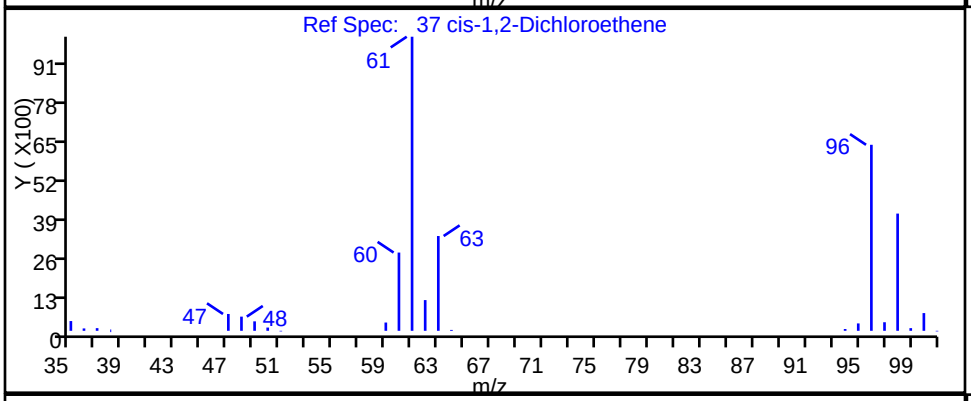
37 cis-1,2-Dichloroethene, CAS: 156-59-2

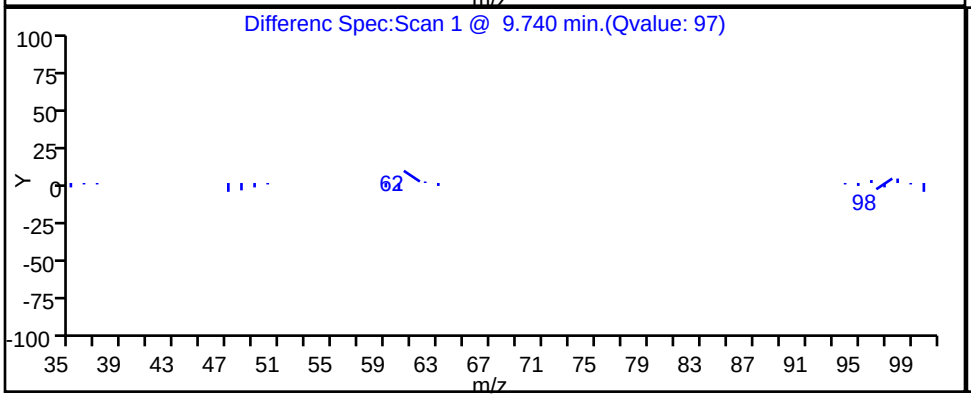


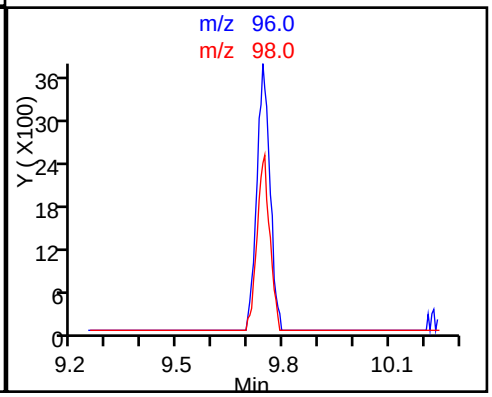












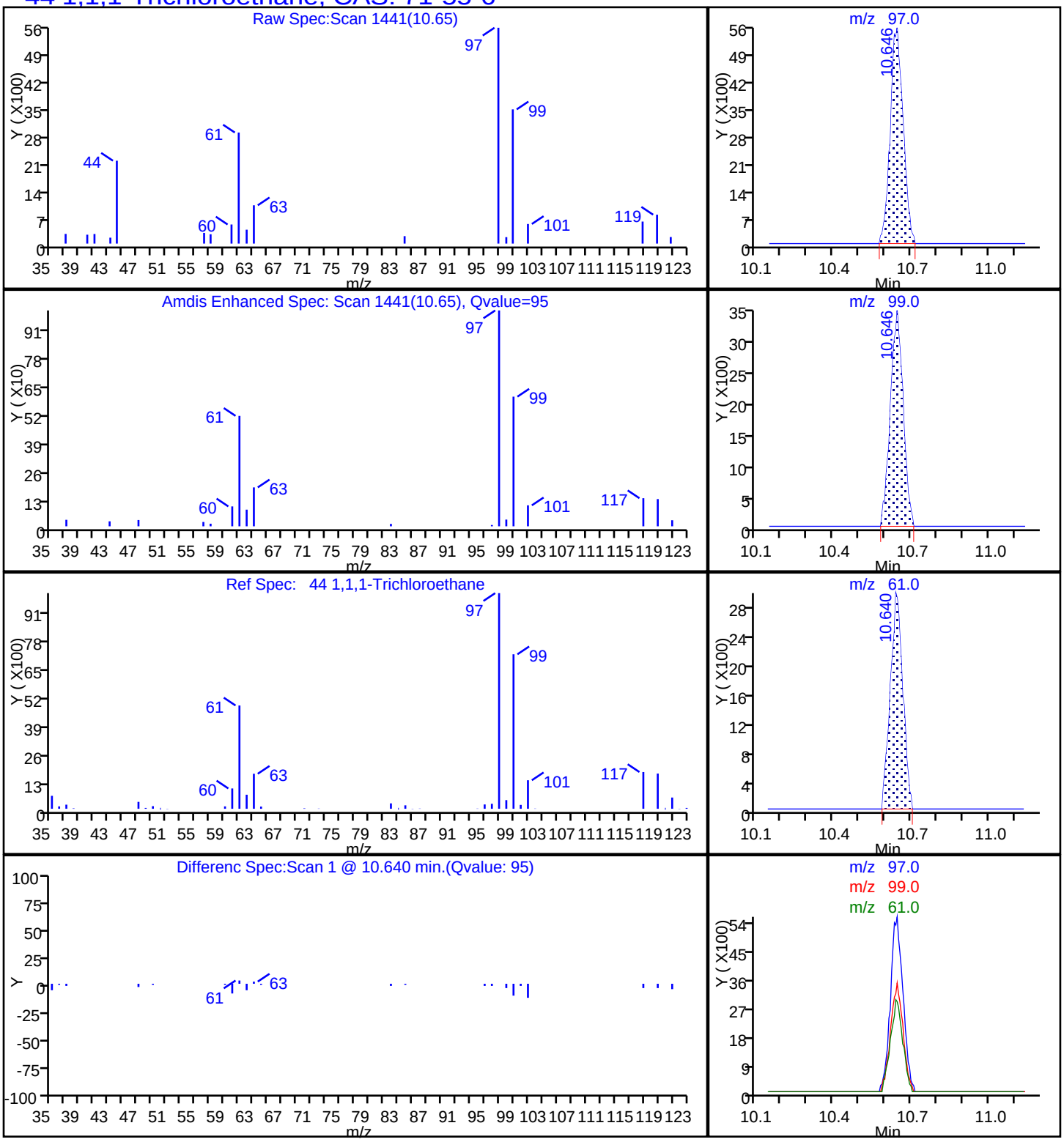
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6



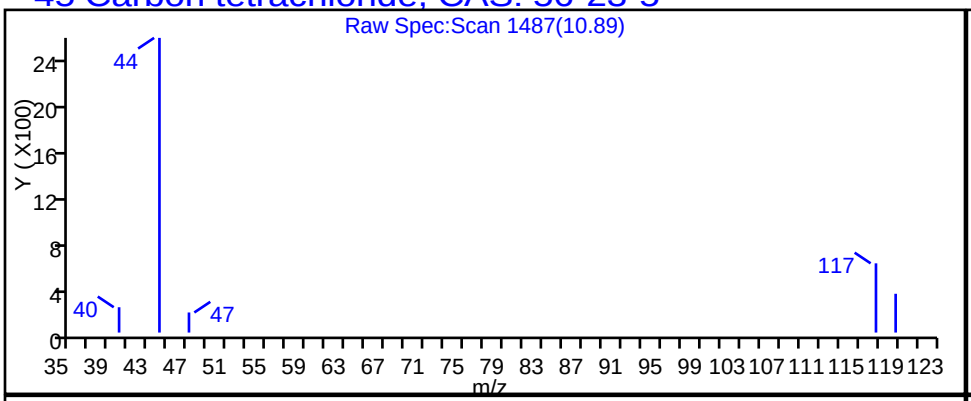
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

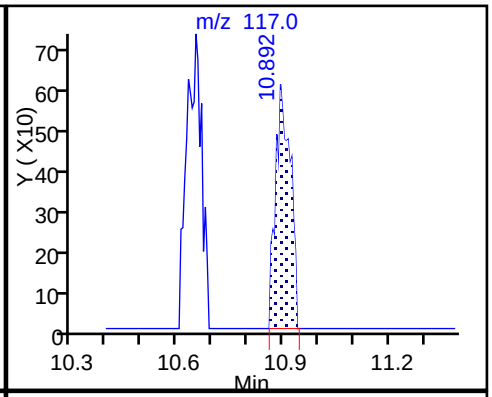
TestAmerica Burlington

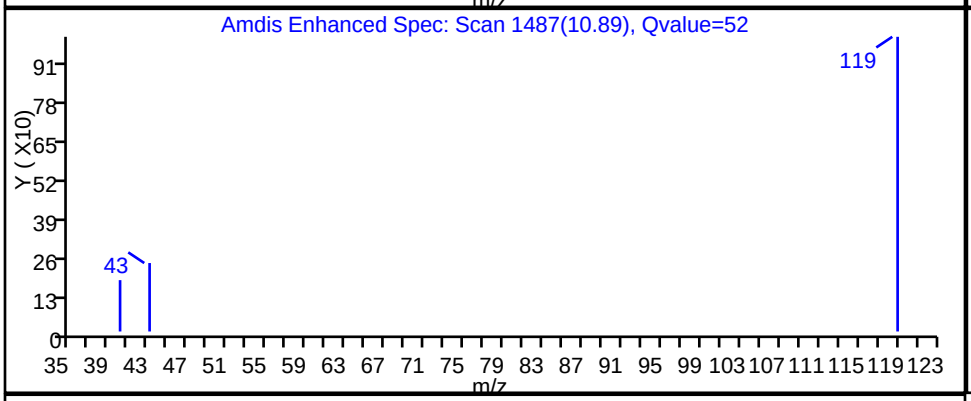
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

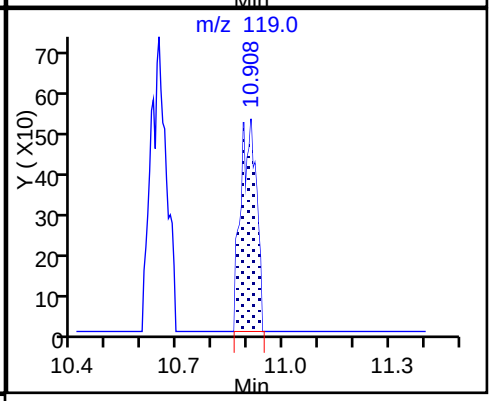
Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

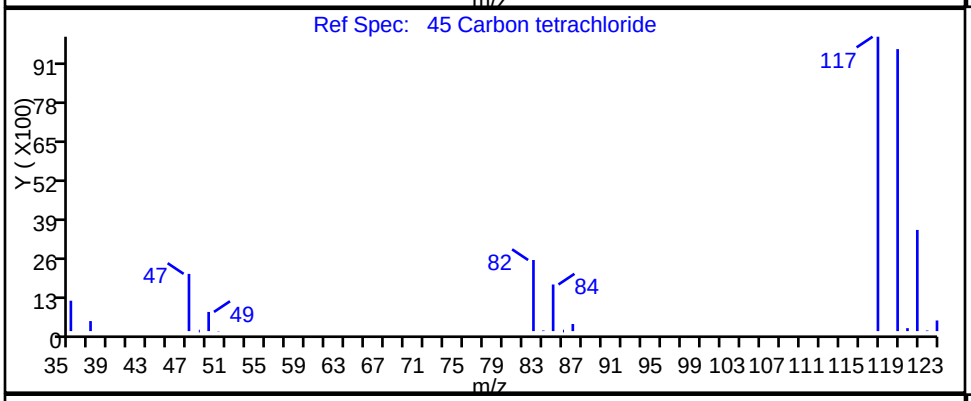
45 Carbon tetrachloride, CAS: 56-23-5

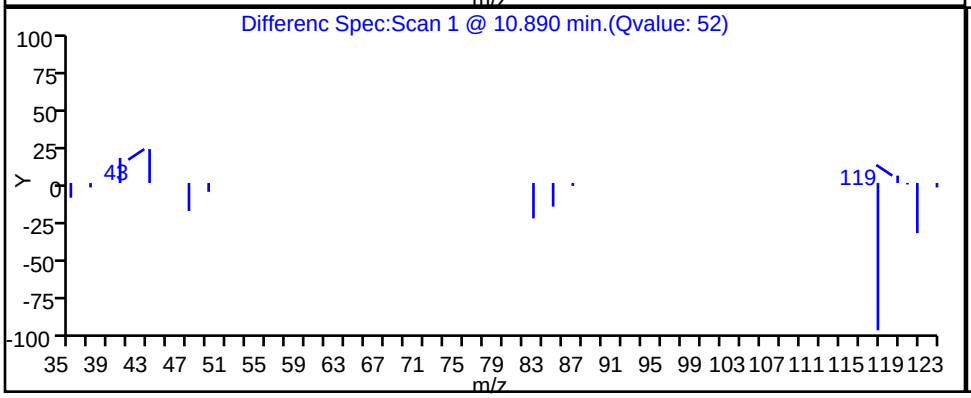


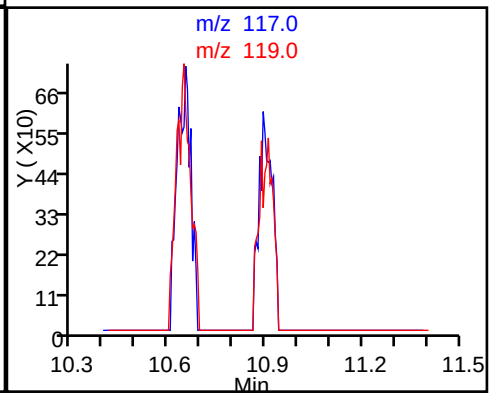












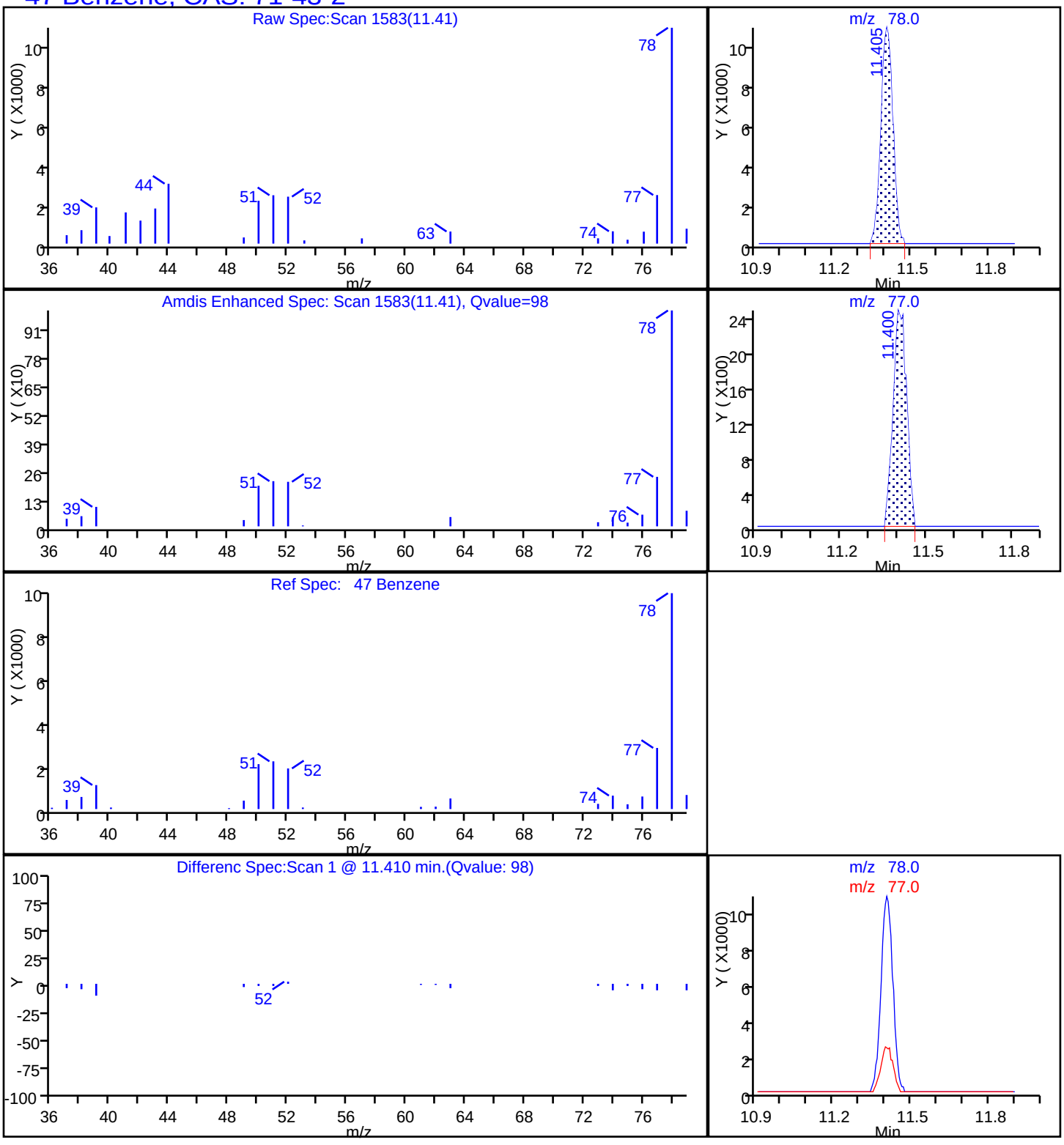
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



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Client ID:	SV-1				
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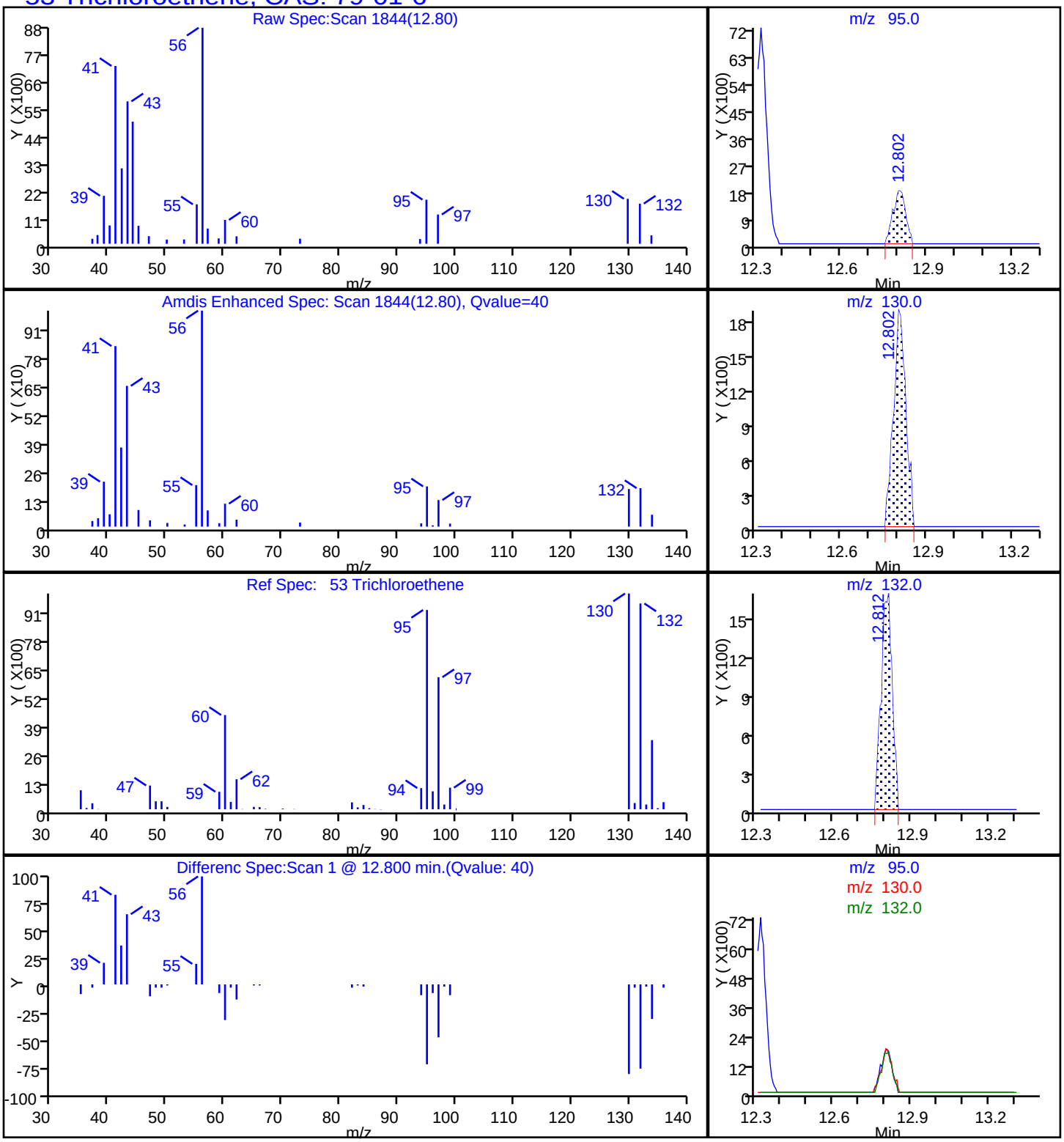
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6



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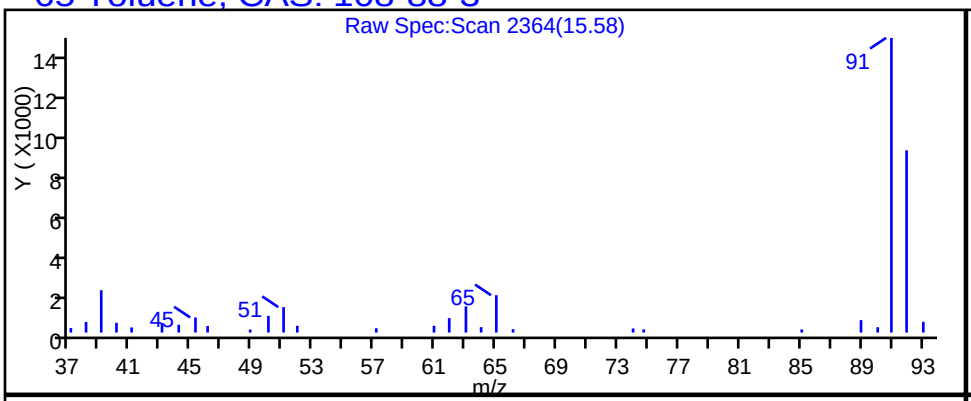
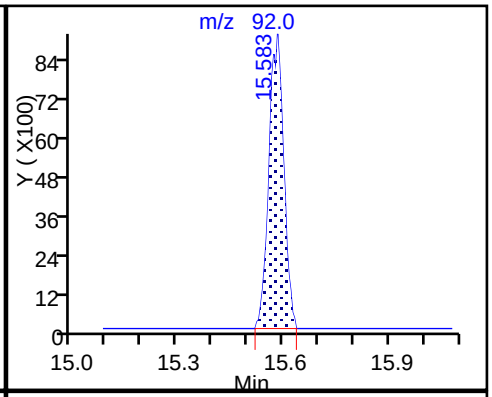
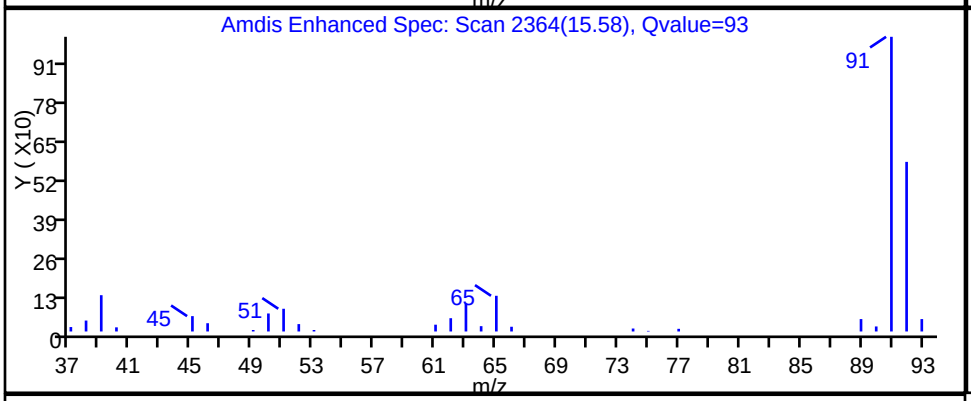
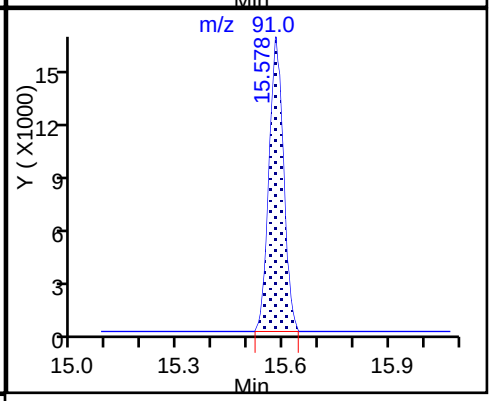
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

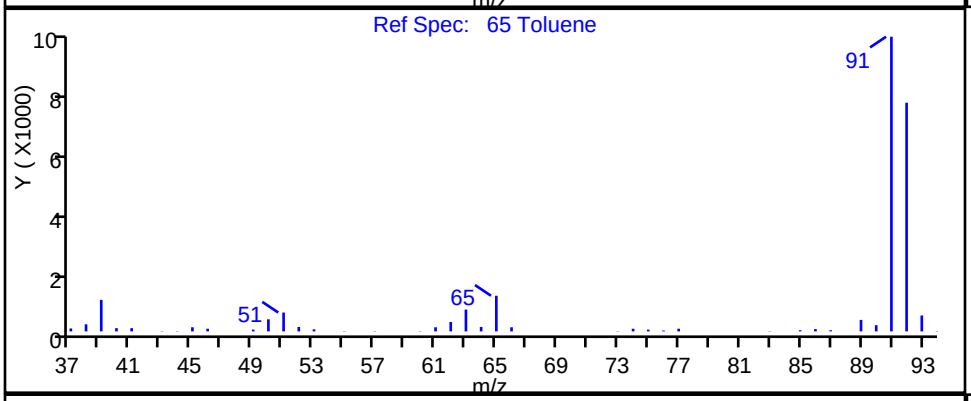
65 Toluene, CAS: 108-88-3

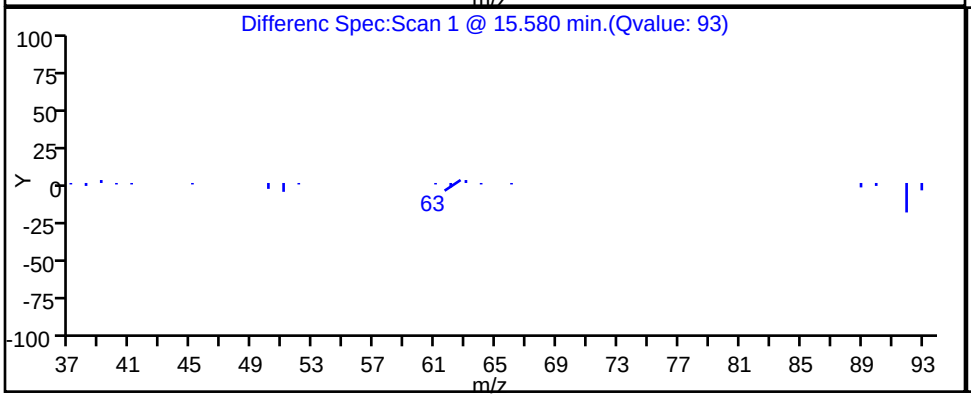


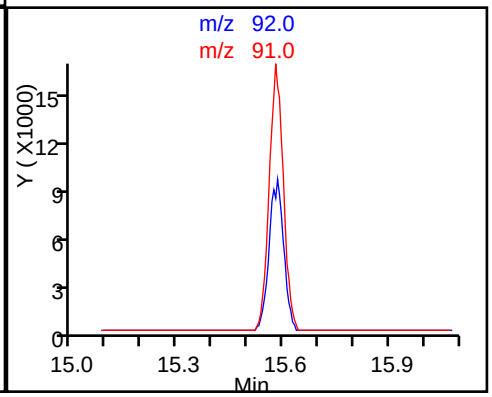












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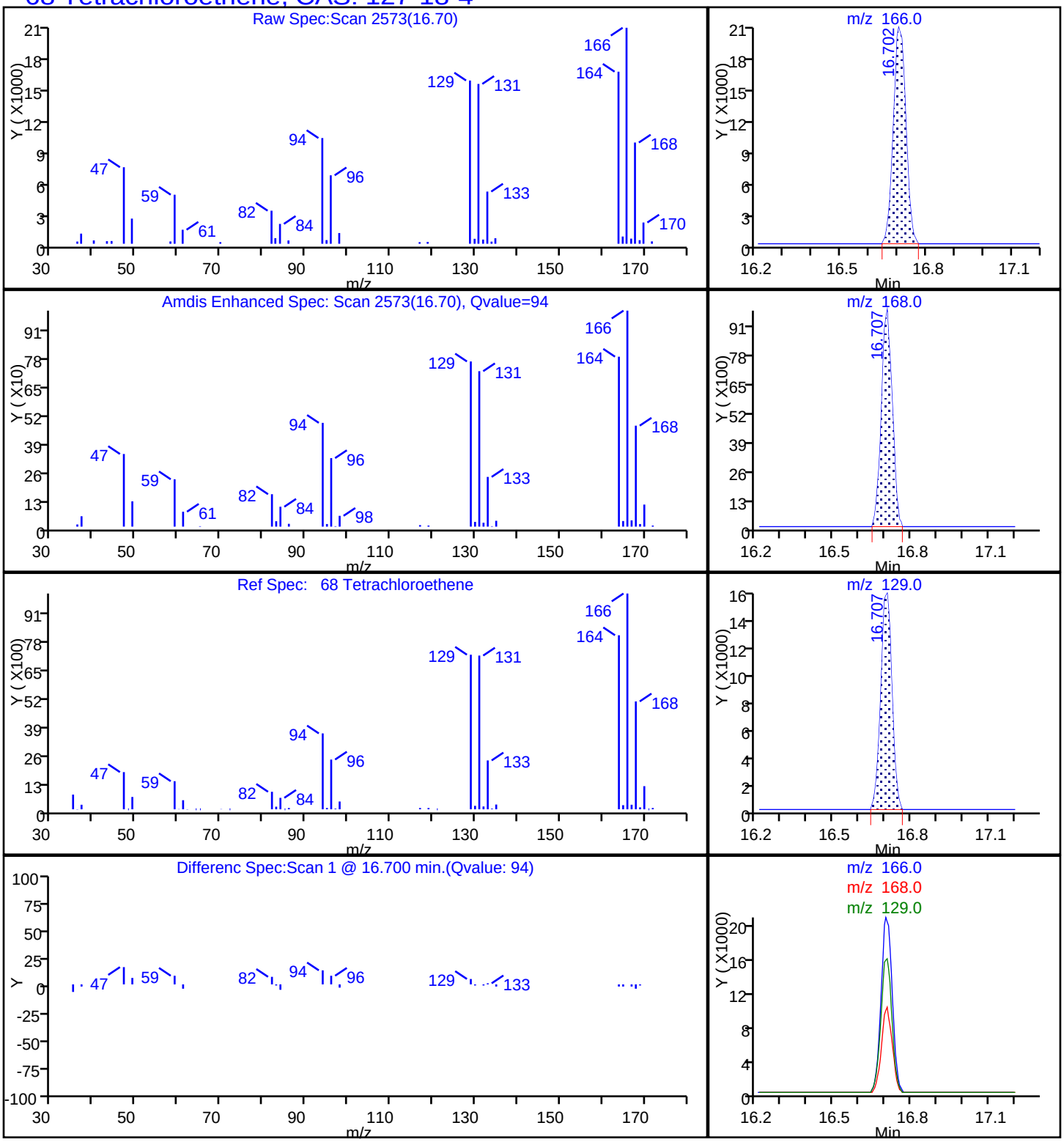
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



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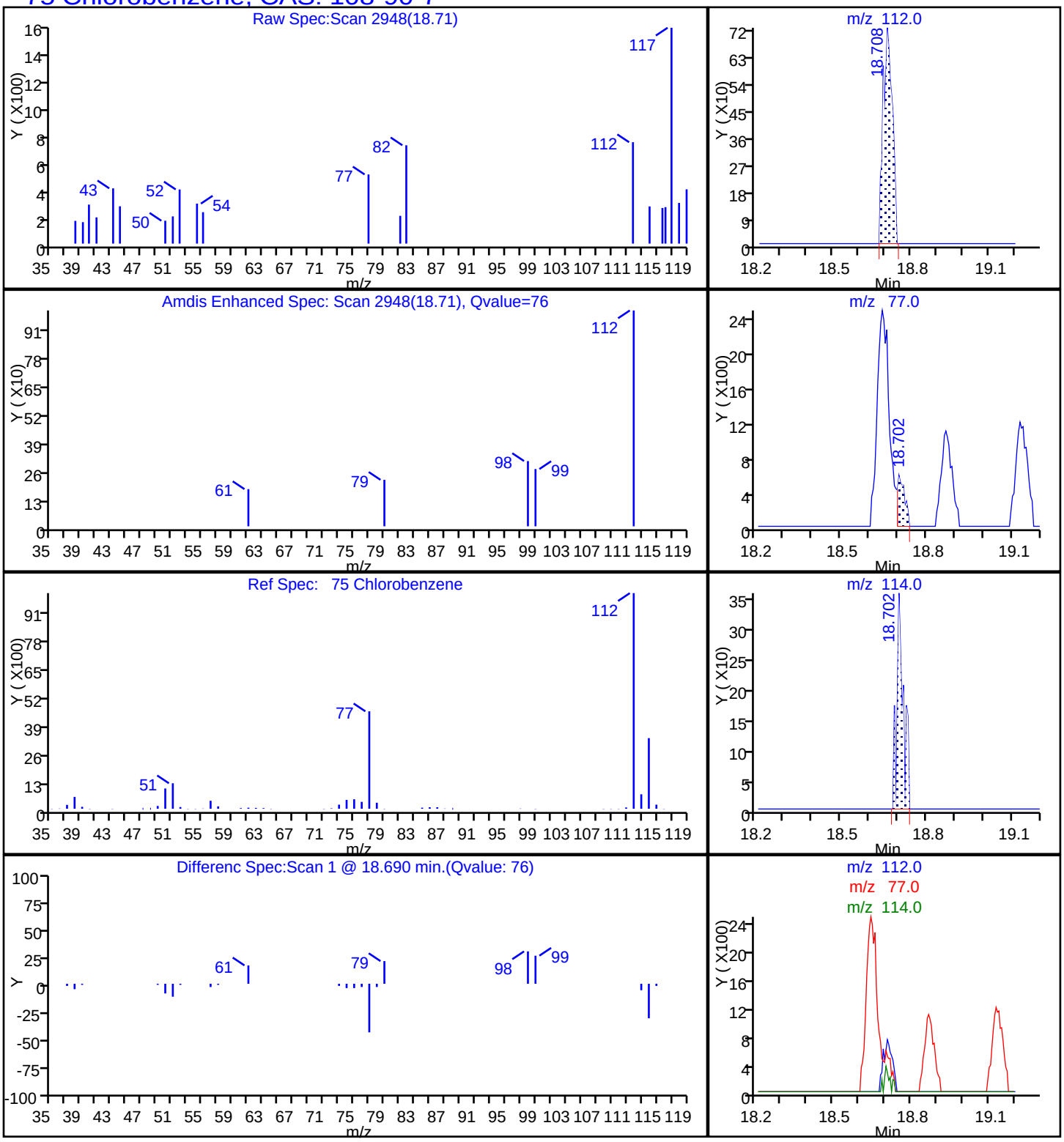
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 Chlorobenzene, CAS: 108-90-7



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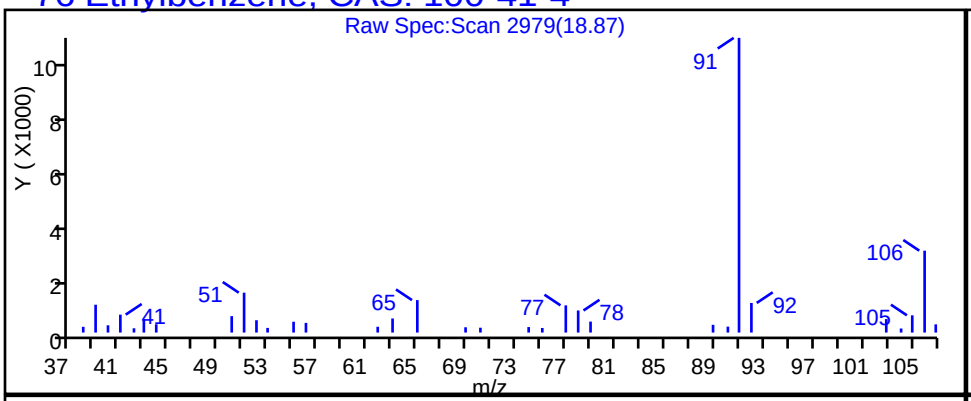
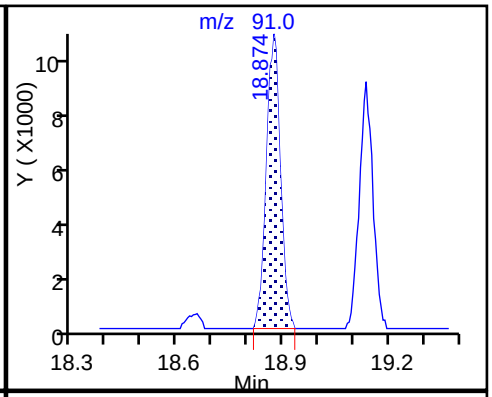
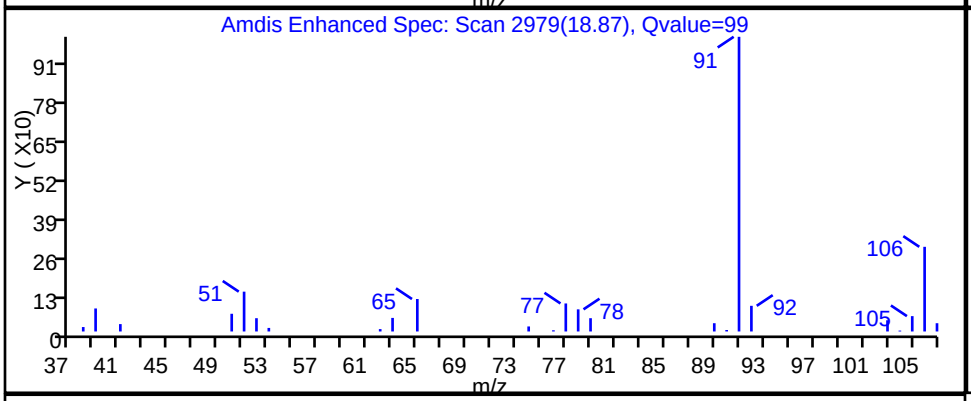
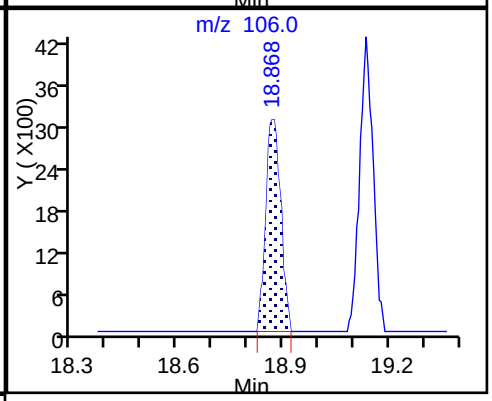
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

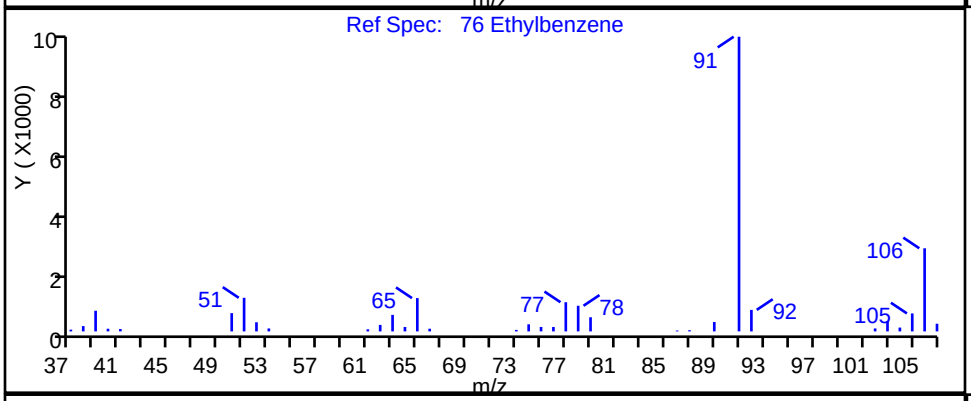
76 Ethylbenzene, CAS: 100-41-4

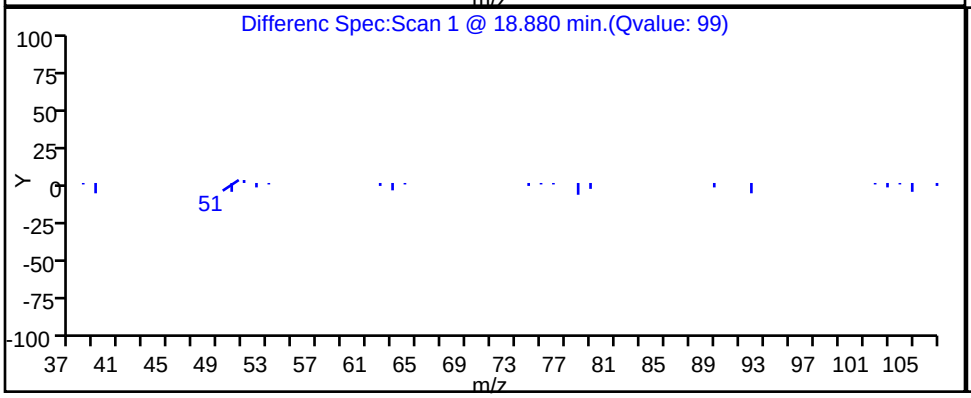


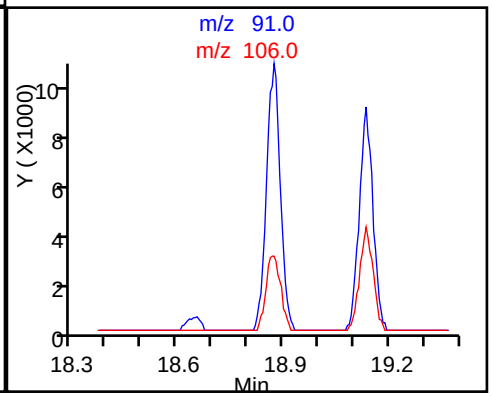












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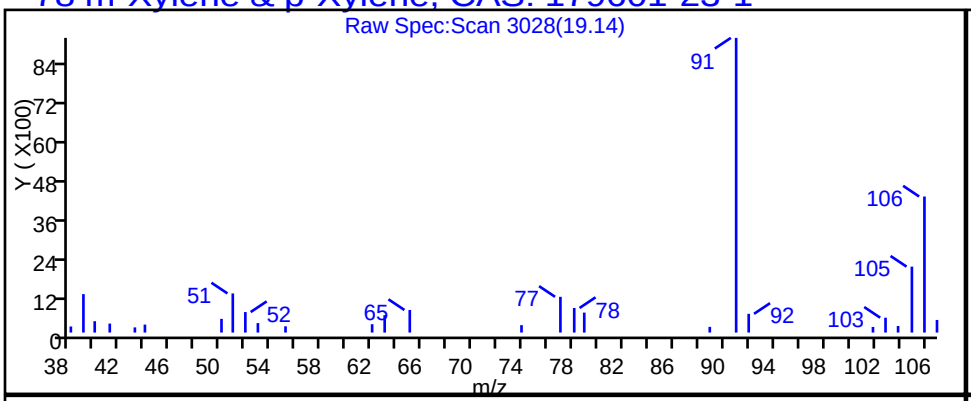
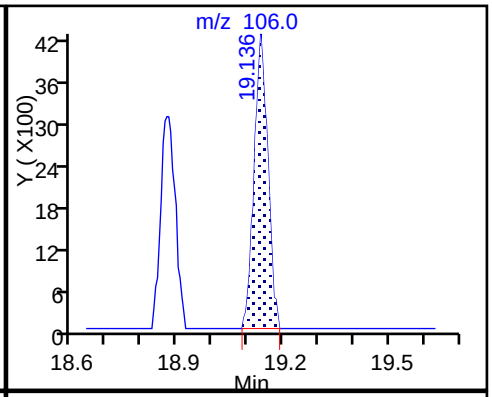
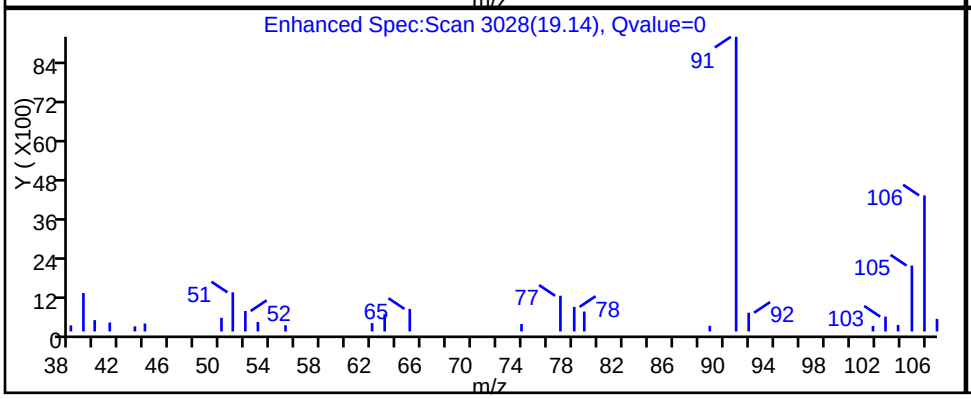
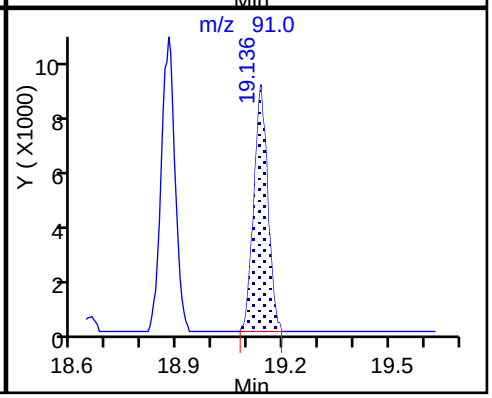
Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

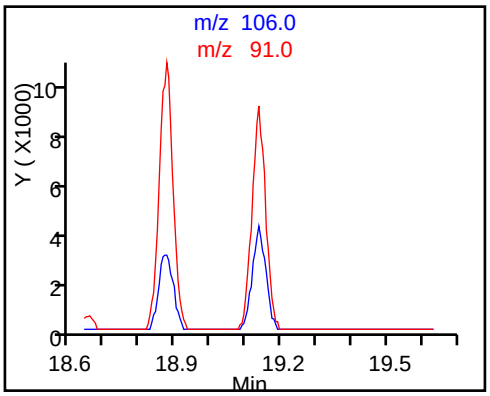
78 m-Xylene & p-Xylene, CAS: 179601-23-1











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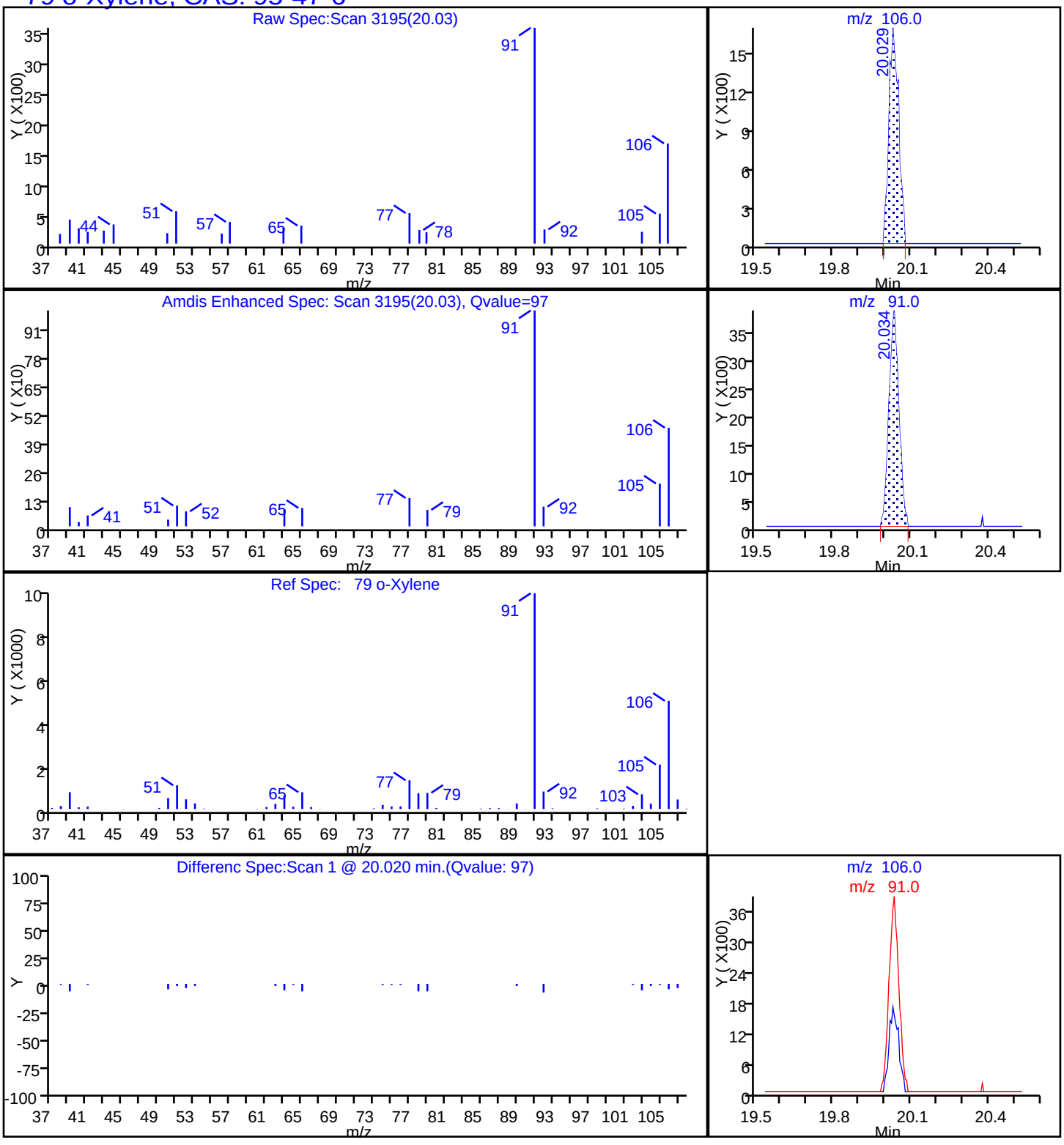
Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



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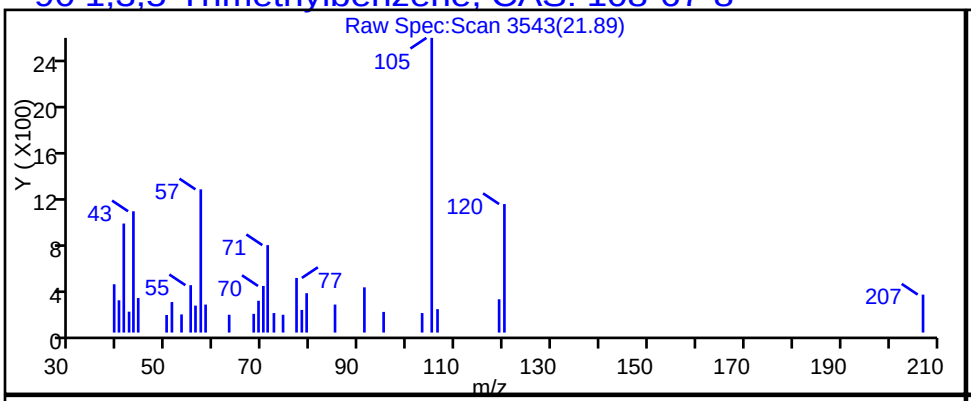
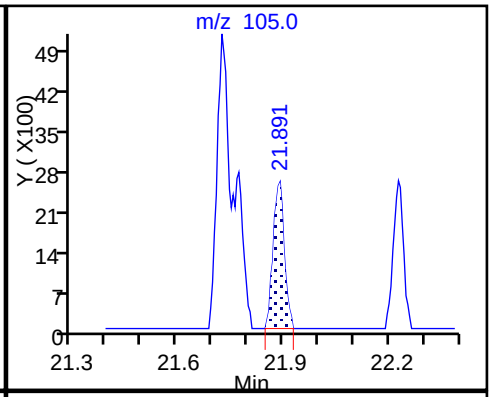
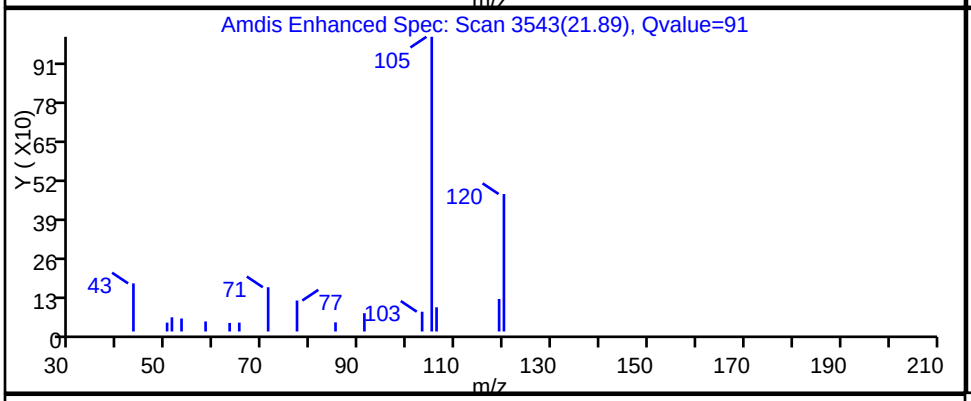
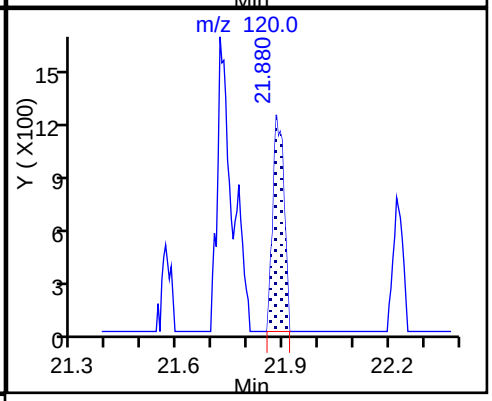
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

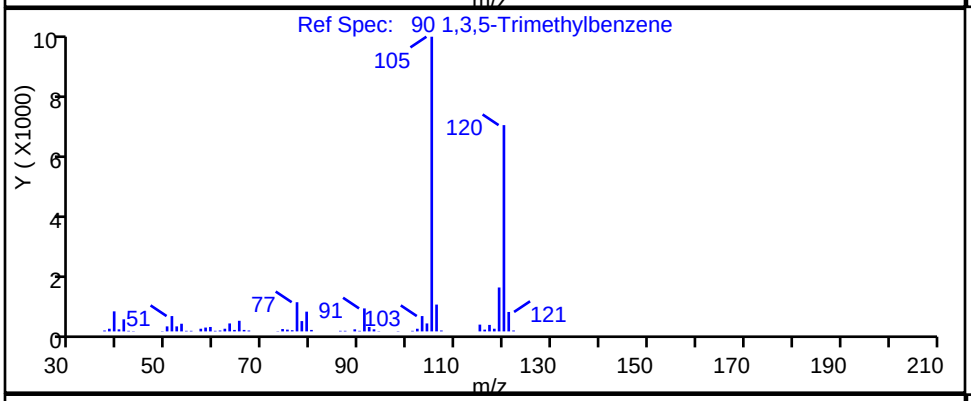
90 1,3,5-Trimethylbenzene, CAS: 108-67-8

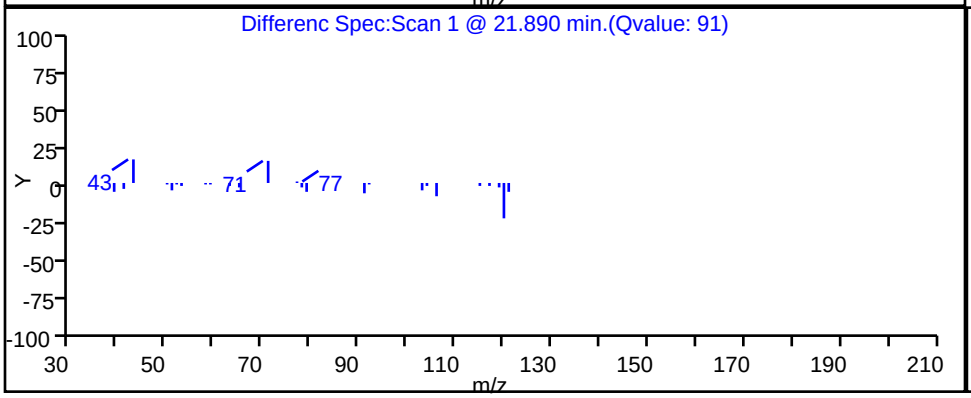


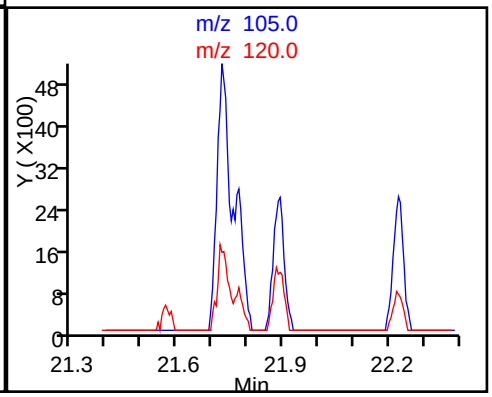












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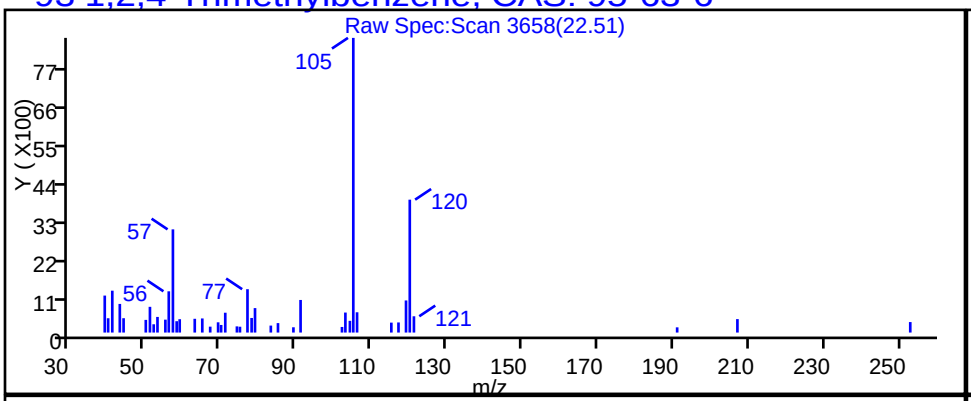
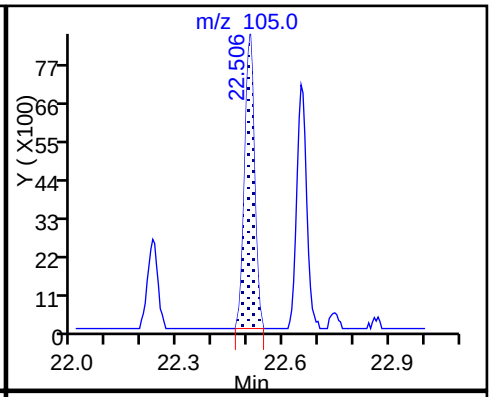
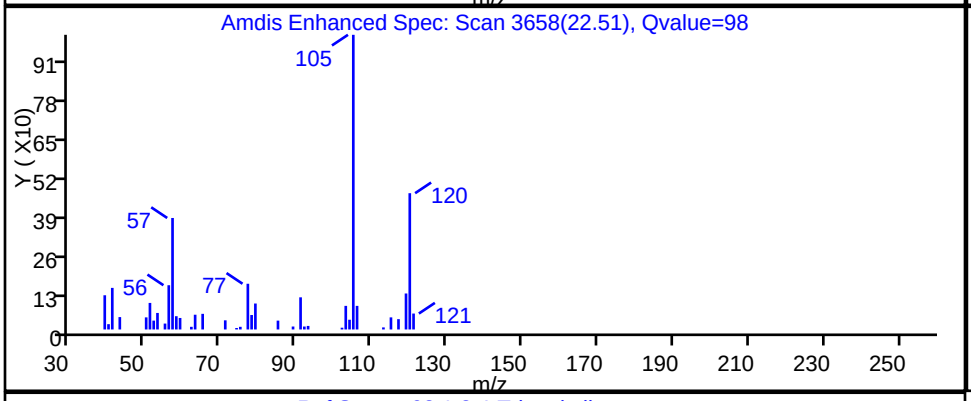
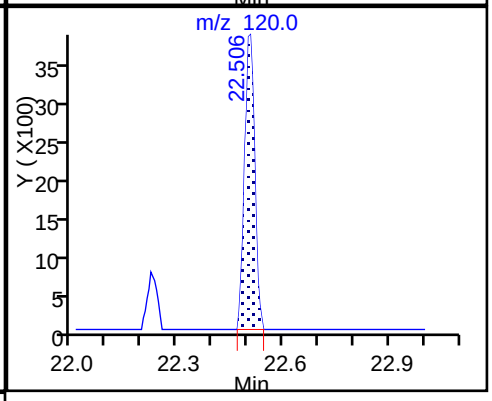
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

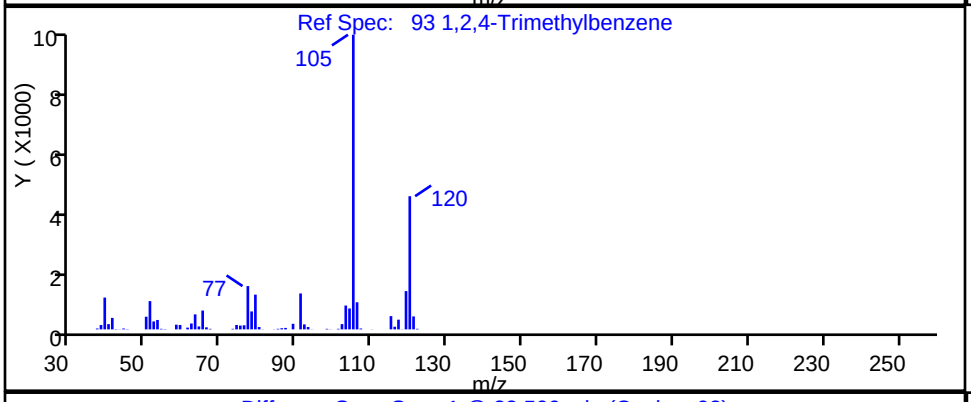
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

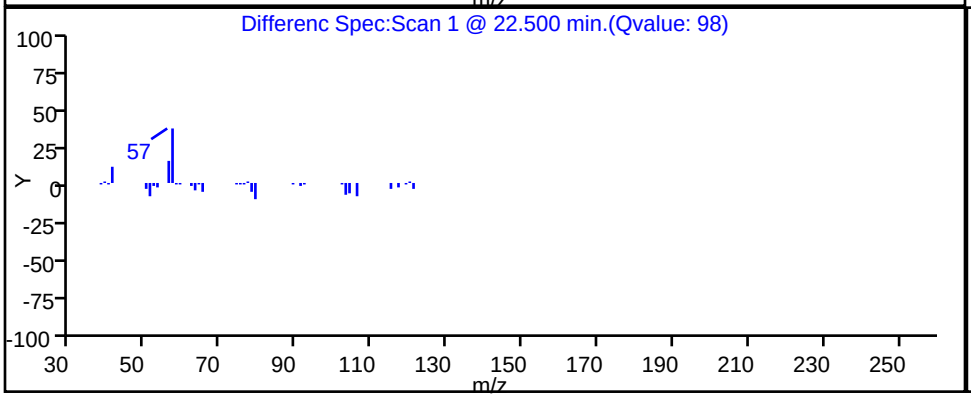


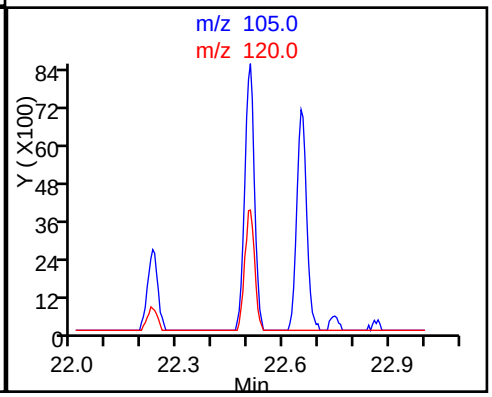












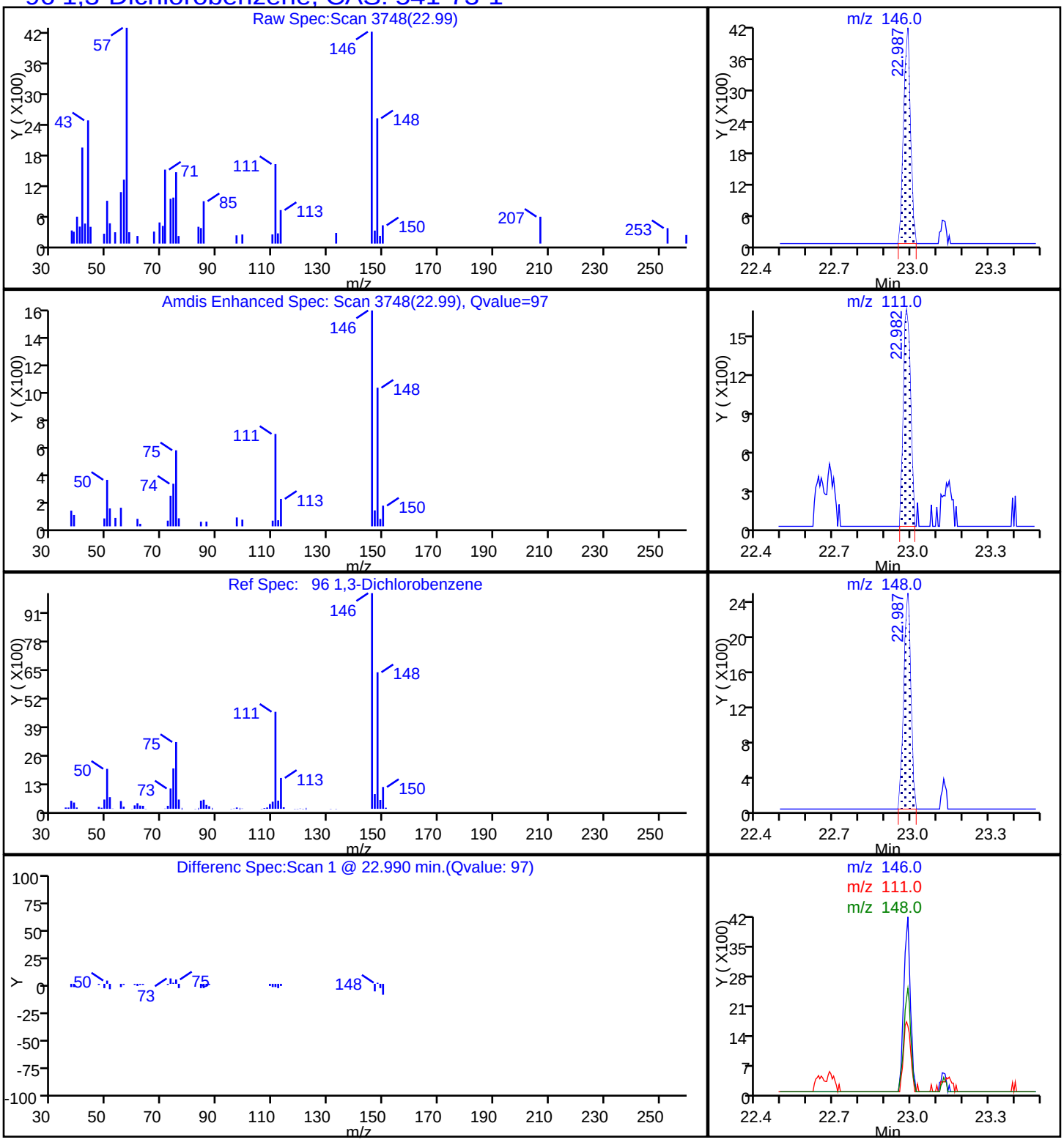
Report Date: 08-Aug-2017 14:28:15 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D

Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

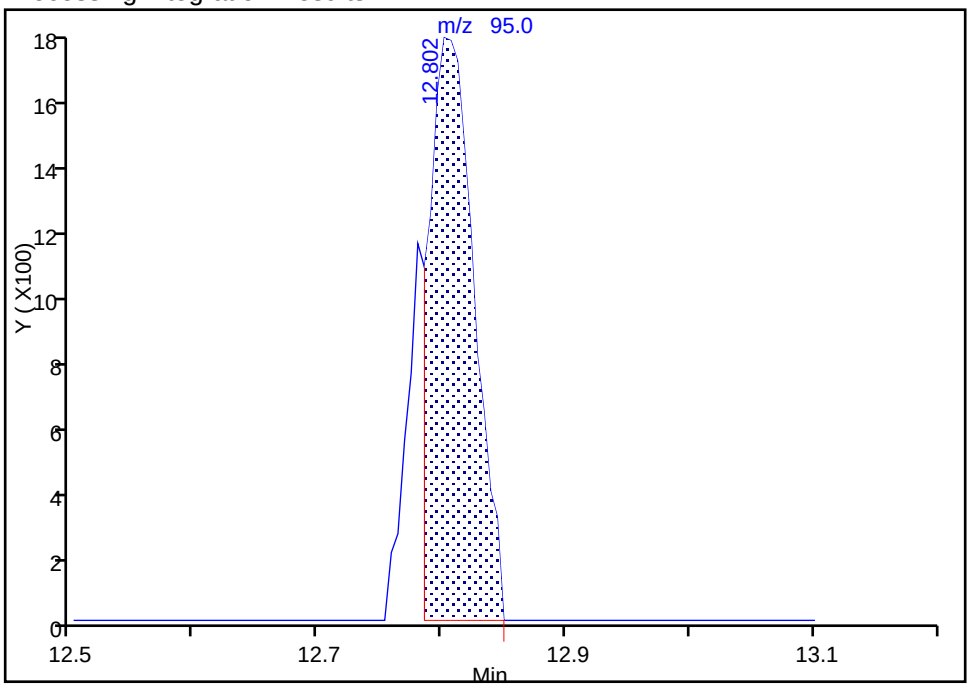
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-11.D				
Injection Date:	07-Aug-2017 21:21:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-1	Lab Sample ID:	200-39613-1		
Client ID:	SV-1				
Operator ID:	ert	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

53 Trichloroethene, CAS: 79-01-6

Signal: 1

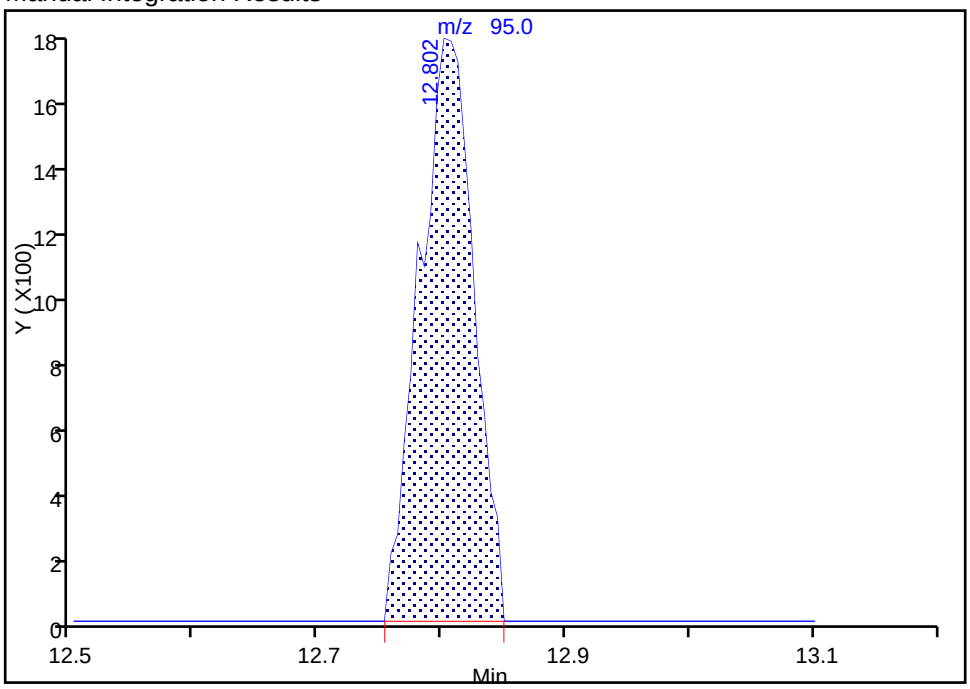
Processing Integration Results

RT: 12.80
Area: 4513
Amount: 0.178386
Amount Units: ppb v/v



Manual Integration Results

RT: 12.80
Area: 5456
Amount: 0.215661
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:27:30

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-2 Lab Sample ID: 200-39613-2

Matrix: Air Lab File ID: 26252-12.D

Analysis Method: TO-15 Date Collected: 08/03/2017 10:25

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 22:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.16	U	0.50	0.16
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
75-09-2	Methylene Chloride	84.93	0.097	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
56-23-5	Carbon tetrachloride	153.81	0.028	J	0.20	0.011
71-43-2	Benzene	78.11	0.14	J	0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
108-88-3	Toluene	92.14	0.35		0.20	0.035
127-18-4	Tetrachloroethene	165.83	0.23		0.20	0.0098
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.17	J	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.48	J	0.50	0.077
95-47-6	Xylene, o-	106.17	0.23		0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.38		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0		0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	0.12	J	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
91-20-3	Naphthalene	128.17	0.16	J	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-2 Lab Sample ID: 200-39613-2

Matrix: Air Lab File ID: 26252-12.D

Analysis Method: TO-15 Date Collected: 08/03/2017 10:25

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 22:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.33	U	1.0	0.33
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
75-09-2	Methylene Chloride	84.93	0.34	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
56-23-5	Carbon tetrachloride	153.81	0.18	J	1.3	0.069
71-43-2	Benzene	78.11	0.44	J	0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
108-88-3	Toluene	92.14	1.3		0.75	0.13
127-18-4	Tetrachloroethene	165.83	1.6		1.4	0.066
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.75	J	0.87	0.15
179601-23-1	m,p-Xylene	106.17	2.1	J	2.2	0.33
95-47-6	Xylene, o-	106.17	0.98		0.87	0.17
108-67-8	1,3,5-Trimethylbenzene	120.20	1.9		0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	4.9		0.98	0.28
541-73-1	1,3-Dichlorobenzene	147.00	0.75	J	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
91-20-3	Naphthalene	128.17	0.82	J	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D
Lims ID: 200-39613-A-2
Client ID: SV-2
Sample Type: Client
Inject. Date: 07-Aug-2017 22:12:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-012
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:39:43 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:40:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.509	3.515	-0.006	96	1785	0.1105	
7 Vinyl chloride	62		3.739				ND	
11 Chloroethane	64		4.676				ND	
21 1,1-Dichloroethene	96		6.216				ND	
27 Methylene Chloride	49	7.270	7.286	-0.016	94	1941	0.0969	
29 Methyl tert-butyl ether	73		7.698				ND	
31 trans-1,2-Dichloroethene	61		7.720				ND	
34 1,1-Dichloroethane	63		8.608				ND	
37 cis-1,2-Dichloroethene	96		9.752				ND	
* 40 Chlorobromomethane	128	10.228	10.234	-0.006	95	141594	10.0	
44 1,1,1-Trichloroethane	97		10.651				ND	
45 Carbon tetrachloride	117	10.902	10.908	-0.006	77	992	0.0284	
47 Benzene	78	11.416	11.411	0.005	97	8608	0.1392	M
48 1,2-Dichloroethane	62		11.620				ND	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	777045	10.0	
53 Trichloroethene	95		12.807				ND	
54 1,2-Dichloropropane	63		13.412				ND	
65 Toluene	92	15.583	15.584	-0.001	93	14726	0.3470	
68 Tetrachloroethene	166	16.707	16.707	0.000	91	7474	0.2307	
* 74 Chlorobenzene-d5	117	18.643	18.649	-0.006	91	682798	10.0	
75 Chlorobenzene	112		18.713				ND	
76 Ethylbenzene	91	18.868	18.874	-0.006	99	16590	0.1718	
78 m-Xylene & p-Xylene	106	19.136	19.141	-0.005	0	17479	0.4823	
79 o-Xylene	106	20.034	20.035	-0.001	98	8006	0.2255	
90 1,3,5-Trimethylbenzene	105	21.885	21.891	-0.006	91	32823	0.3775	
93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	99	87709	1.00	
96 1,3-Dichlorobenzene	146	22.987	22.988	-0.001	97	7022	0.1243	
101 1,2-Dichlorobenzene	146		23.683				ND	
105 Naphthalene	128	26.764	26.765	-0.001	98	14787	0.1565	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

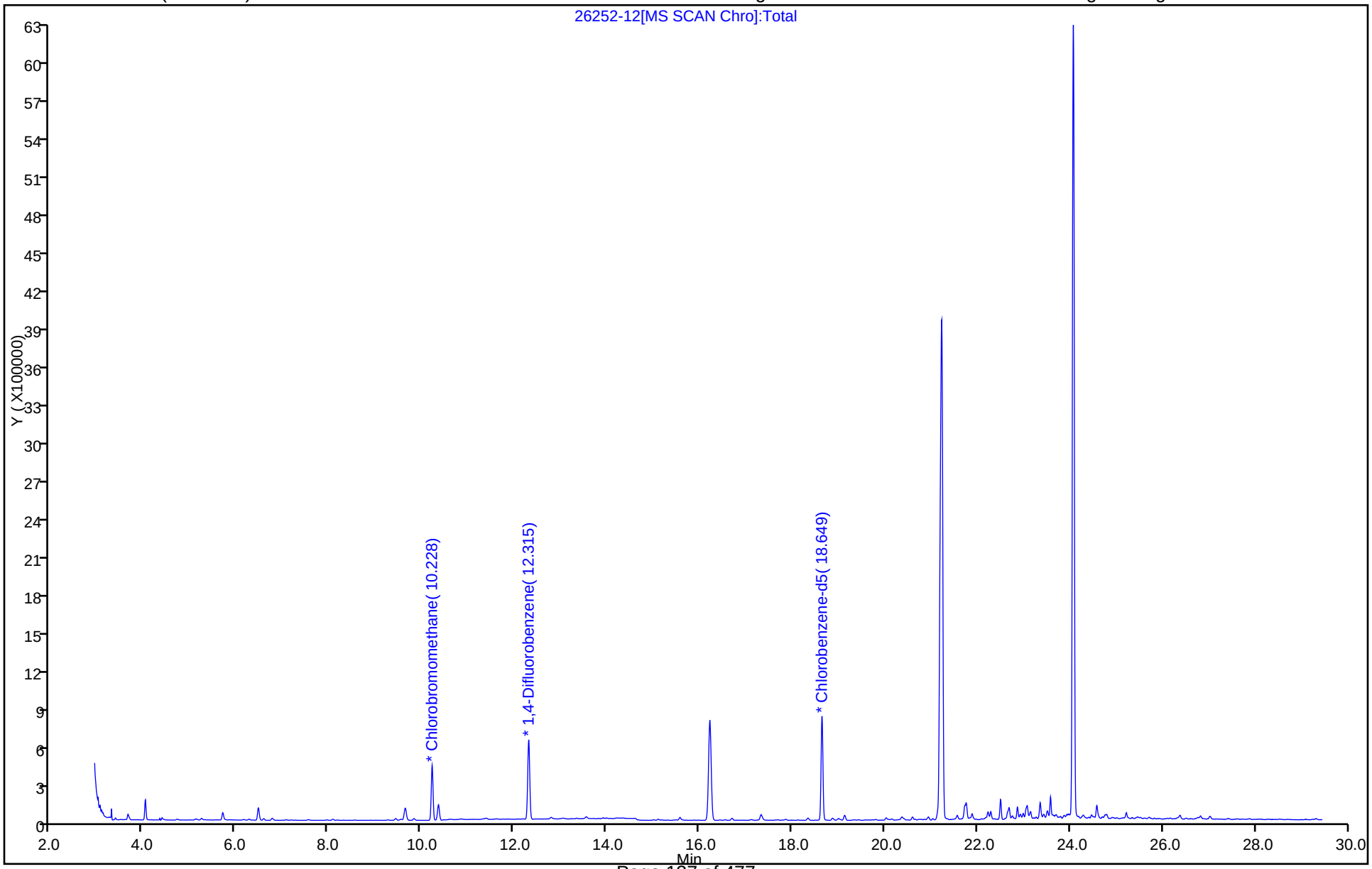
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2	Worklist Smp#:	12
Client ID:	SV-2				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



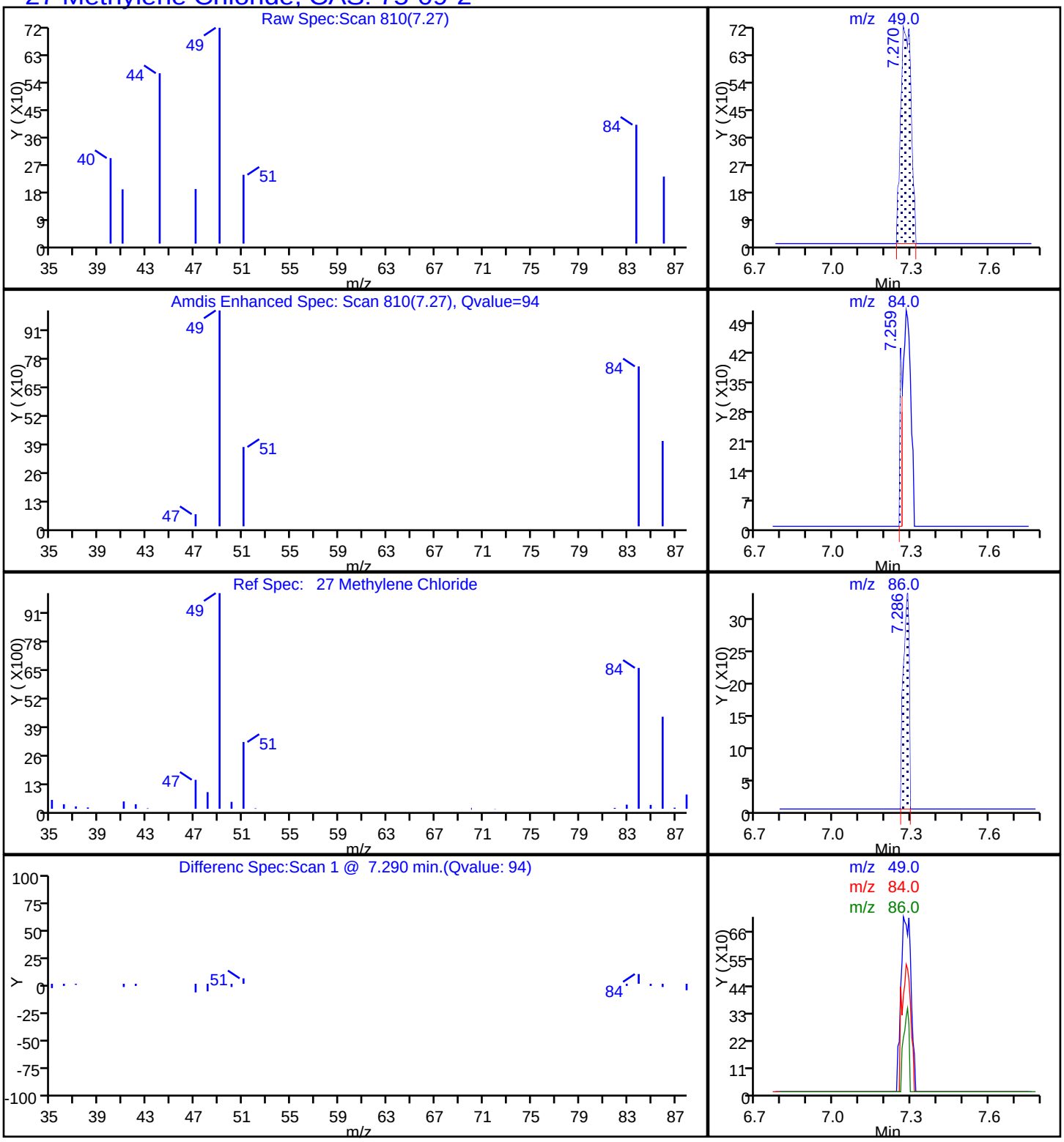
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



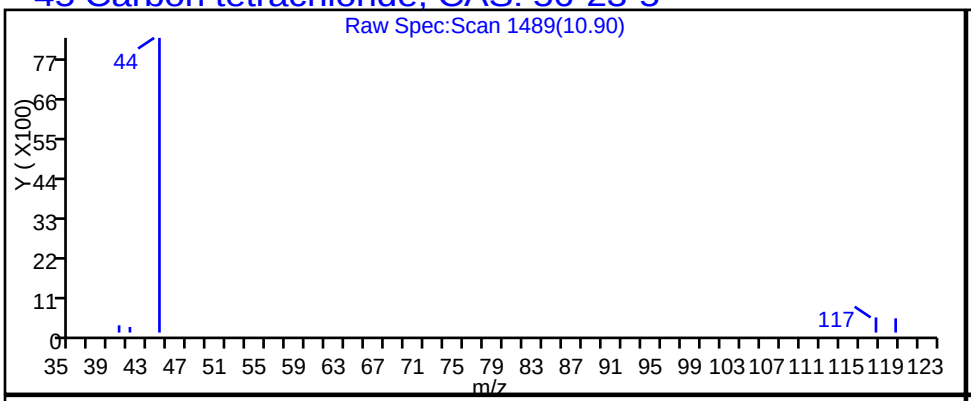
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

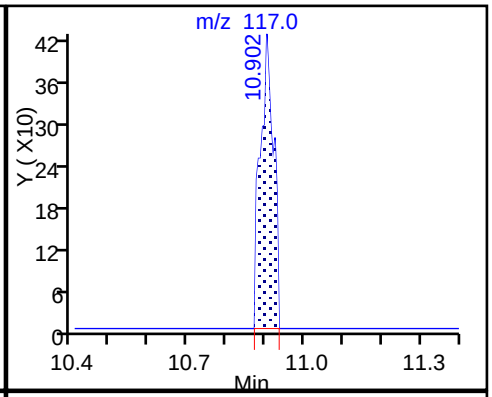
TestAmerica Burlington

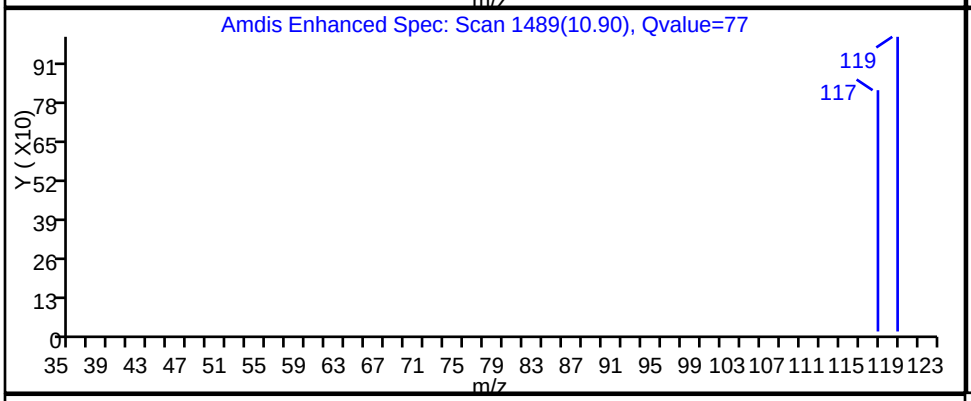
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

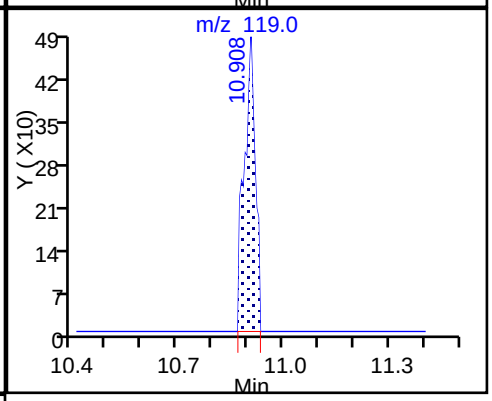
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

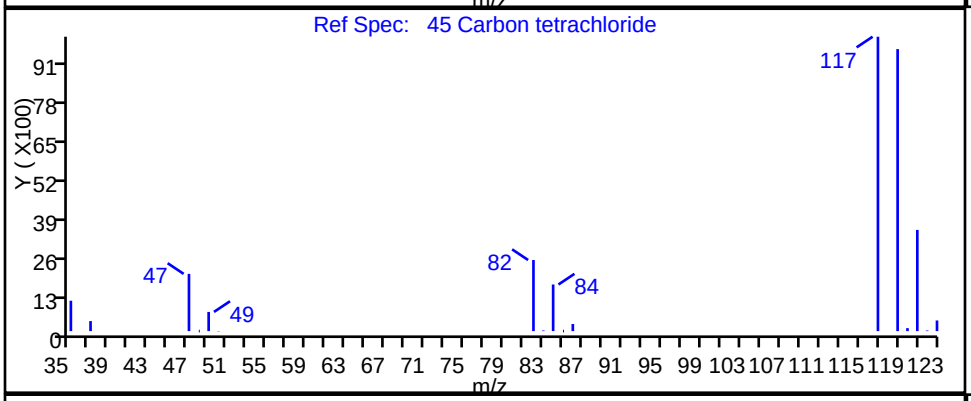
45 Carbon tetrachloride, CAS: 56-23-5

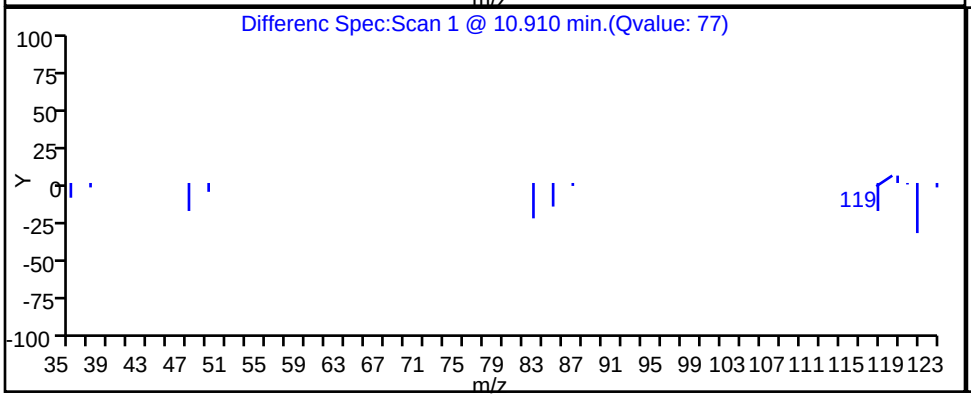


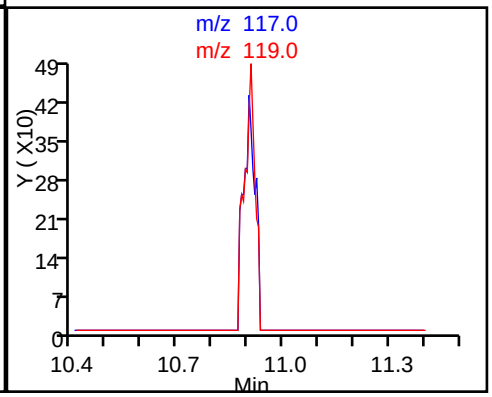












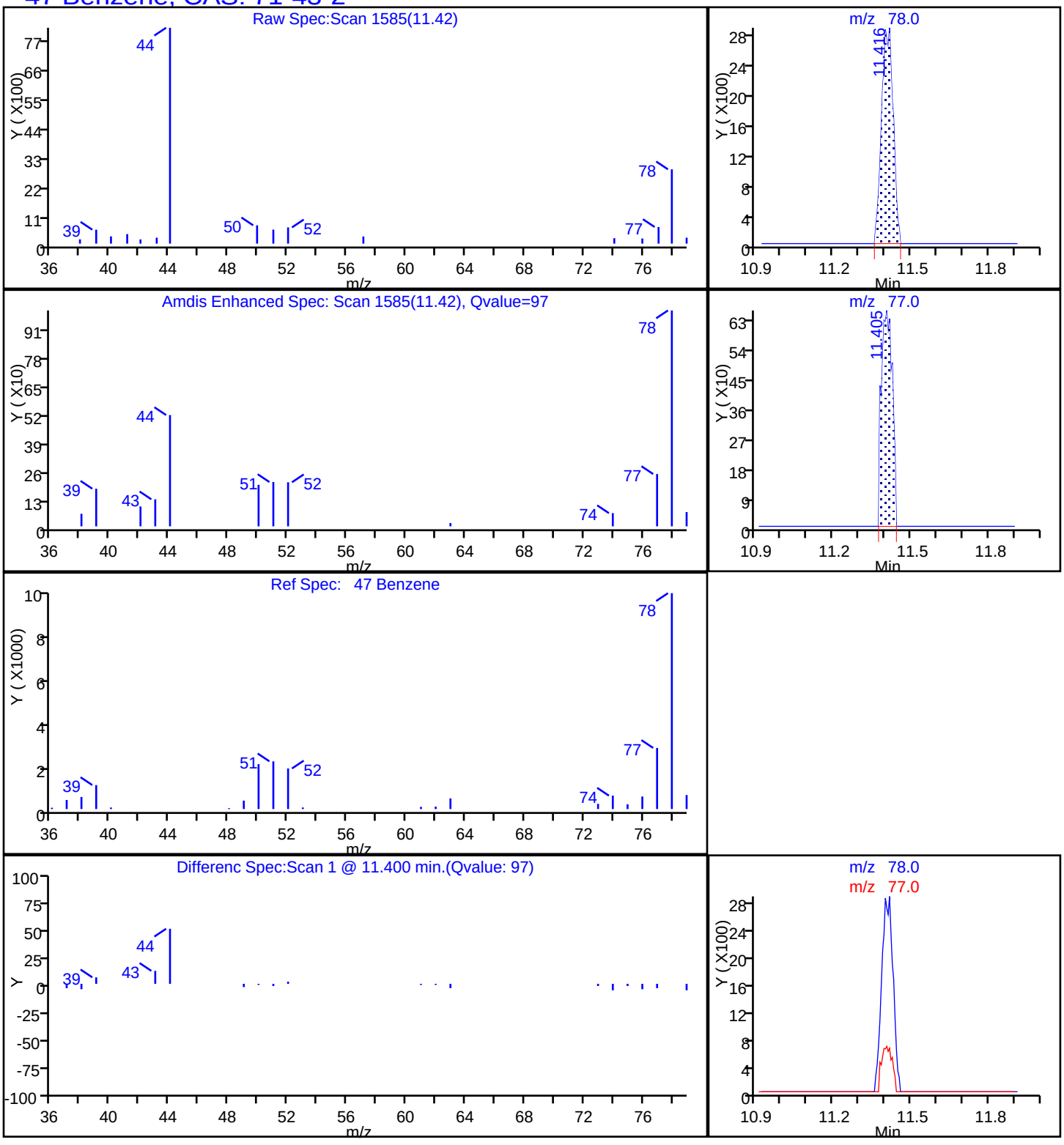
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



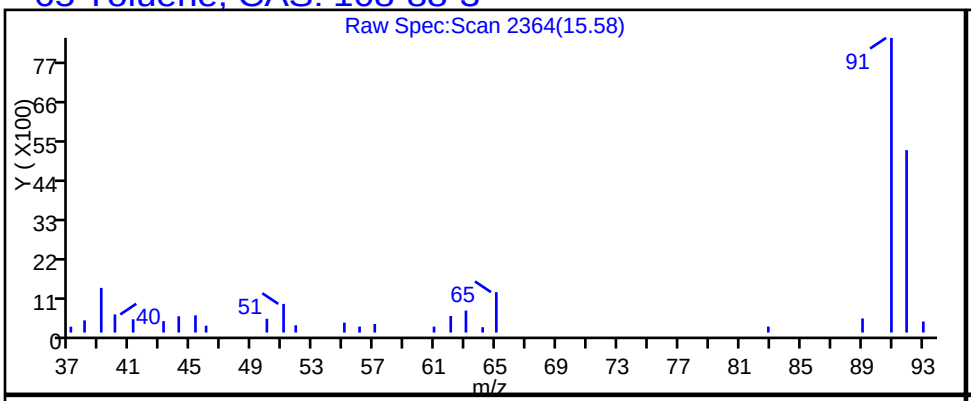
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

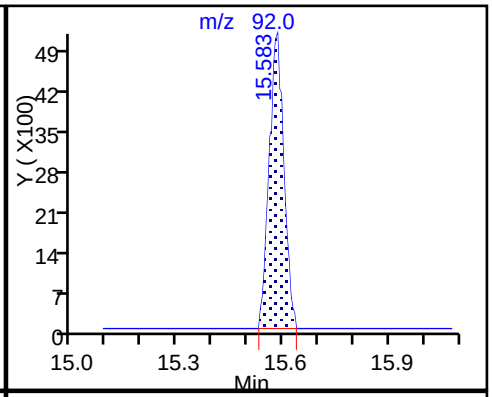
TestAmerica Burlington

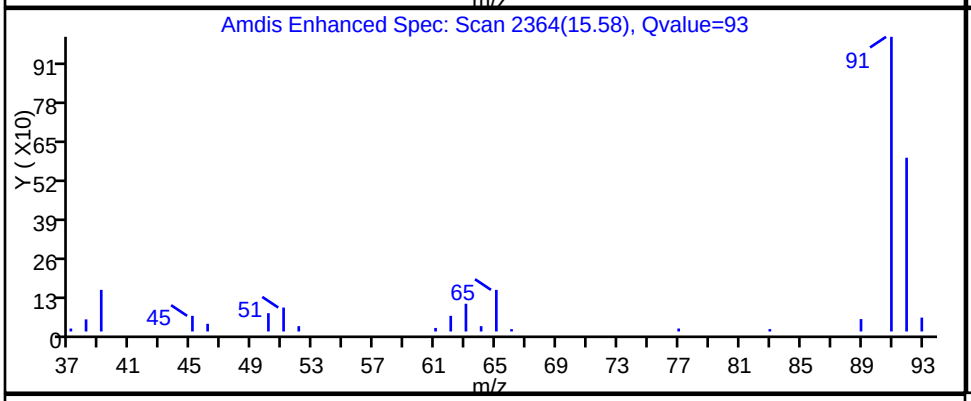
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

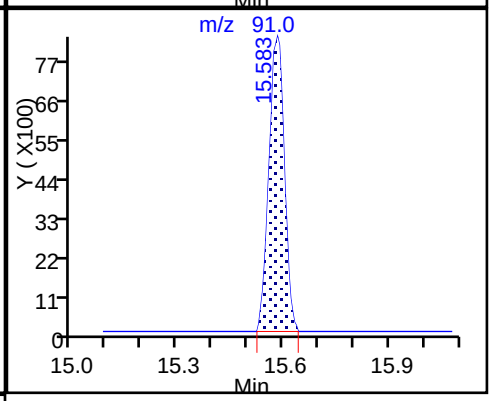
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

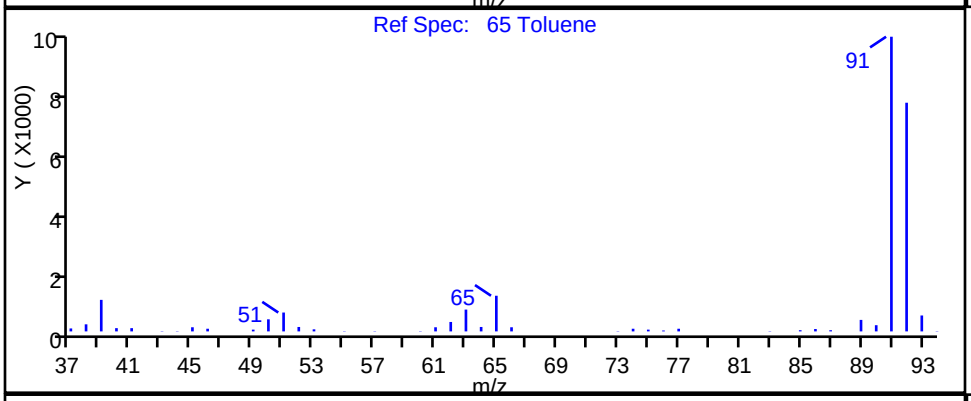
65 Toluene, CAS: 108-88-3

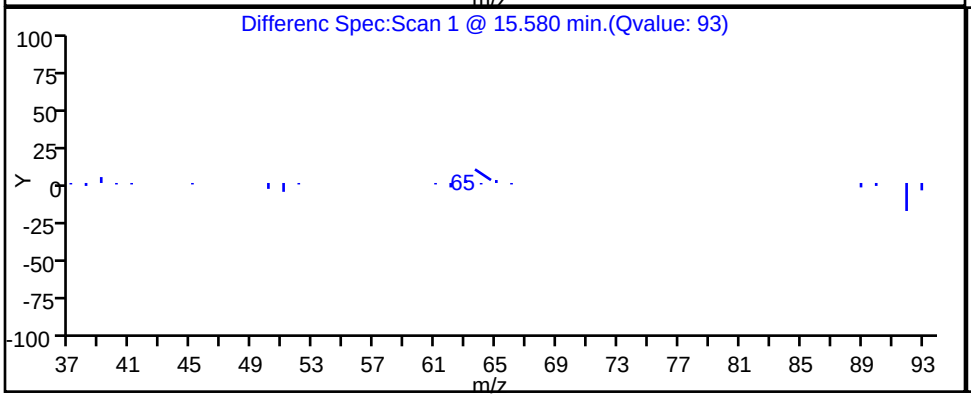


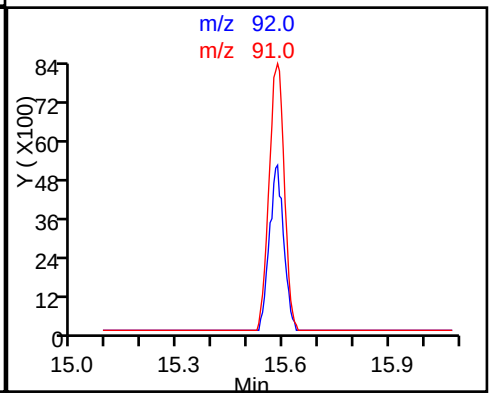












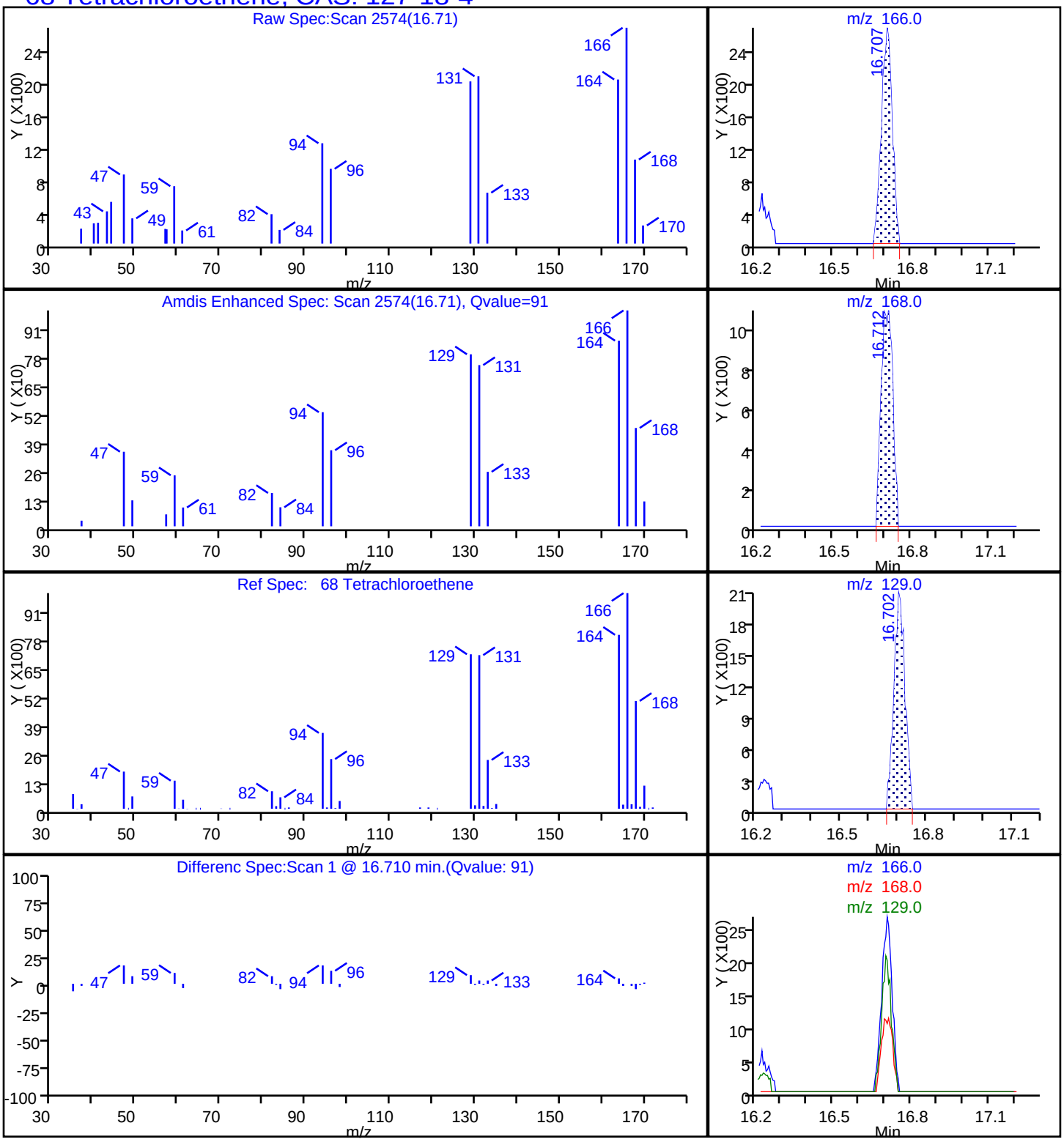
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



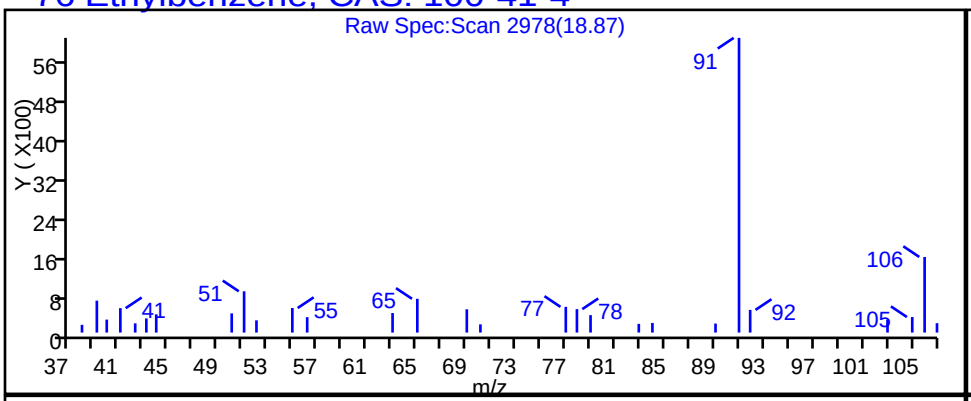
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

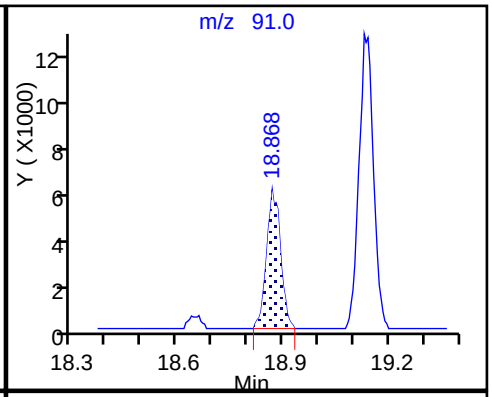
TestAmerica Burlington

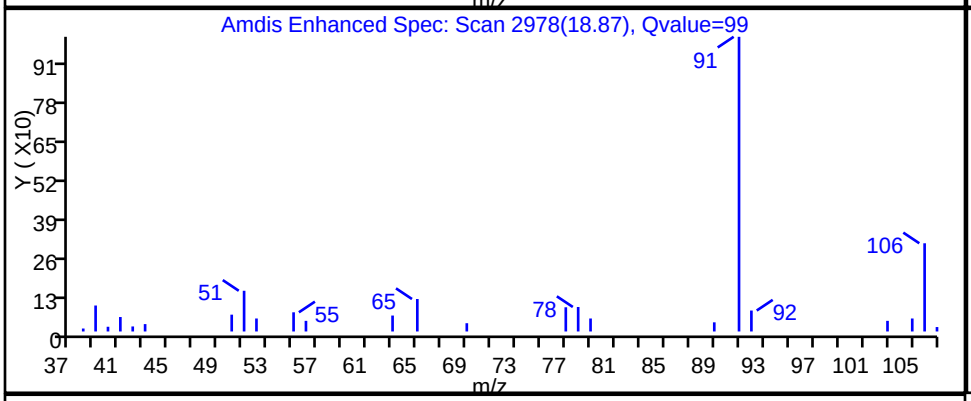
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

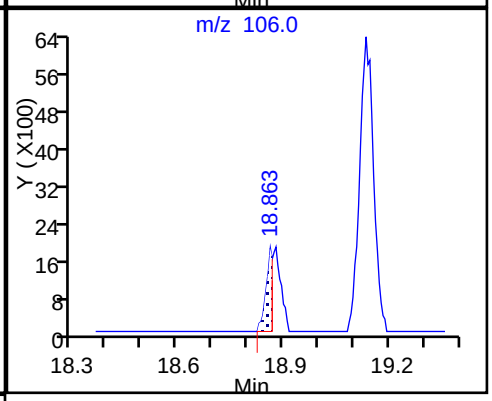
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

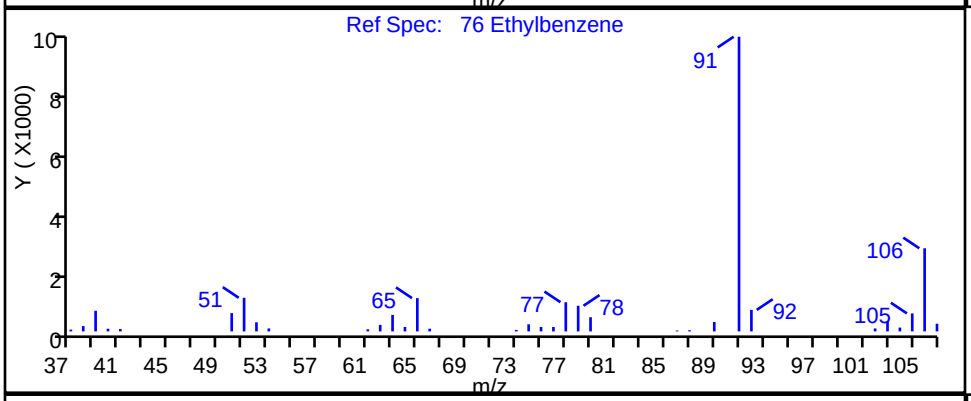
76 Ethylbenzene, CAS: 100-41-4

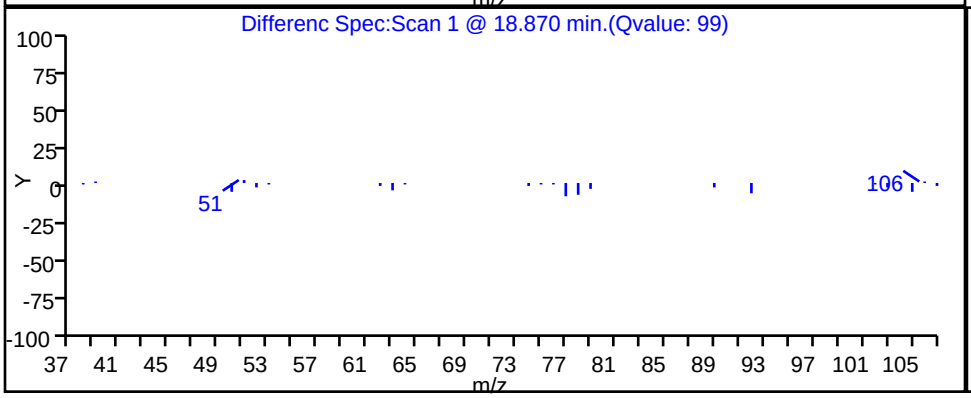


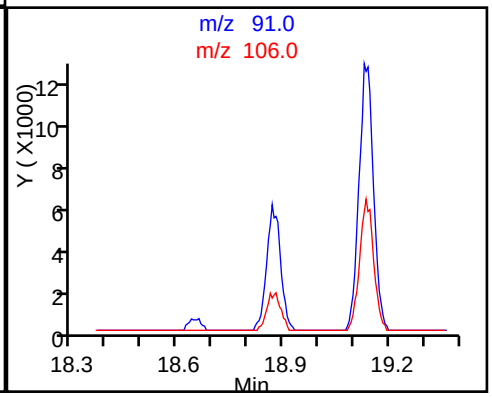










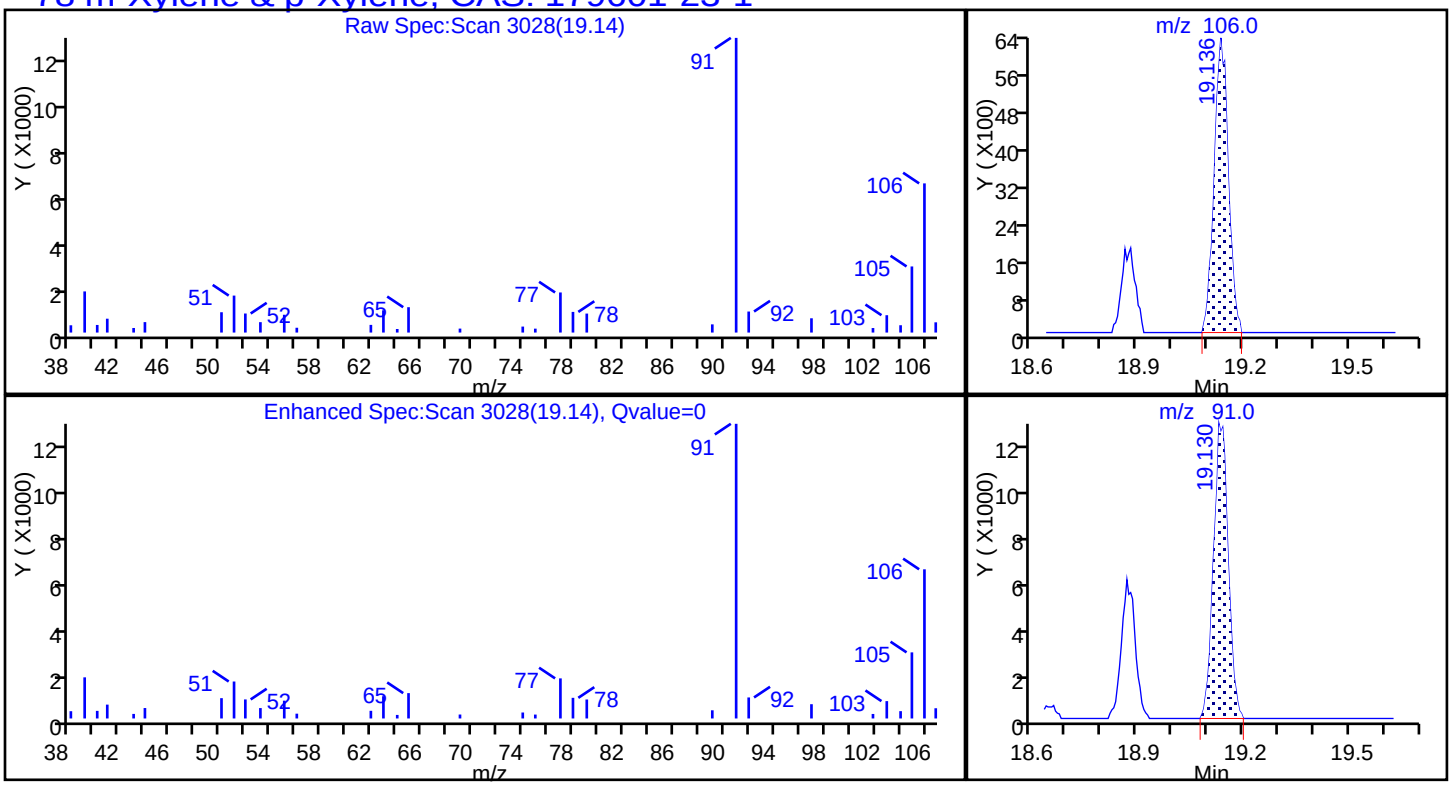


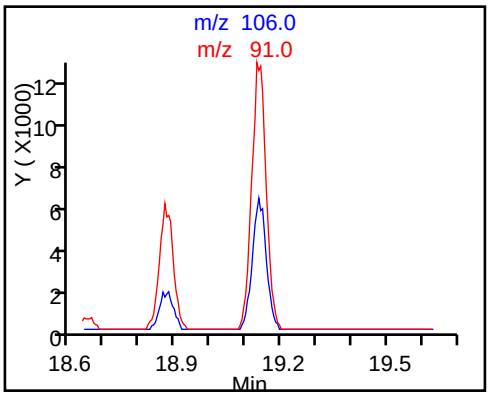
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D				
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





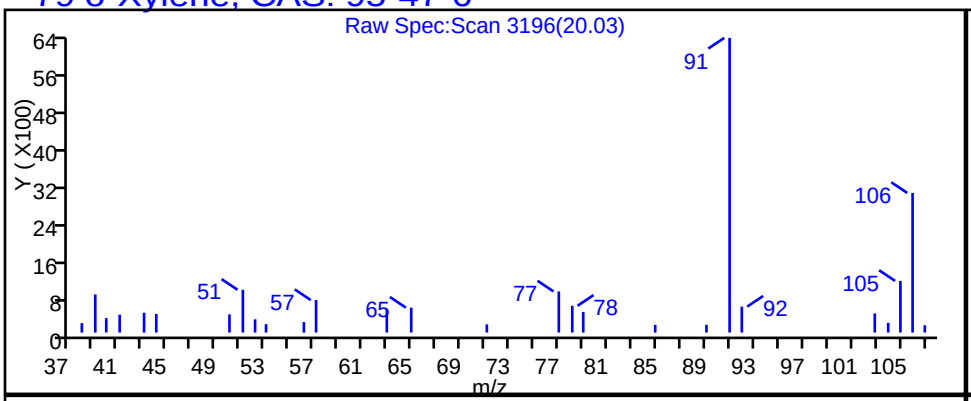
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

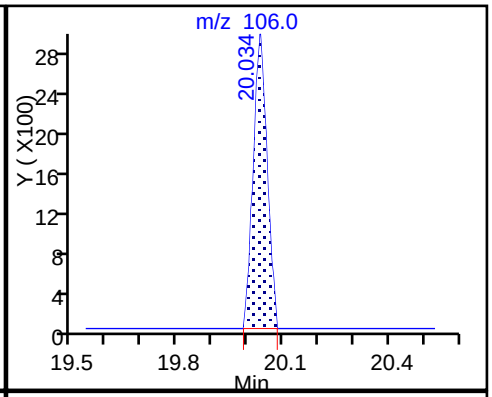
TestAmerica Burlington

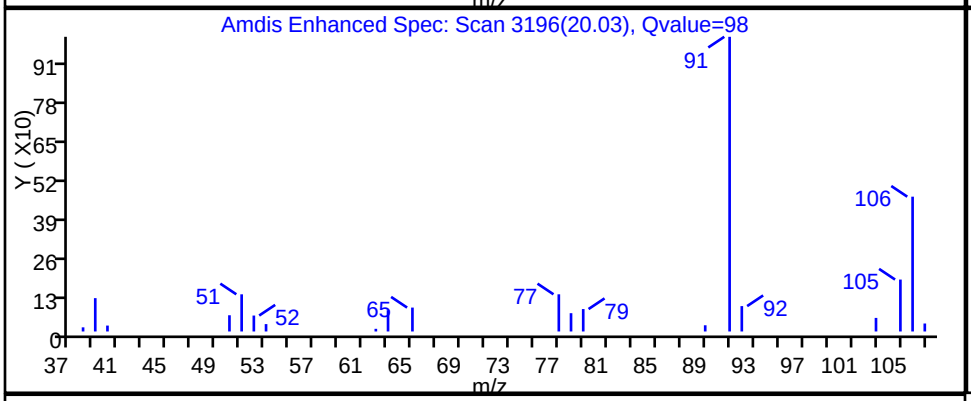
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

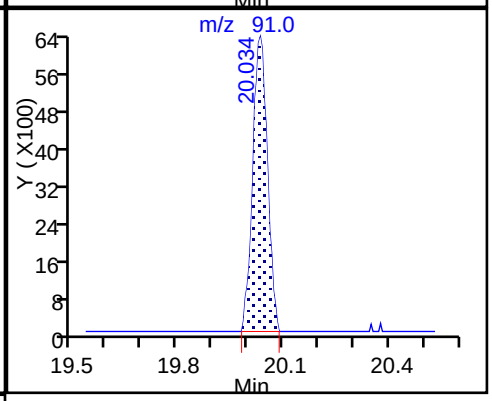
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

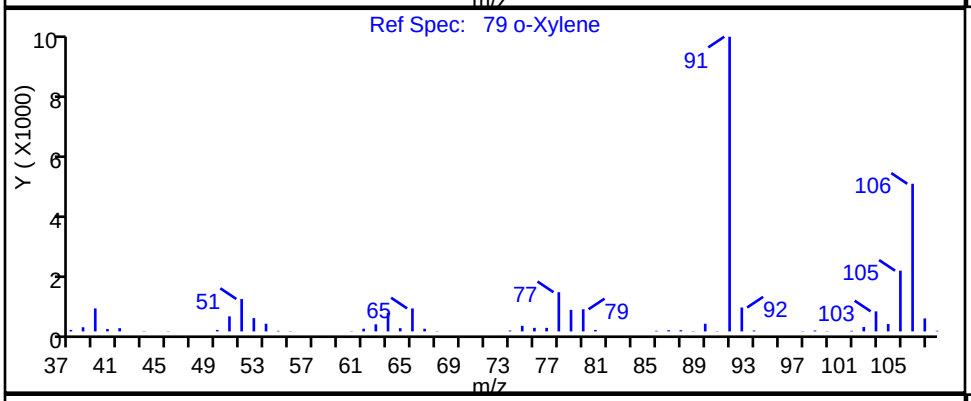
79 o-Xylene, CAS: 95-47-6

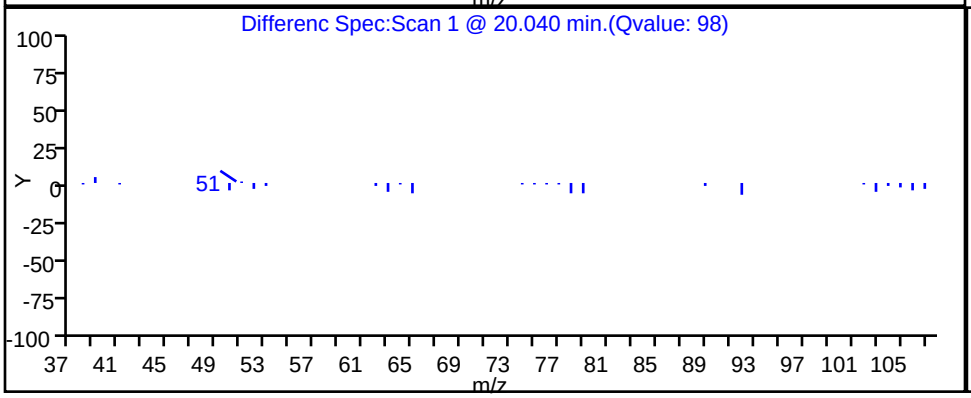


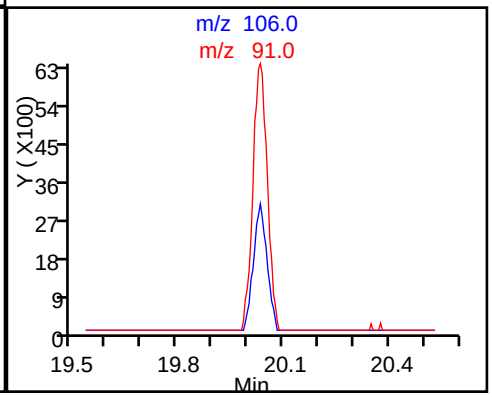












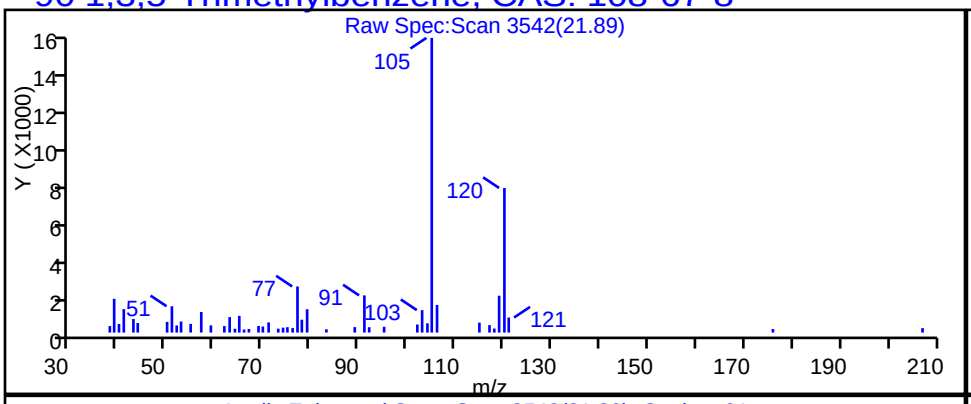
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

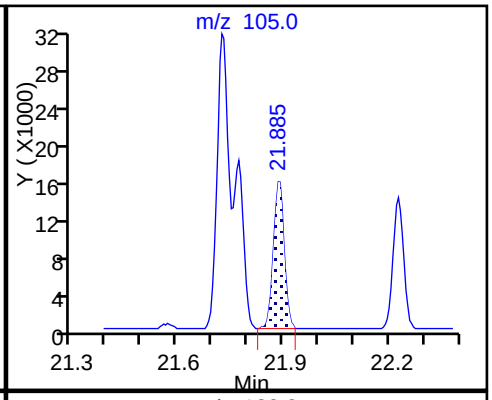
TestAmerica Burlington

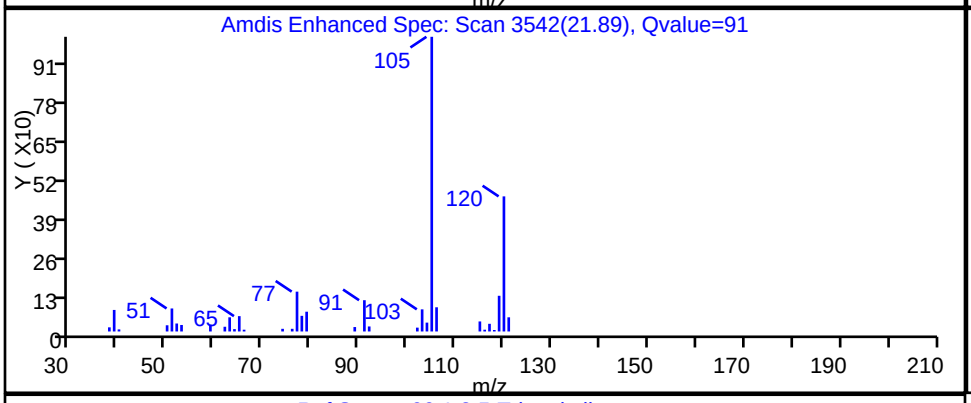
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

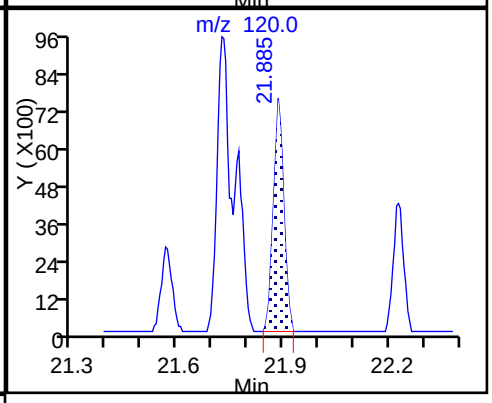
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

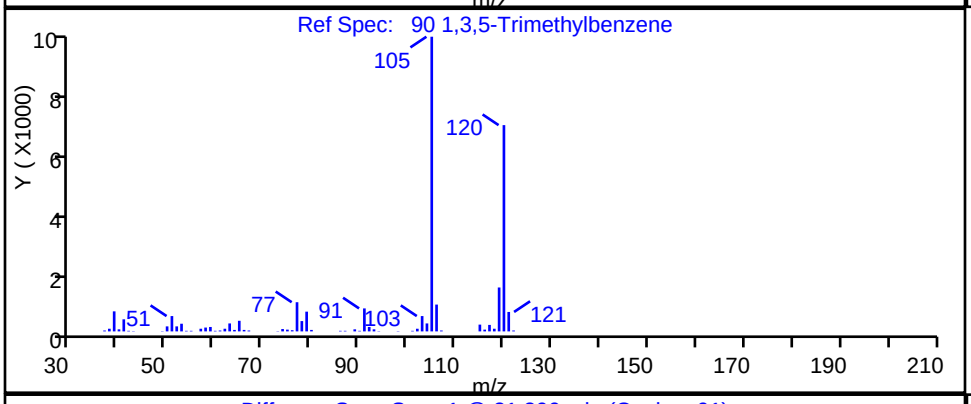
90 1,3,5-Trimethylbenzene, CAS: 108-67-8

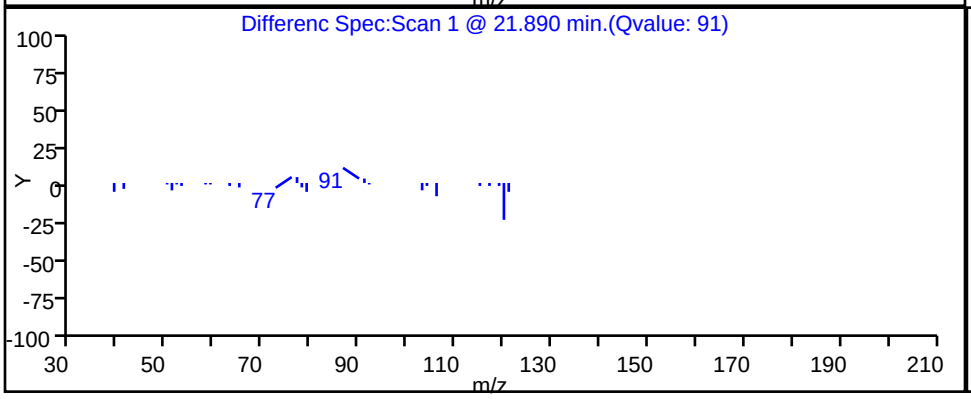


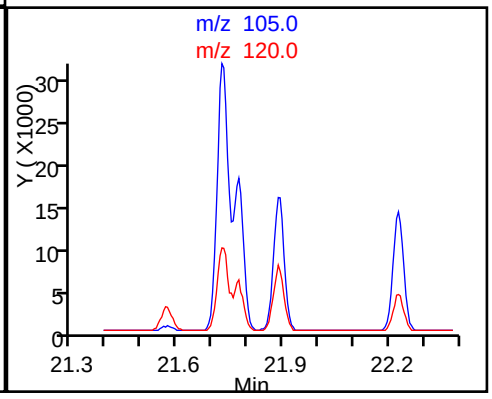












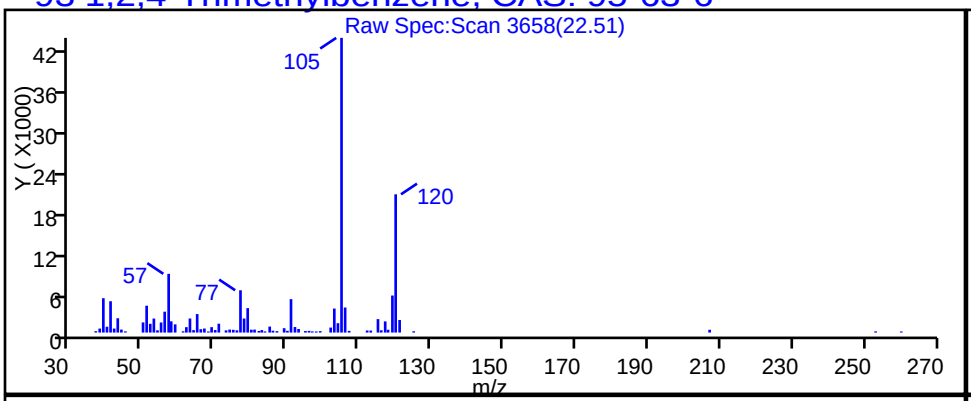
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

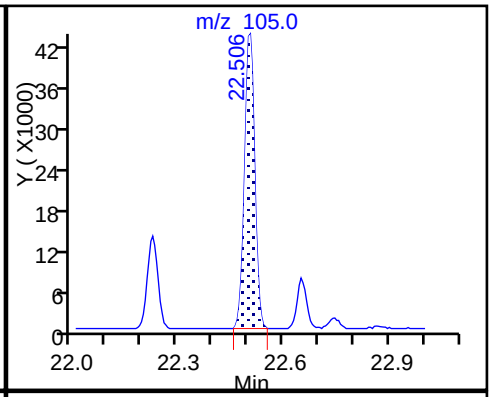
TestAmerica Burlington

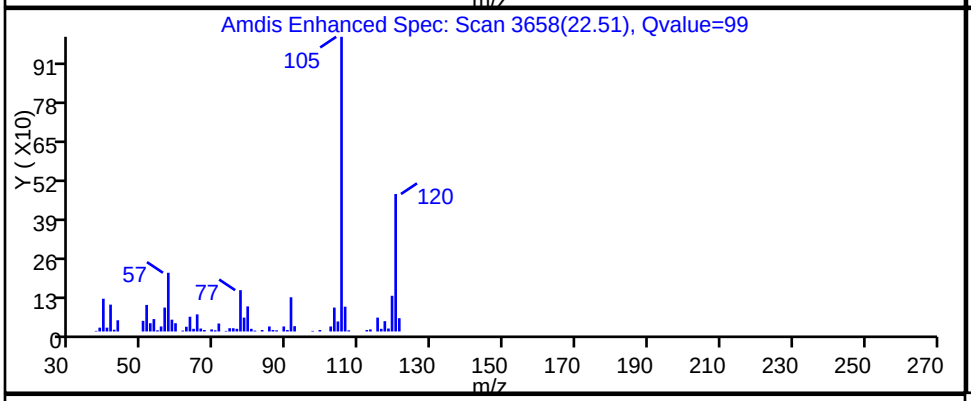
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

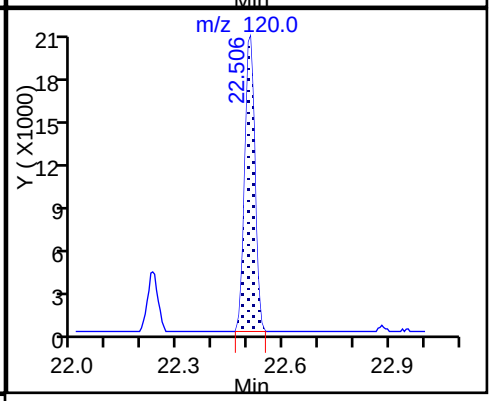
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

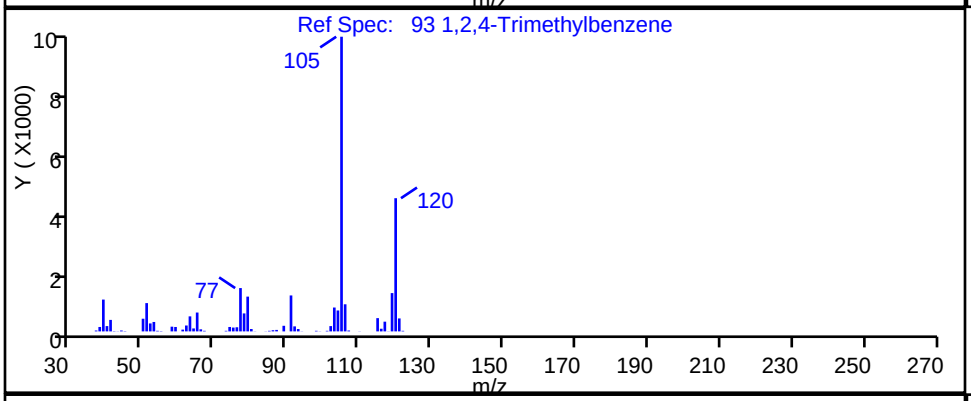
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

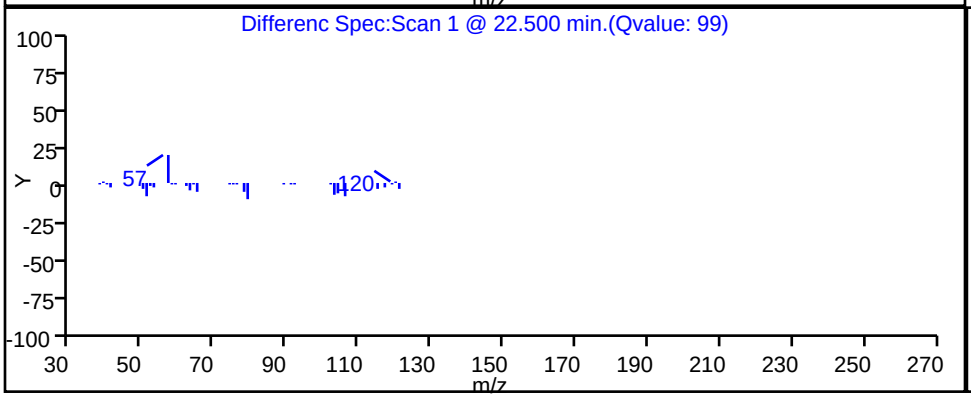


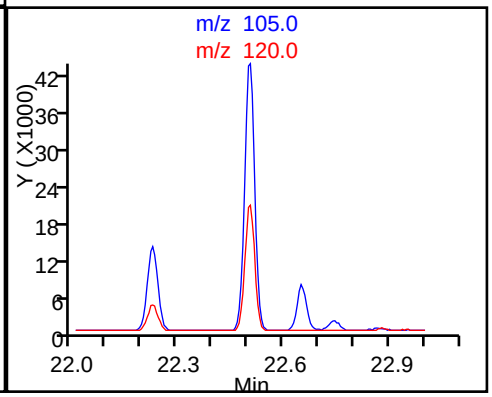












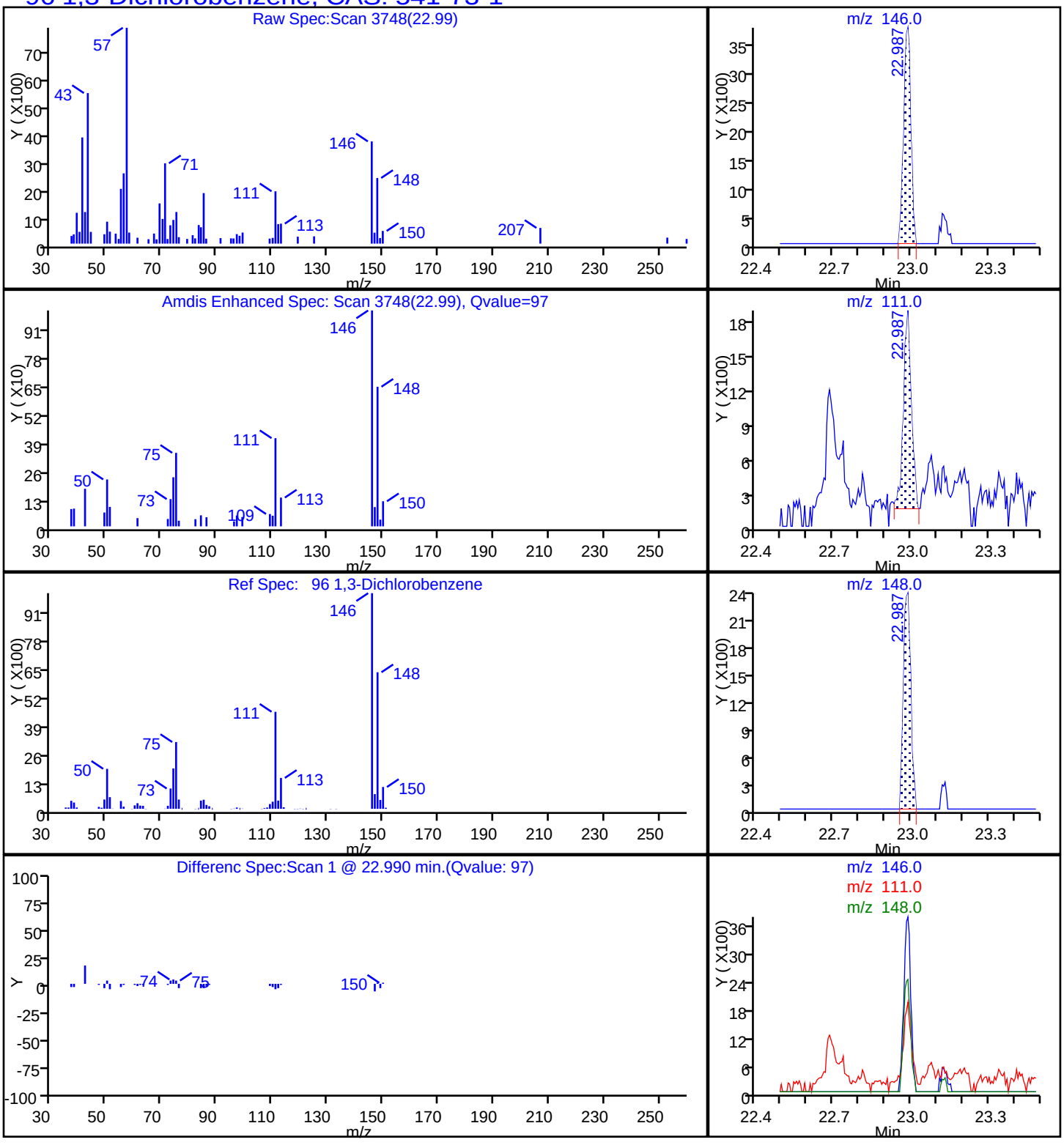
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1



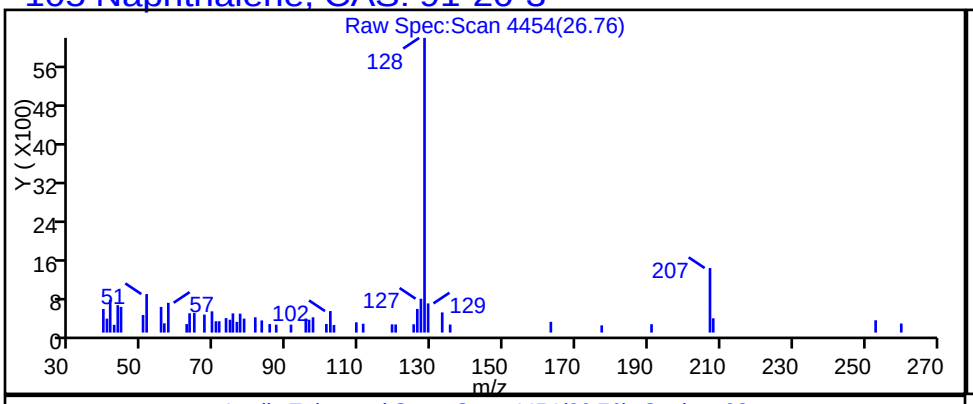
Report Date: 08-Aug-2017 14:40:08 Chrom Revision: 2.2 26-Jun-2017 09:07:56

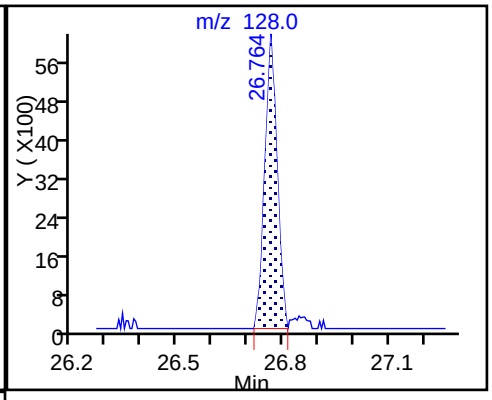
TestAmerica Burlington

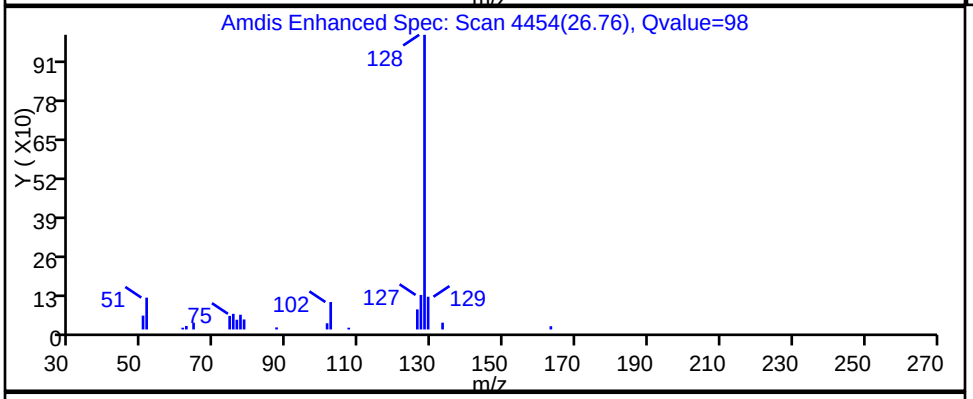
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D

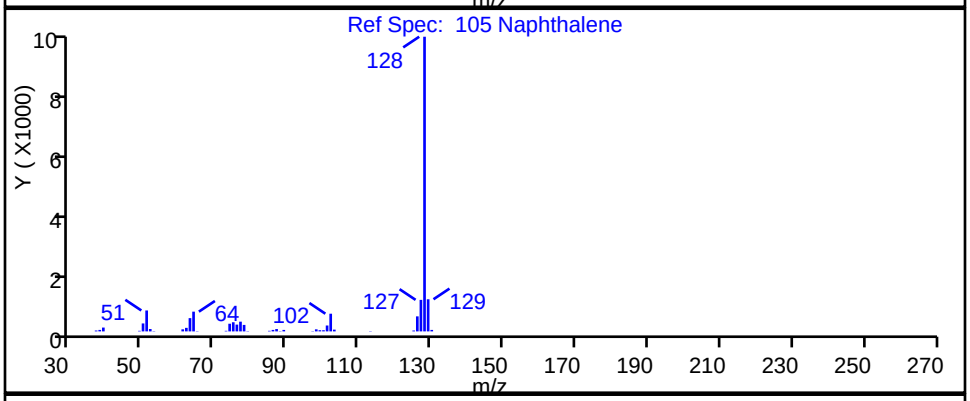
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

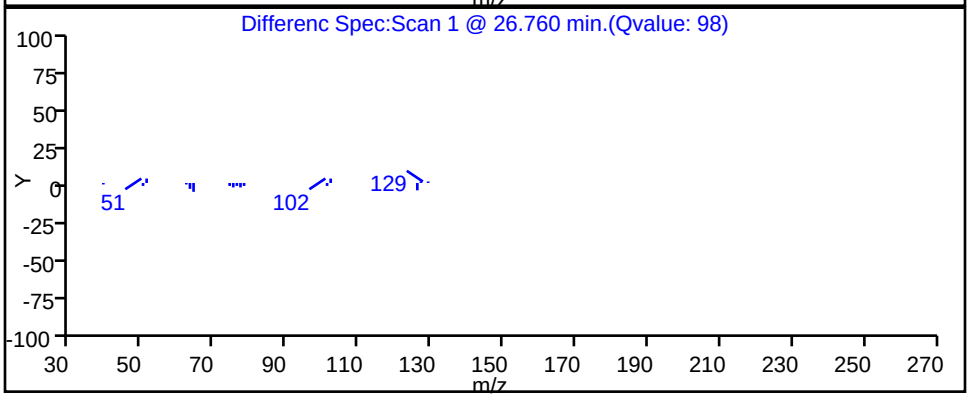
105 Naphthalene, CAS: 91-20-3











Manual Integration/User Assign Peak Report

TestAmerica Burlington

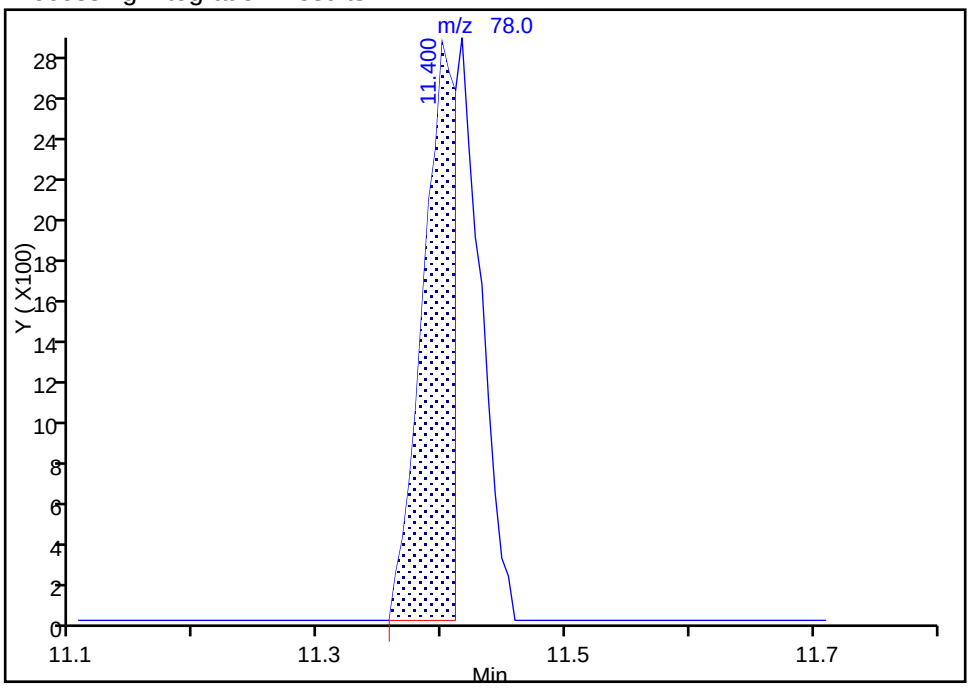
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-12.D				
Injection Date:	07-Aug-2017 22:12:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-2	Lab Sample ID:	200-39613-2		
Client ID:	SV-2				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Signal: 1

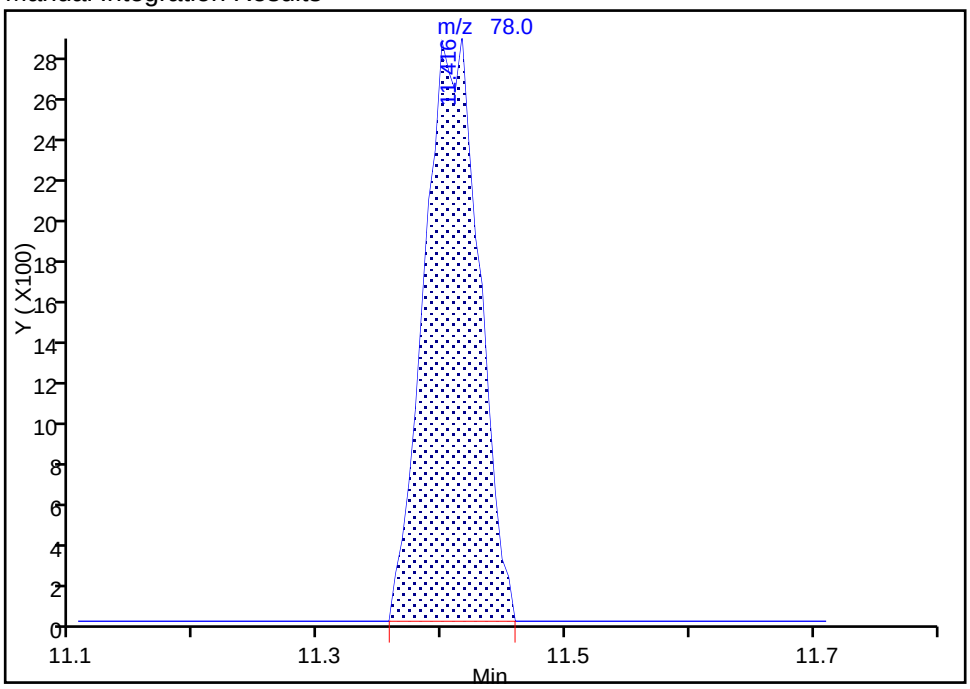
Processing Integration Results

RT: 11.40
Area: 5161
Amount: 0.083451
Amount Units: ppb v/v



Manual Integration Results

RT: 11.42
Area: 8608
Amount: 0.139187
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:29:00

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-3 Lab Sample ID: 200-39613-3

Matrix: Air Lab File ID: 26252-13.D

Analysis Method: TO-15 Date Collected: 08/03/2017 12:00

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 23:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.17	J	0.50	0.16
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
75-09-2	Methylene Chloride	84.93	0.094	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
56-23-5	Carbon tetrachloride	153.81	0.026	J	0.20	0.011
71-43-2	Benzene	78.11	0.73		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.30		0.20	0.034
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
108-88-3	Toluene	92.14	1.6		0.20	0.035
127-18-4	Tetrachloroethene	165.83	0.10	J	0.20	0.0098
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.19	J	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.34	J	0.50	0.077
95-47-6	Xylene, o-	106.17	0.14	J	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.087	J	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.13	J	0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	0.050	U	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
91-20-3	Naphthalene	128.17	0.10	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-3 Lab Sample ID: 200-39613-3

Matrix: Air Lab File ID: 26252-13.D

Analysis Method: TO-15 Date Collected: 08/03/2017 12:00

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 23:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.34	J	1.0	0.33
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
75-09-2	Methylene Chloride	84.93	0.33	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
56-23-5	Carbon tetrachloride	153.81	0.16	J	1.3	0.069
71-43-2	Benzene	78.11	2.3		0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	1.2		0.81	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
108-88-3	Toluene	92.14	5.9		0.75	0.13
127-18-4	Tetrachloroethene	165.83	0.68	J	1.4	0.066
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.81	J	0.87	0.15
179601-23-1	m,p-Xylene	106.17	1.5	J	2.2	0.33
95-47-6	Xylene, o-	106.17	0.59	J	0.87	0.17
108-67-8	1,3,5-Trimethylbenzene	120.20	0.43	J	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.62	J	0.98	0.28
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
91-20-3	Naphthalene	128.17	0.52	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D
Lims ID: 200-39613-A-3
Client ID: SV-3
Sample Type: Client
Inject. Date: 07-Aug-2017 23:02:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-013
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:31:36 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:31:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.509	3.515	-0.006	97	2754	0.1662	
7 Vinyl chloride	62		3.739				ND	
11 Chloroethane	64		4.676				ND	
21 1,1-Dichloroethene	96		6.216				ND	
27 Methylene Chloride	49	7.291	7.286	0.005	91	1931	0.0940	
29 Methyl tert-butyl ether	73		7.698				ND	
31 trans-1,2-Dichloroethene	61		7.720				ND	
34 1,1-Dichloroethane	63		8.608				ND	
37 cis-1,2-Dichloroethene	96		9.752				ND	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	95	145156	10.0	
44 1,1,1-Trichloroethane	97		10.651				ND	
45 Carbon tetrachloride	117	10.918	10.908	0.010	62	928	0.0260	M
47 Benzene	78	11.411	11.411	0.000	98	46258	0.7313	
48 1,2-Dichloroethane	62	11.625	11.620	0.005	86	7975	0.3028	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	794794	10.0	
53 Trichloroethene	95		12.807				ND	
54 1,2-Dichloropropane	63		13.412				ND	
65 Toluene	92	15.589	15.584	0.005	92	72698	1.57	
68 Tetrachloroethene	166	16.712	16.707	0.005	92	3539	0.1002	
* 74 Chlorobenzene-d5	117	18.649	18.649	0.000	91	744190	10.0	
75 Chlorobenzene	112		18.713				ND	
76 Ethylbenzene	91	18.879	18.874	0.005	91	19571	0.1859	
78 m-Xylene & p-Xylene	106	19.136	19.141	-0.005	0	13403	0.3393	
79 o-Xylene	106	20.034	20.035	-0.001	96	5295	0.1368	
90 1,3,5-Trimethylbenzene	105	21.891	21.891	0.000	93	8281	0.0874	
93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	99	11923	0.1252	
96 1,3-Dichlorobenzene	146	22.982	22.988	-0.006	53	1488	0.0242	
101 1,2-Dichlorobenzene	146		23.683				ND	
105 Naphthalene	128		26.765				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

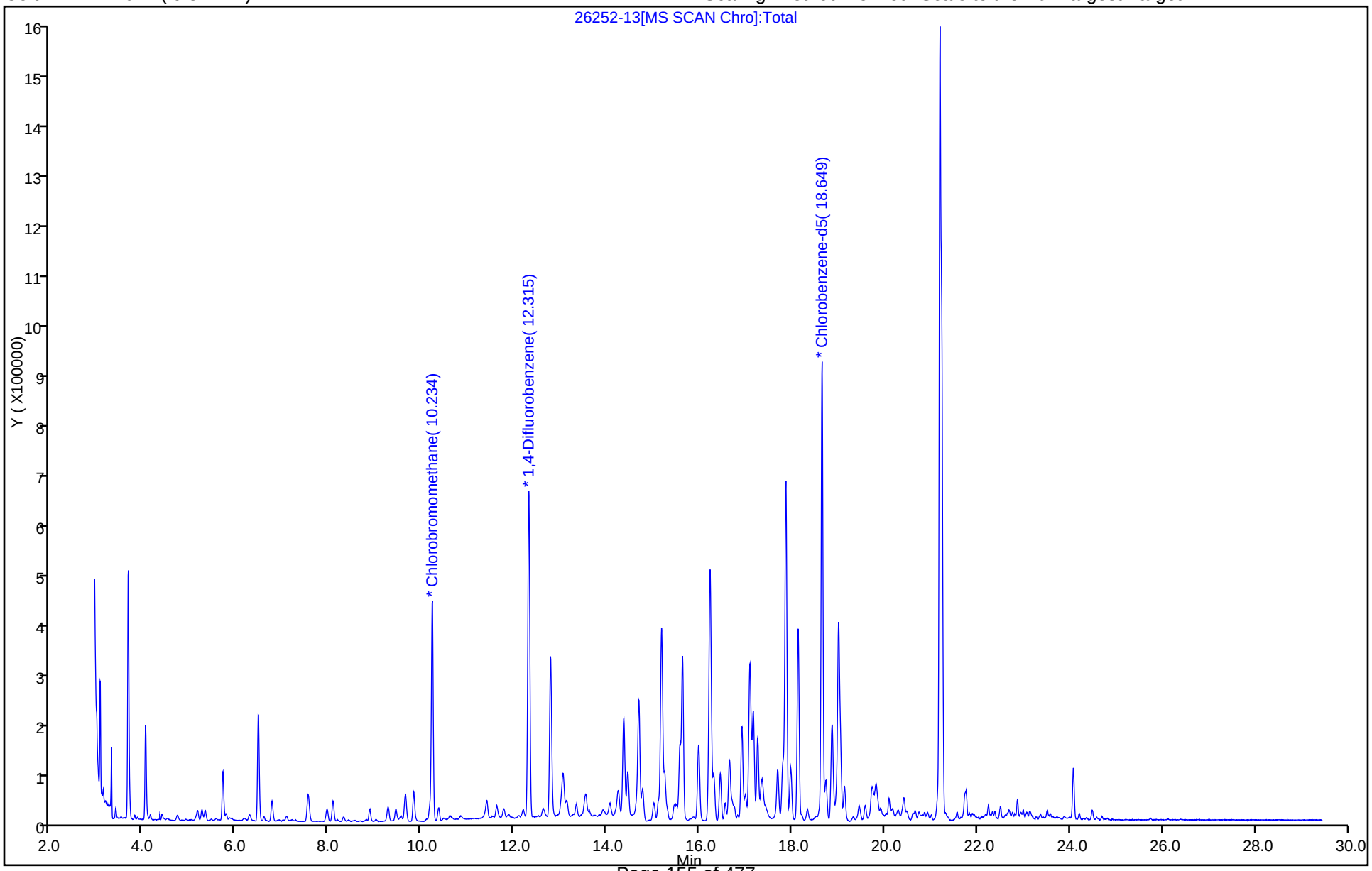
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3	Worklist Smp#:	13
Client ID:	SV-3				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

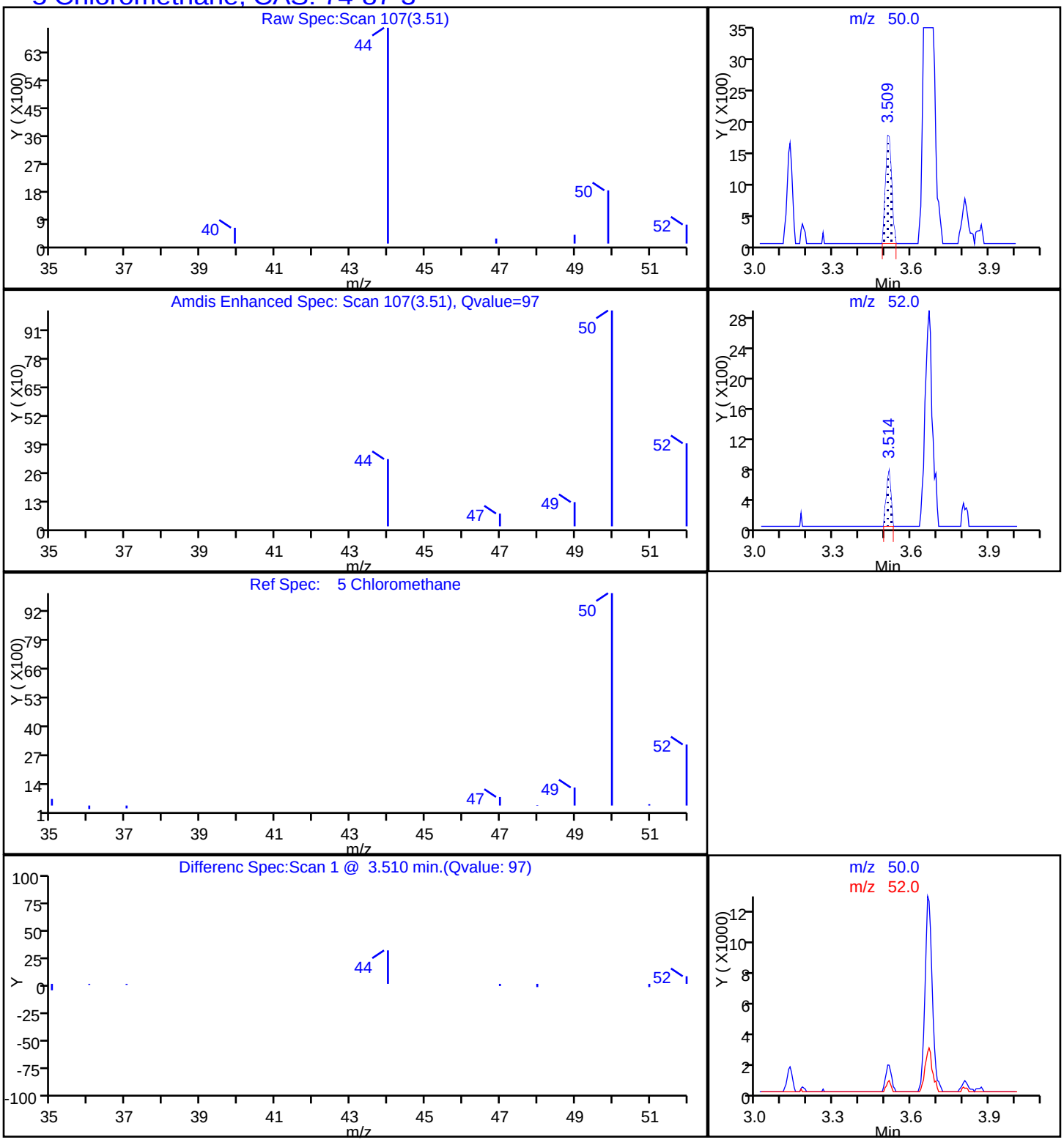


TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



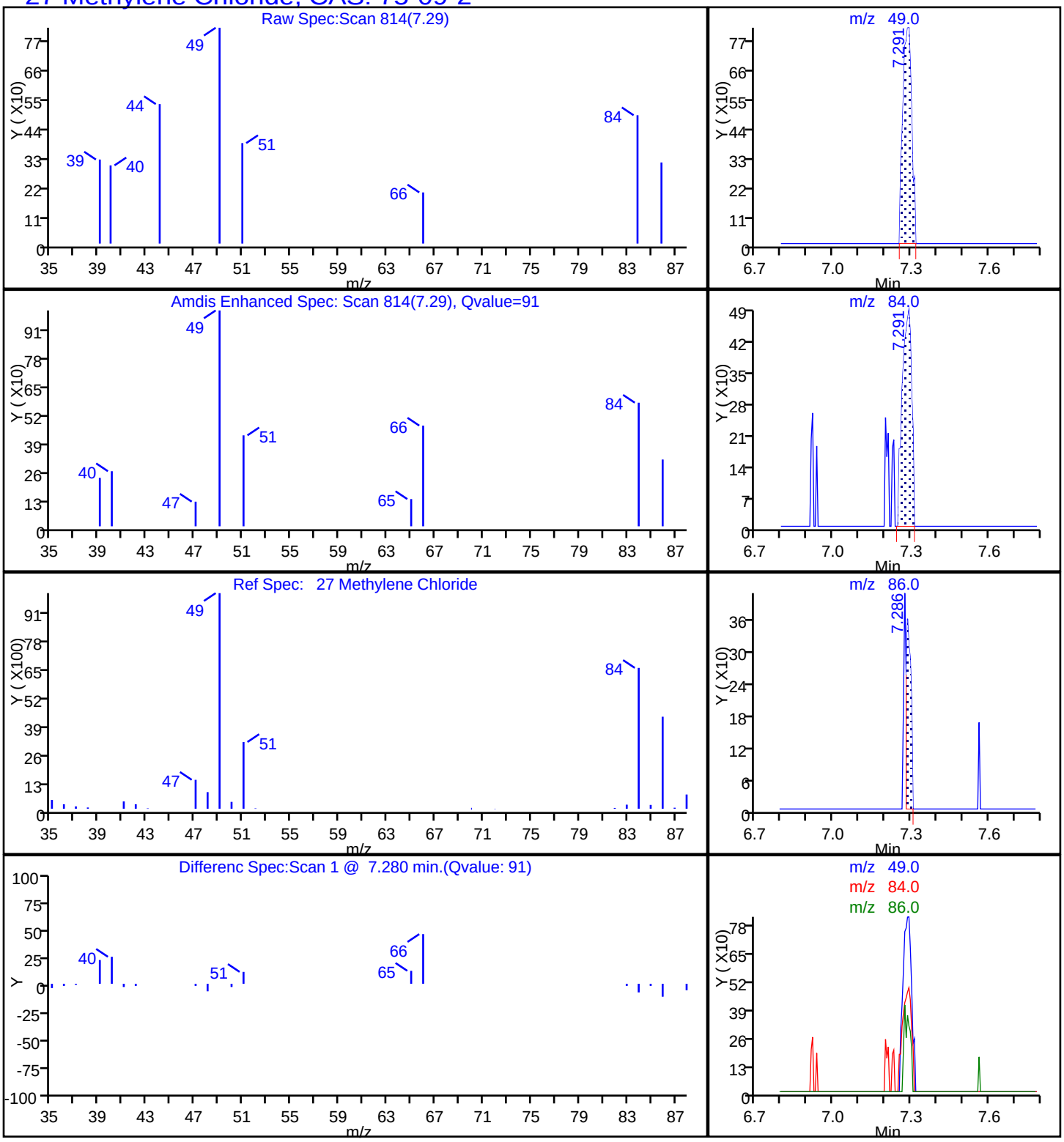
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



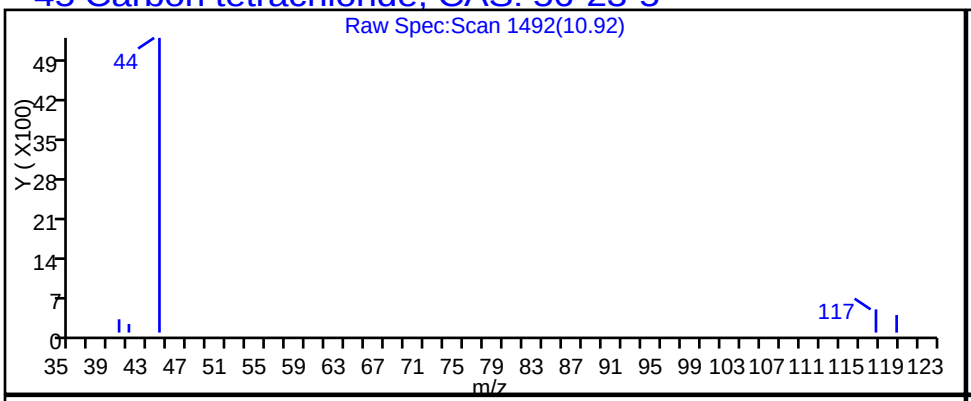
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

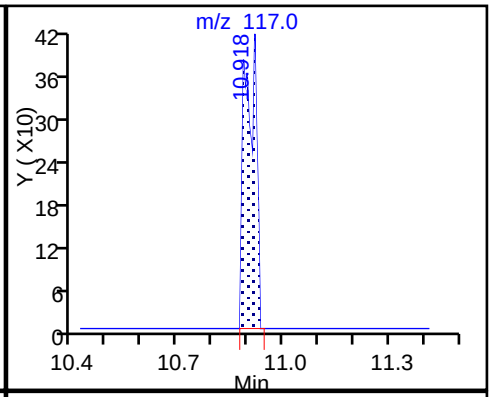
TestAmerica Burlington

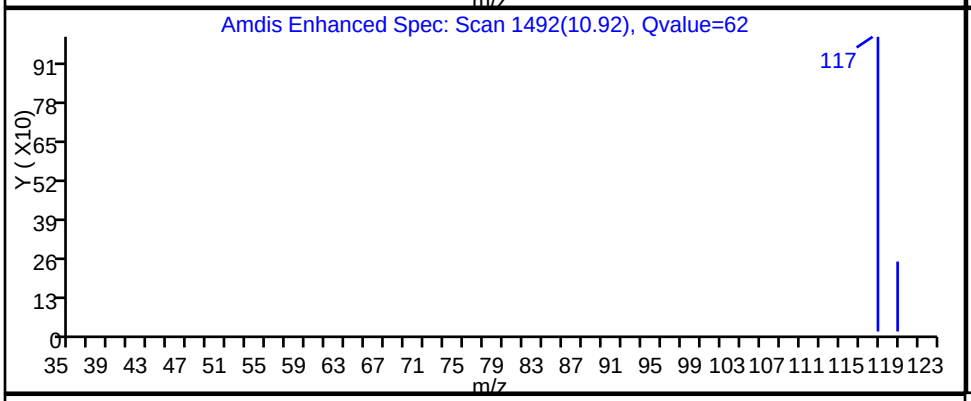
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

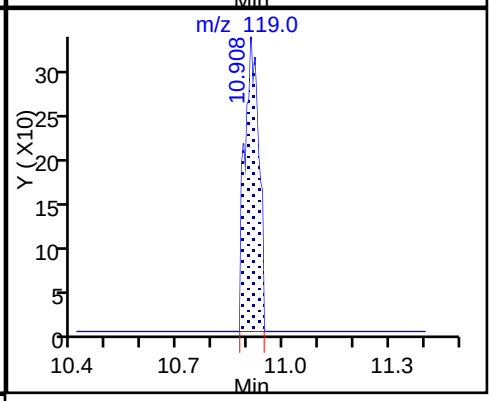
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

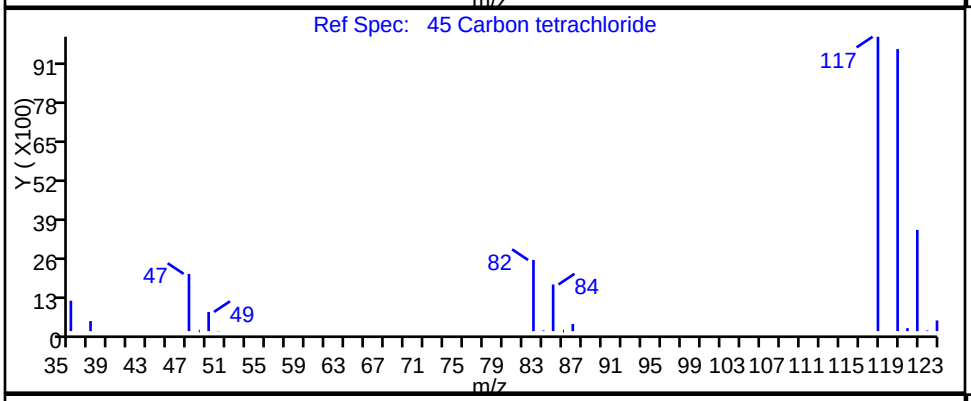
45 Carbon tetrachloride, CAS: 56-23-5

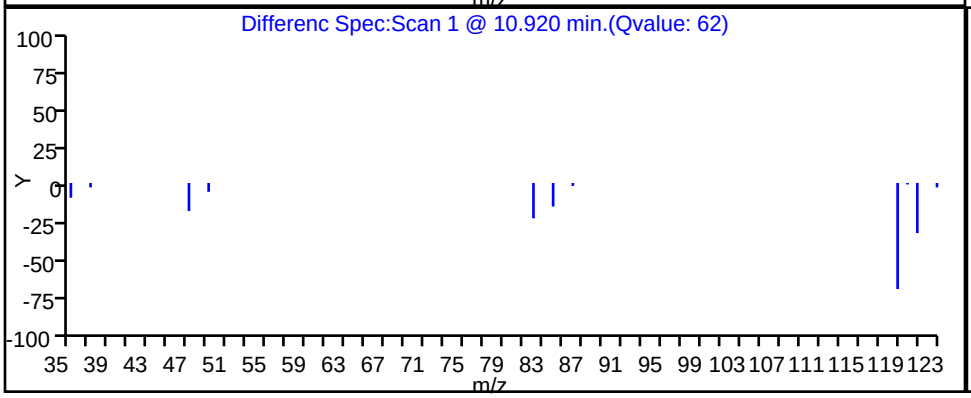


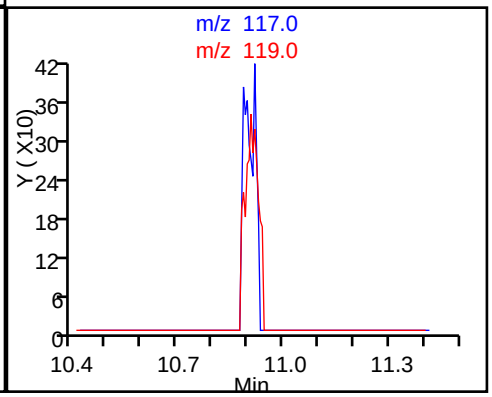












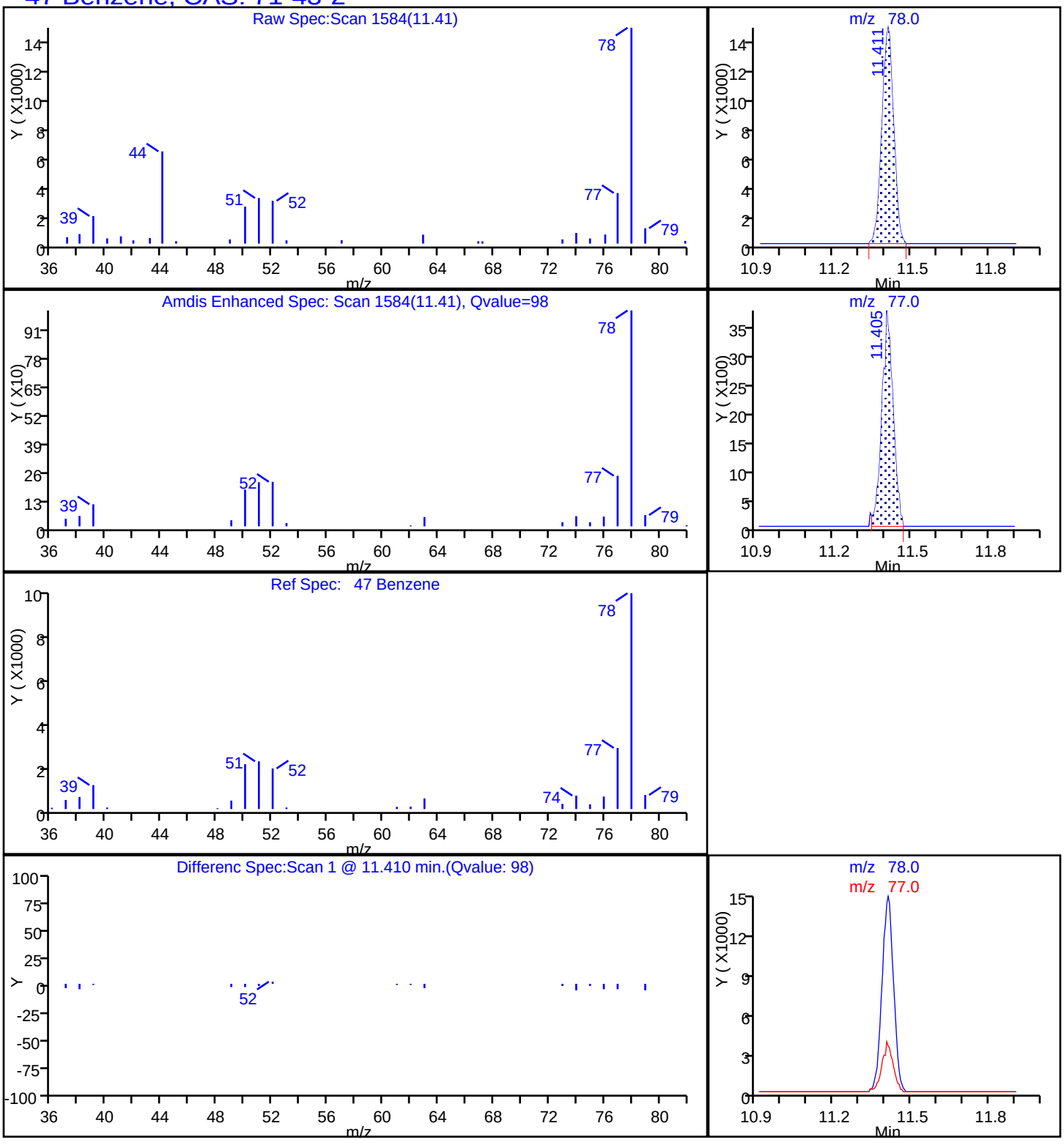
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



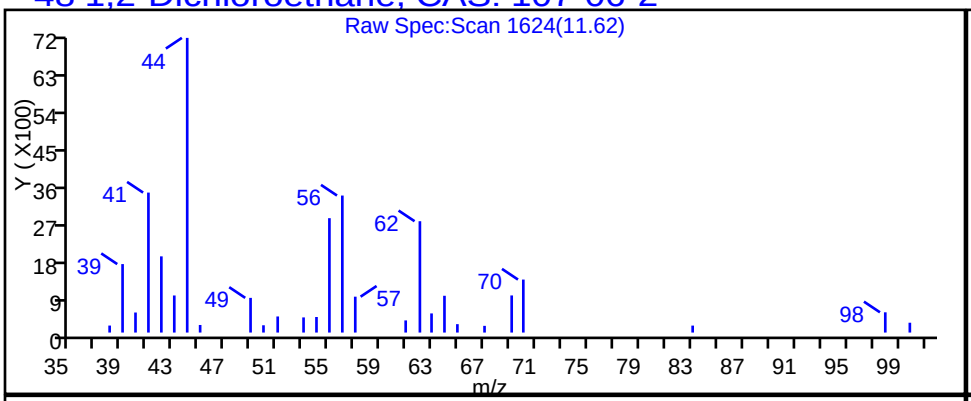
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

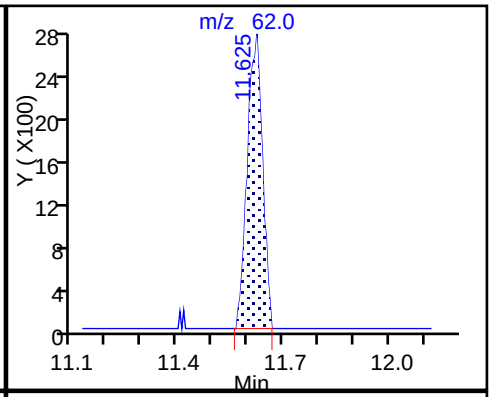
TestAmerica Burlington

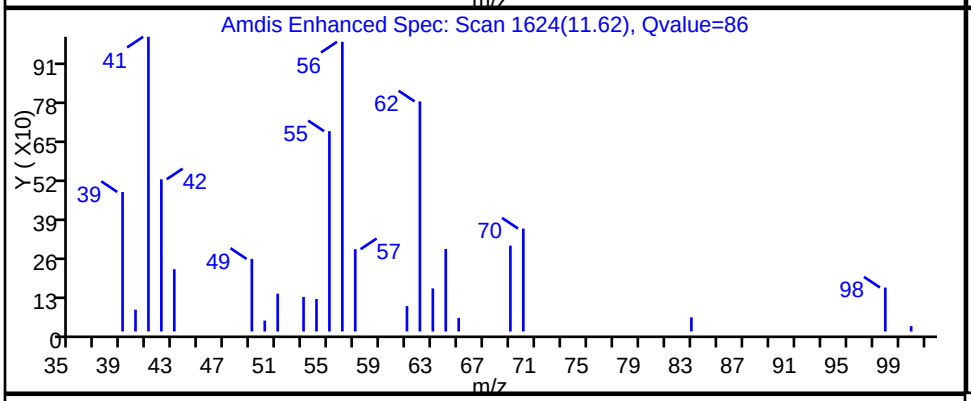
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

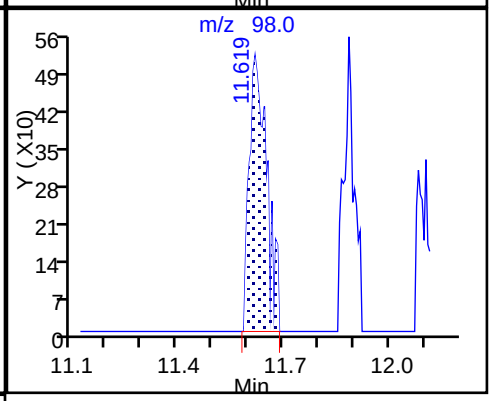
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

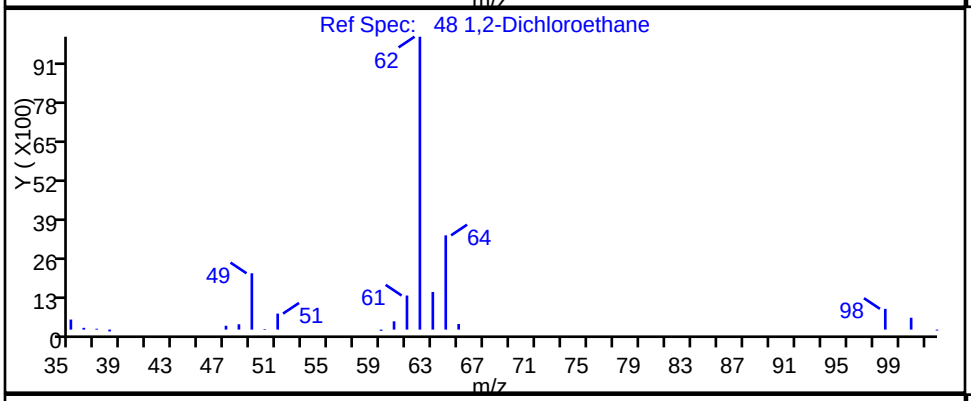
48 1,2-Dichloroethane, CAS: 107-06-2

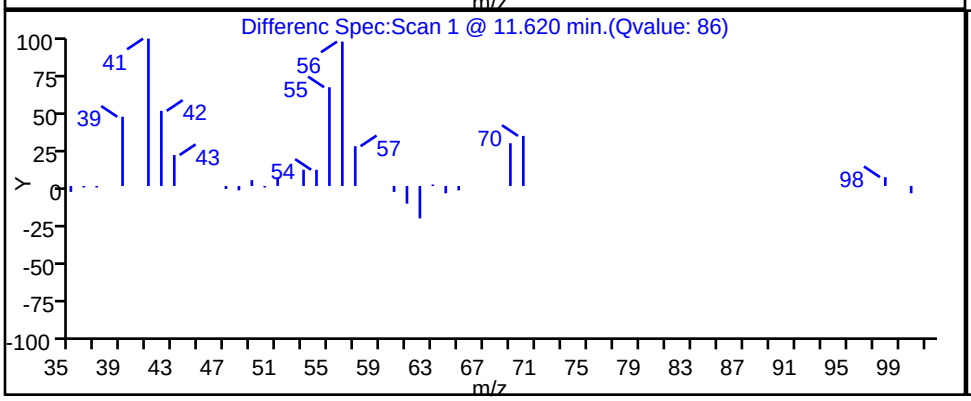


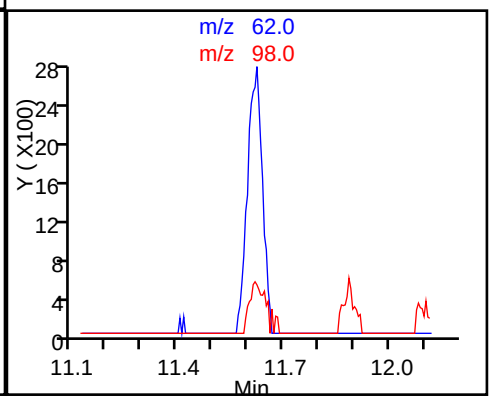












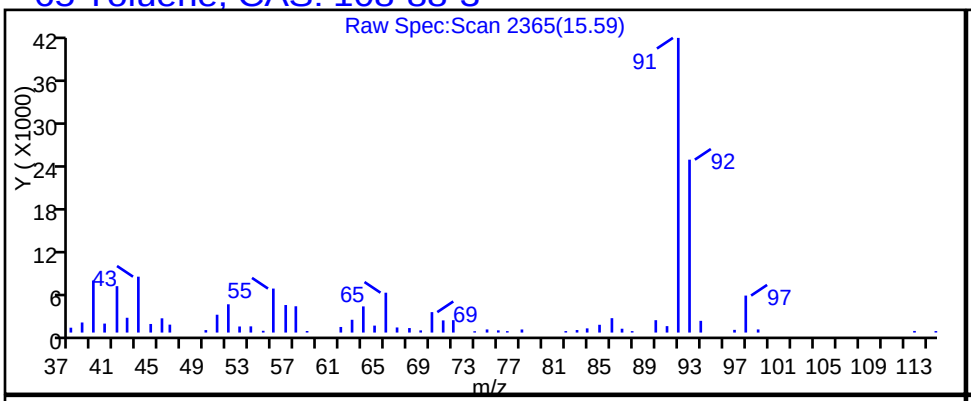
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

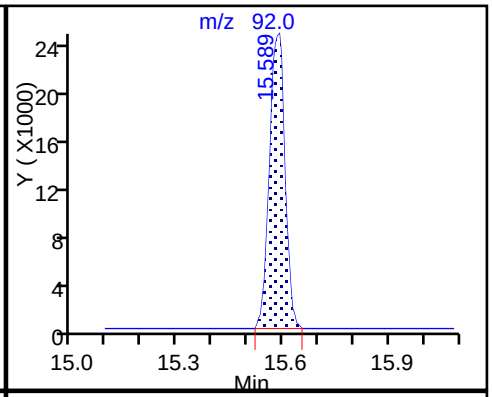
TestAmerica Burlington

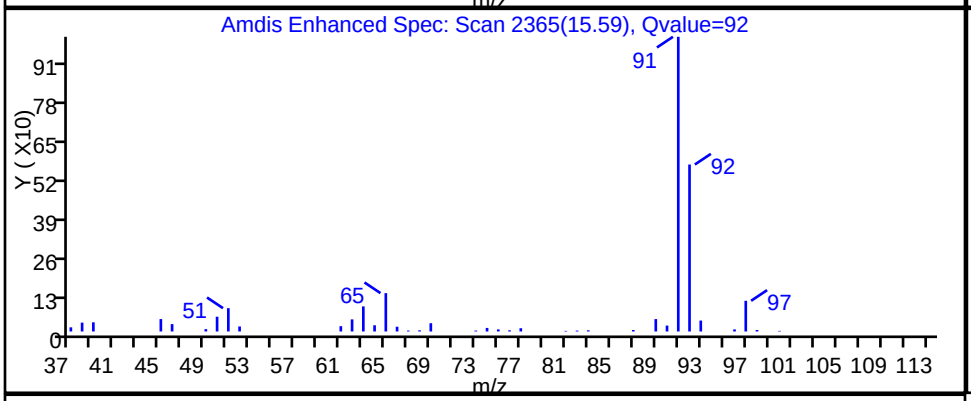
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

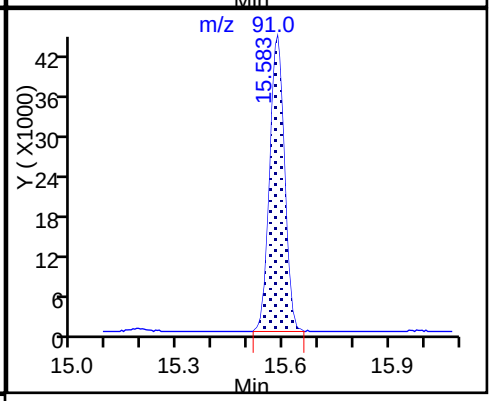
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

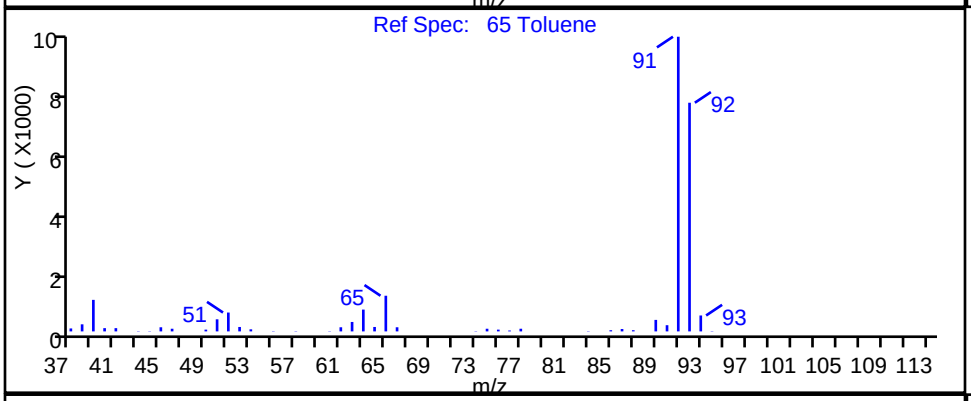
65 Toluene, CAS: 108-88-3

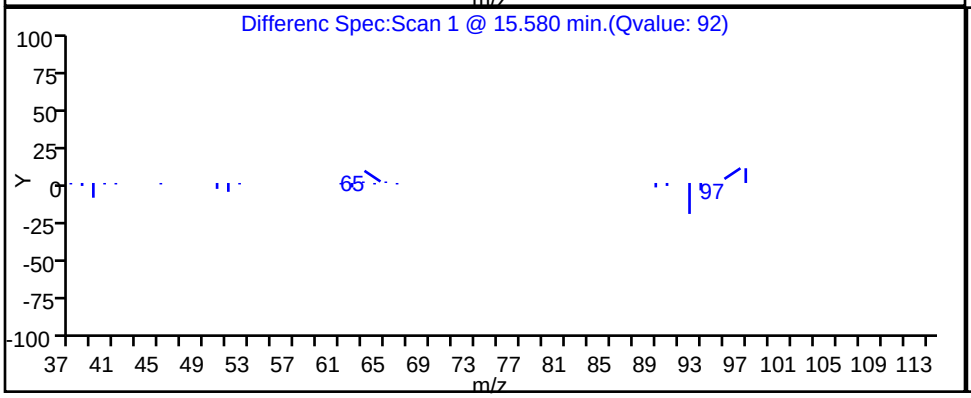


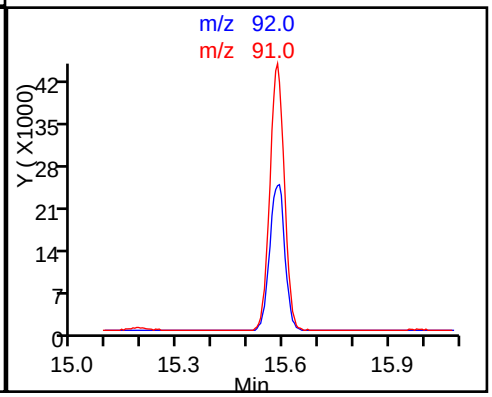












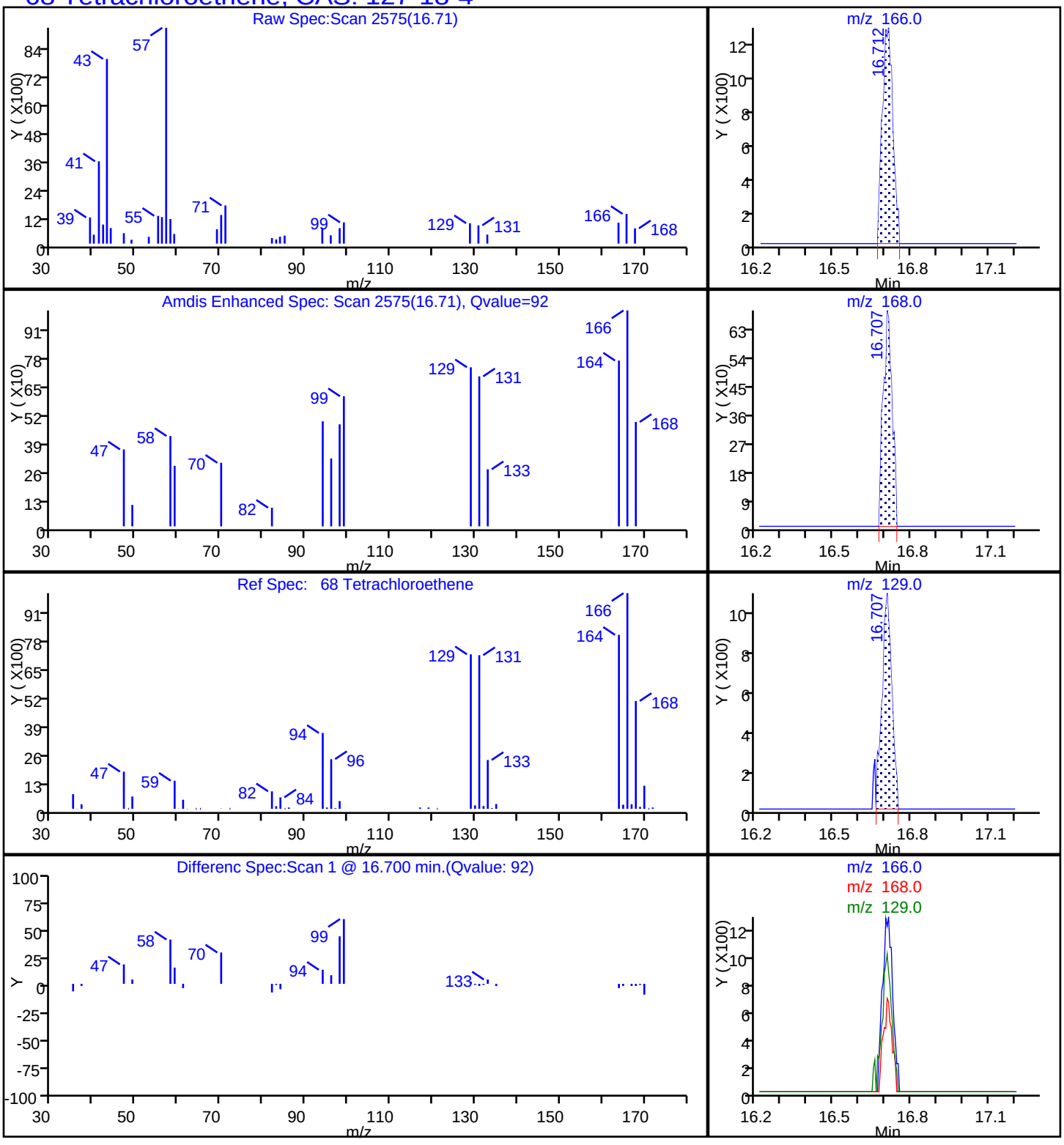
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



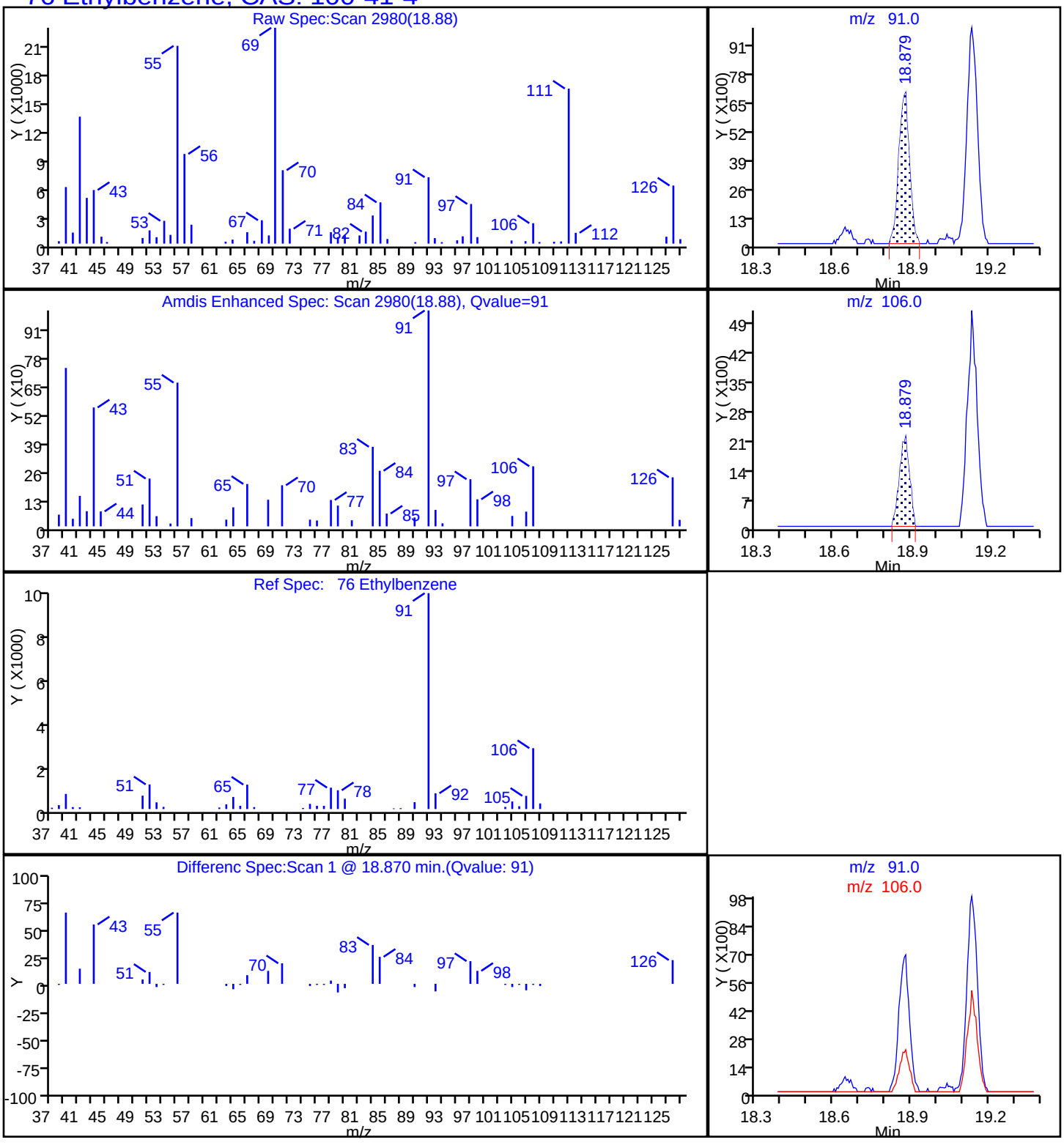
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

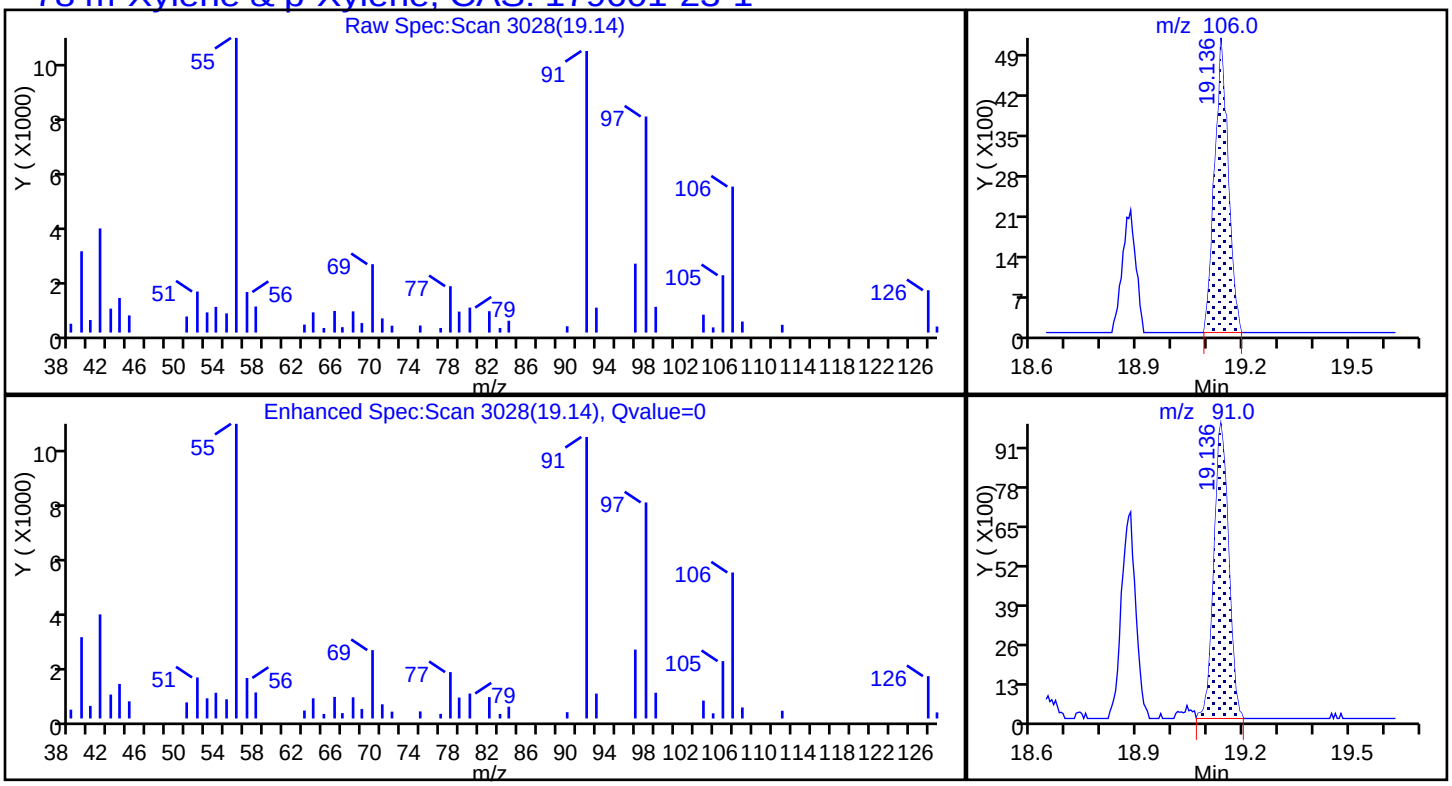


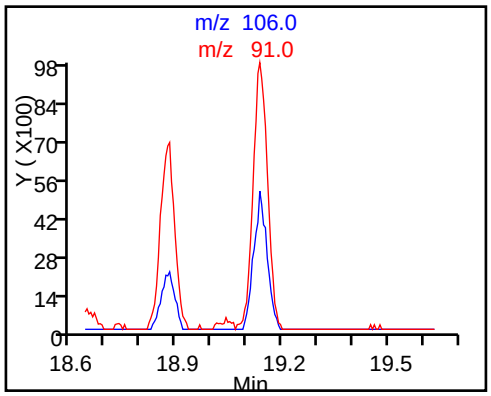
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D				
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





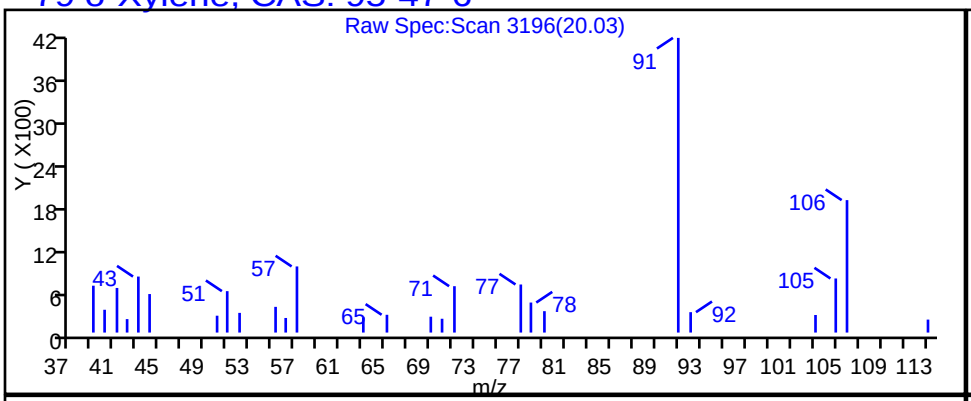
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

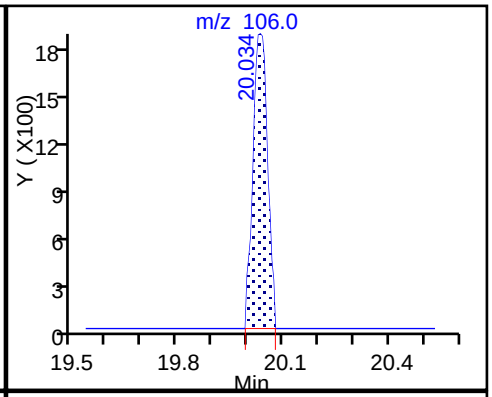
TestAmerica Burlington

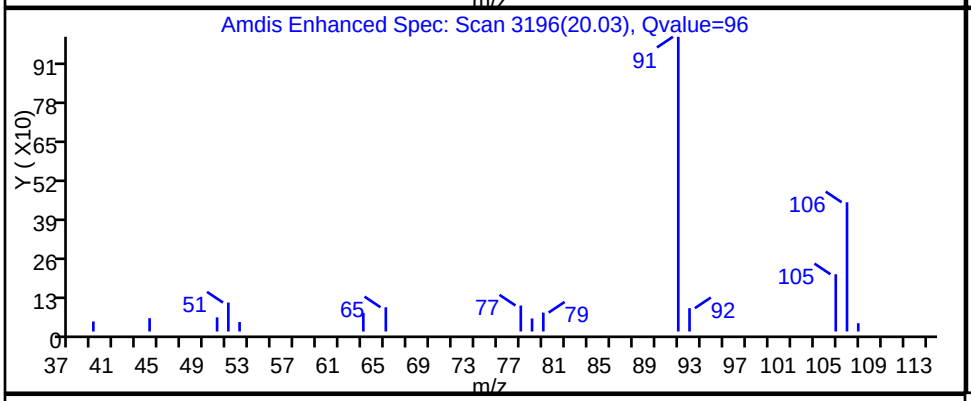
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

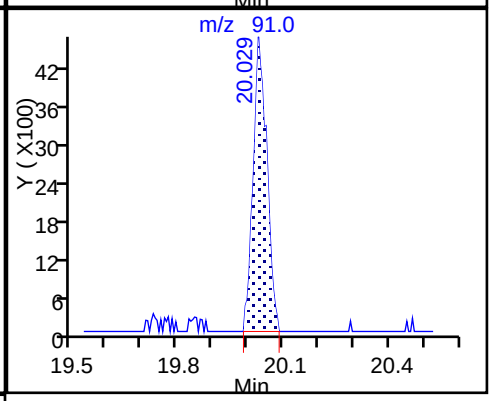
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

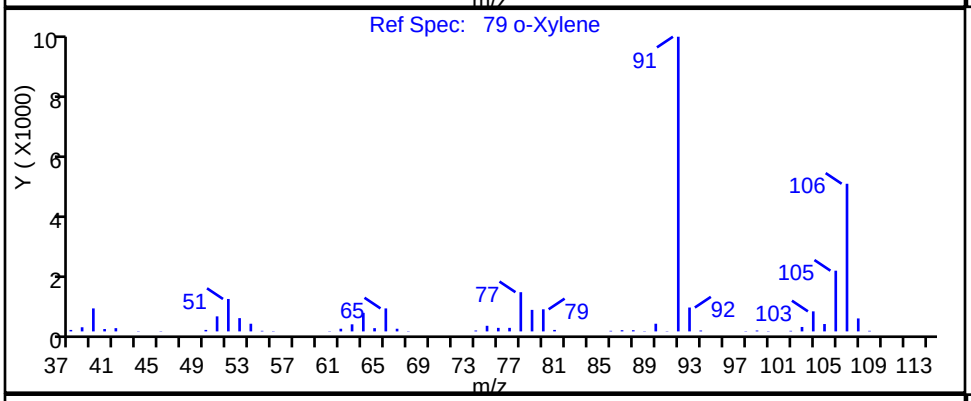
79 o-Xylene, CAS: 95-47-6

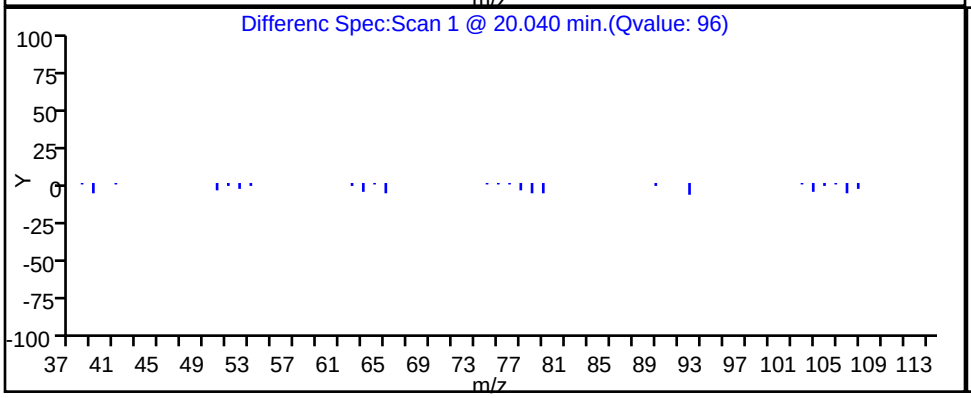


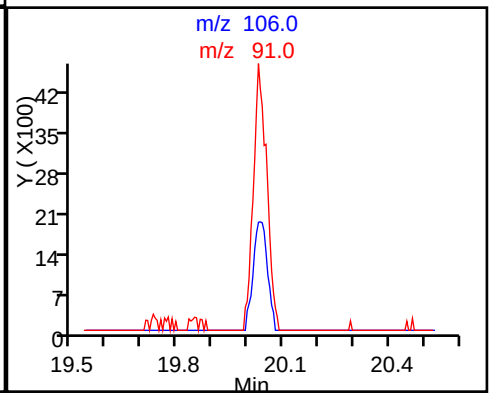












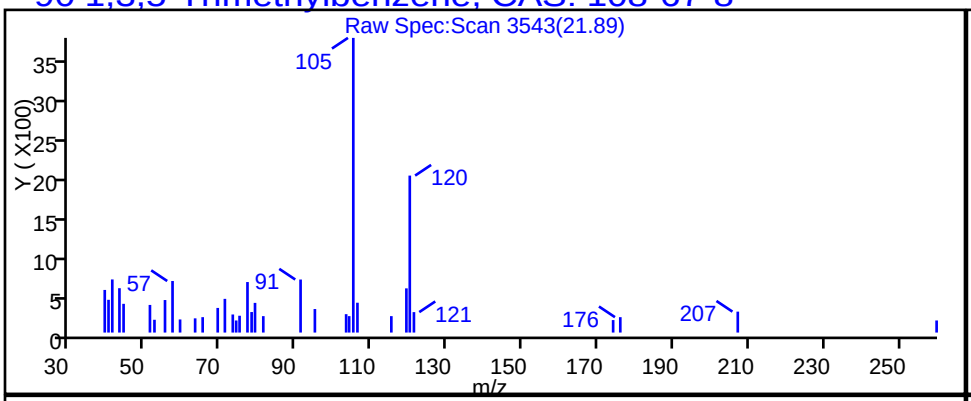
Report Date: 08-Aug-2017 14:31:37 Chrom Revision: 2.2 26-Jun-2017 09:07:56

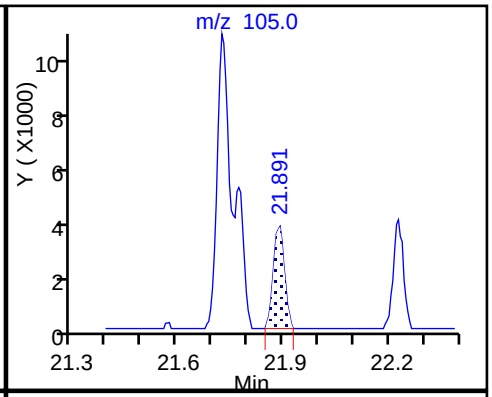
TestAmerica Burlington

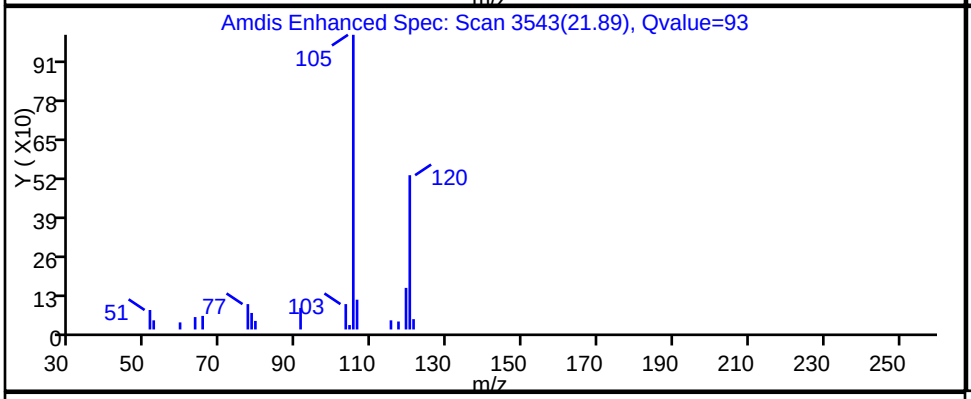
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D

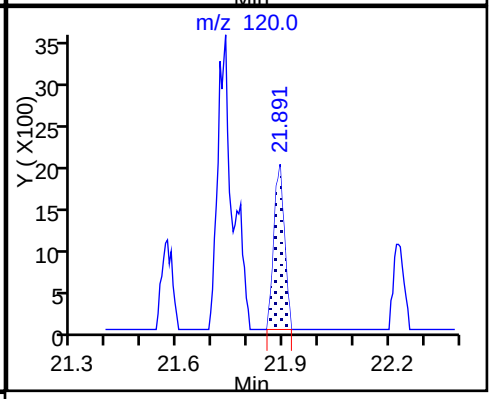
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

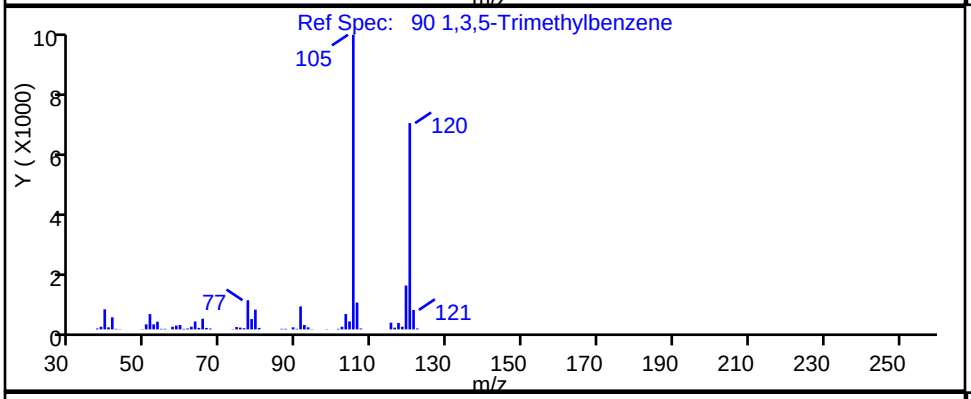
90 1,3,5-Trimethylbenzene, CAS: 108-67-8

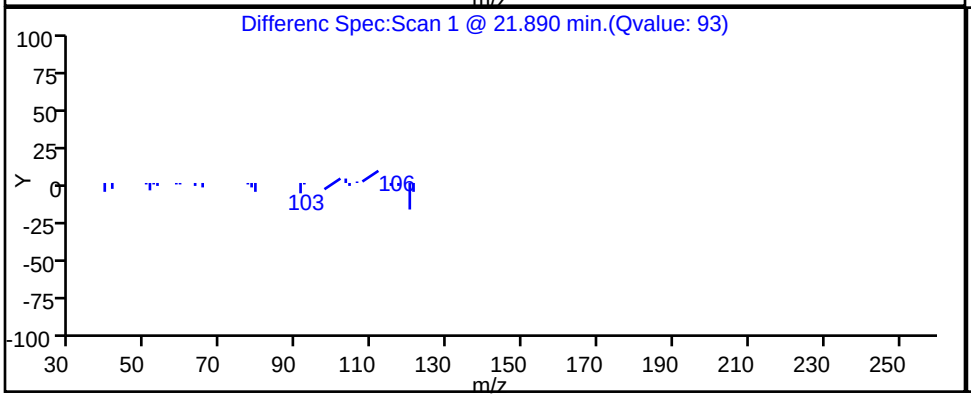


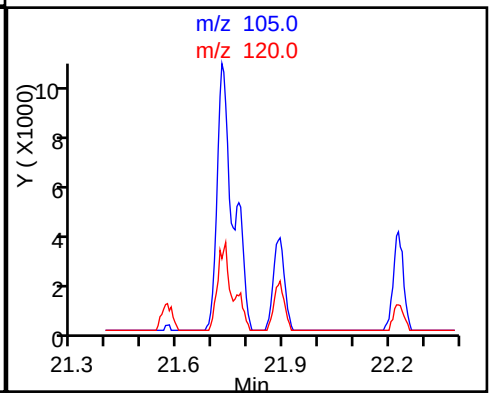








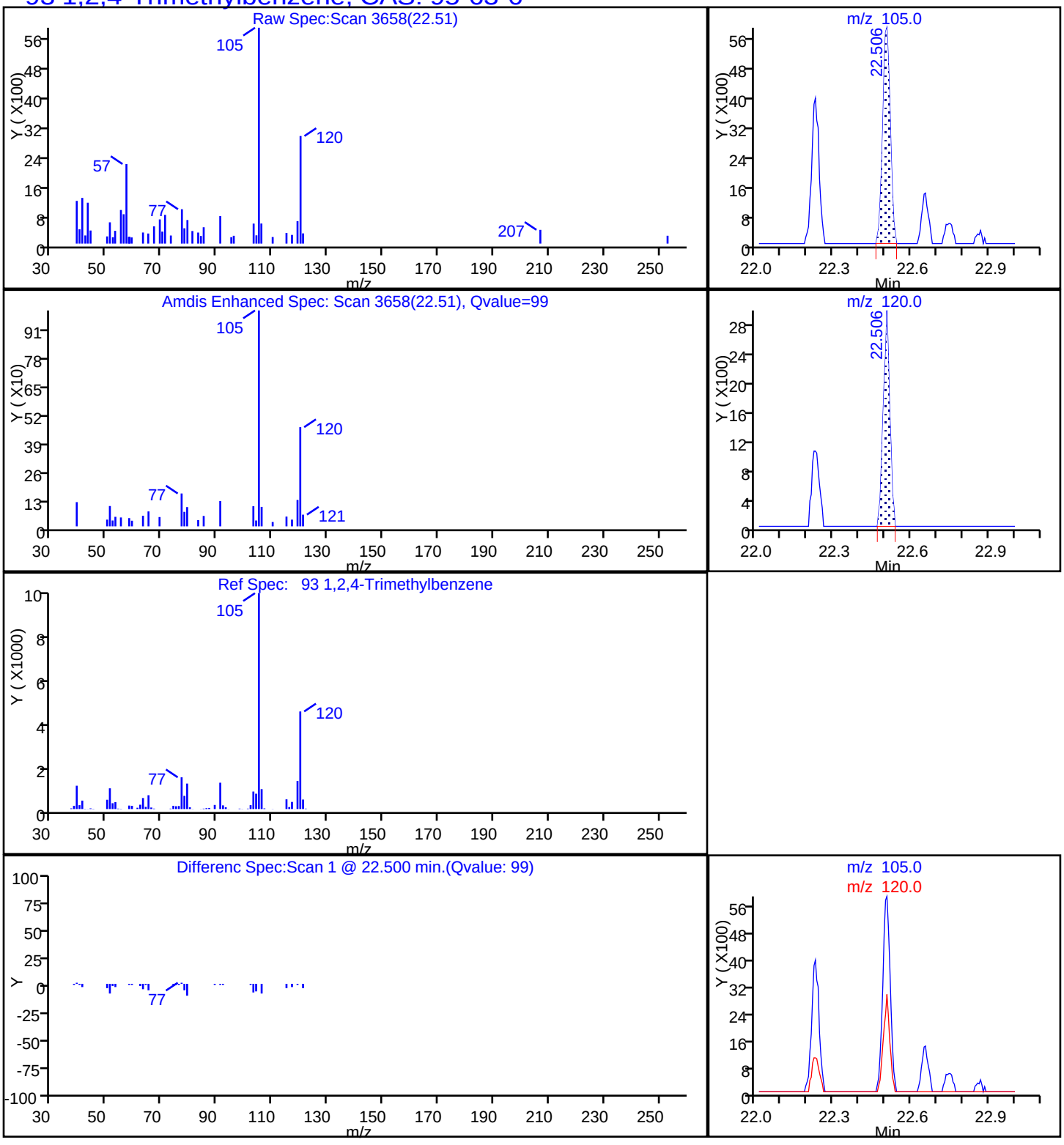




TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D				
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6



Manual Integration/User Assign Peak Report

TestAmerica Burlington

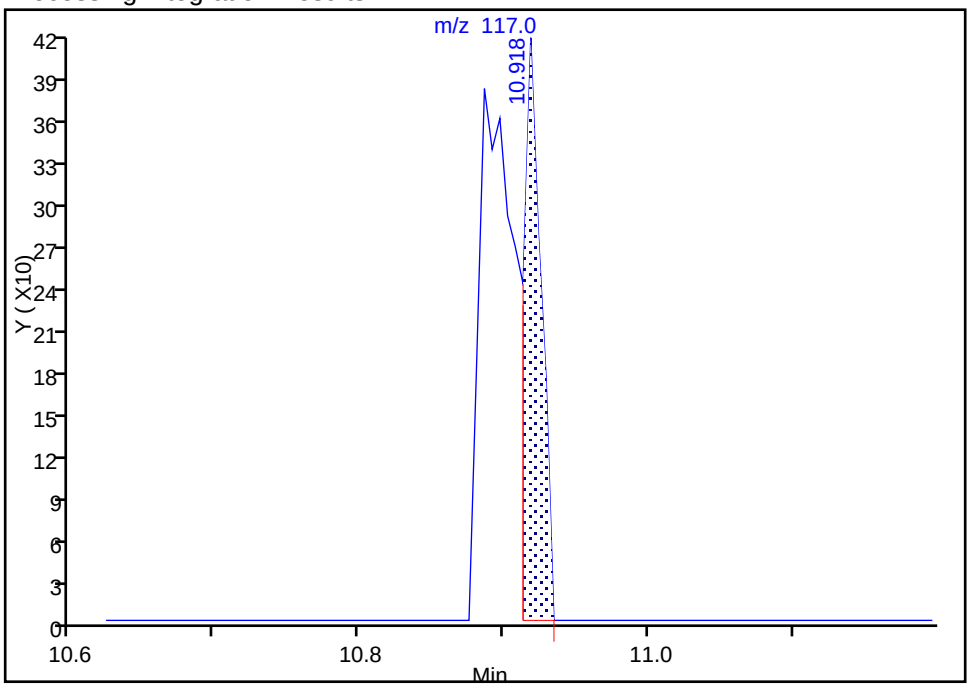
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D				
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

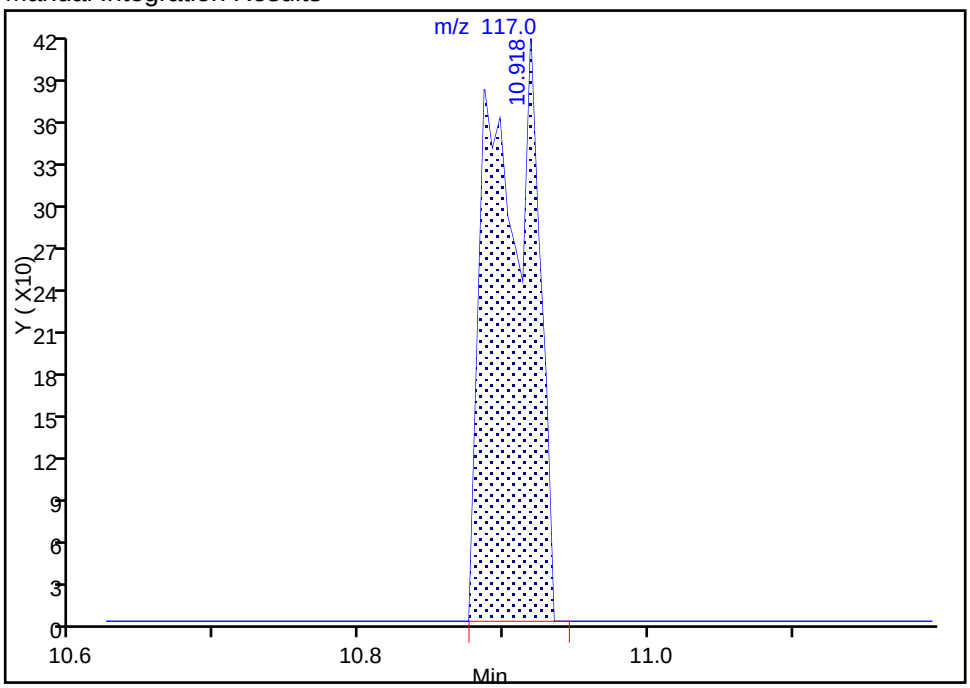
Processing Integration Results

RT: 10.92
Area: 351
Amount: 0.009833
Amount Units: ppb v/v



Manual Integration Results

RT: 10.92
Area: 928
Amount: 0.025996
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:30:20

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

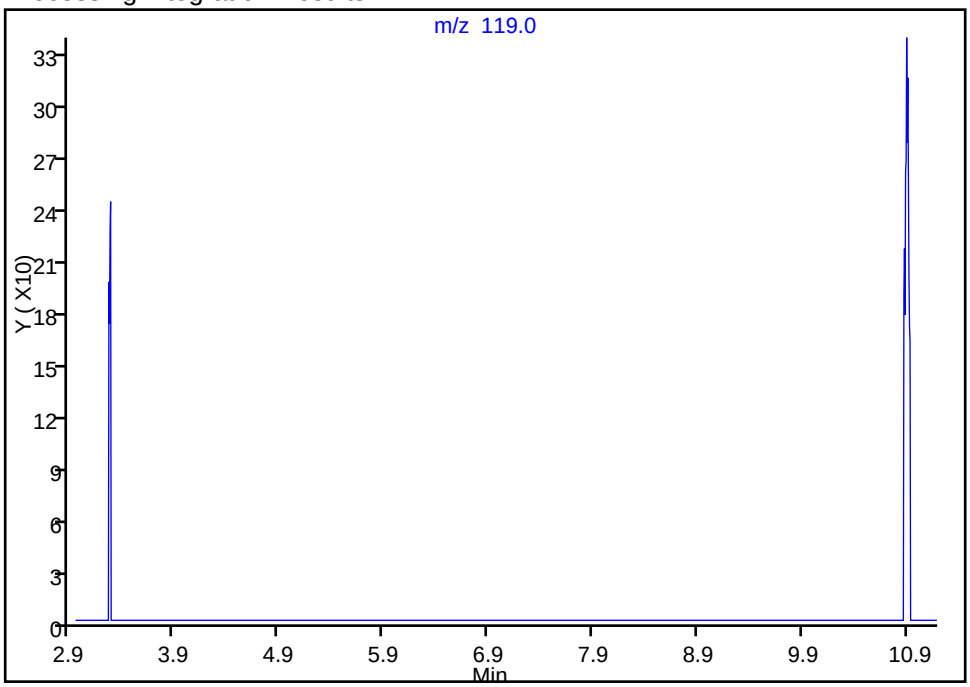
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-13.D				
Injection Date:	07-Aug-2017 23:02:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-3	Lab Sample ID:	200-39613-3		
Client ID:	SV-3				
Operator ID:	ert	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

45 Carbon tetrachloride, CAS: 56-23-5

Signal: 2

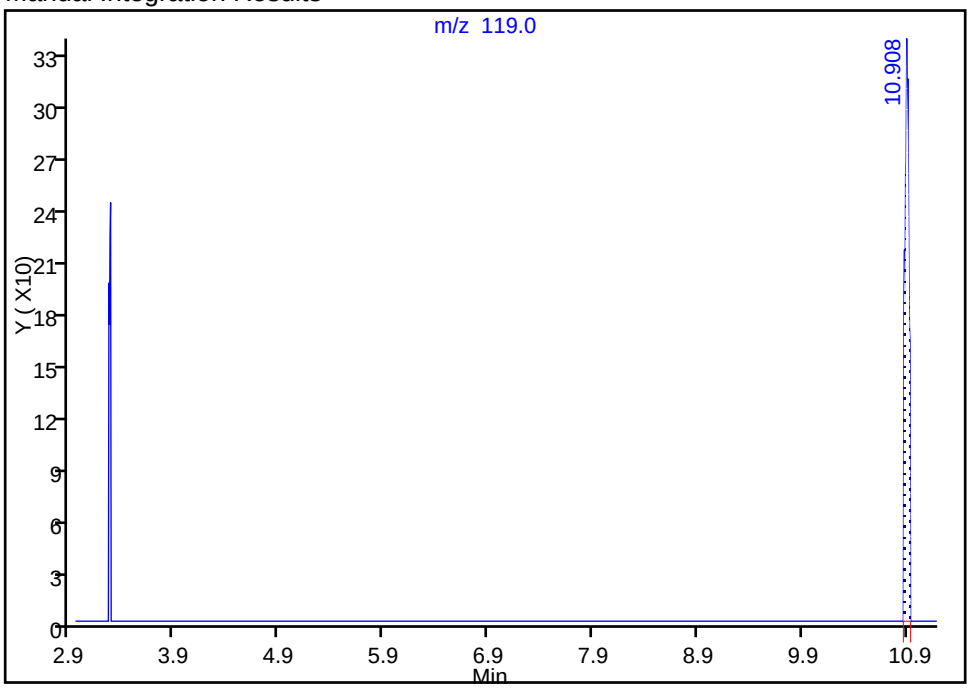
Processing Integration Results

RT: 10.91
Area: 0
Amount: 0.009833
Amount Units: ppb v/v



Manual Integration Results

RT: 10.91
Area: 899
Amount: 0.025996
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:30:30

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-4 Lab Sample ID: 200-39613-4

Matrix: Air Lab File ID: 26252-14.D

Analysis Method: TO-15 Date Collected: 08/03/2017 11:00

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 23:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.30	J	0.50	0.16
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
75-09-2	Methylene Chloride	84.93	0.069	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
56-23-5	Carbon tetrachloride	153.81	0.044	J	0.20	0.011
71-43-2	Benzene	78.11	0.18	J	0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
108-88-3	Toluene	92.14	0.65		0.20	0.035
127-18-4	Tetrachloroethene	165.83	0.27		0.20	0.0098
108-90-7	Chlorobenzene	112.56	0.025	J	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.98		0.20	0.034
179601-23-1	m,p-Xylene	106.17	6.7		0.50	0.077
95-47-6	Xylene, o-	106.17	3.1		0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	5.8		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	11		0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	0.40		0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
91-20-3	Naphthalene	128.17	0.30	J	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-4 Lab Sample ID: 200-39613-4

Matrix: Air Lab File ID: 26252-14.D

Analysis Method: TO-15 Date Collected: 08/03/2017 11:00

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 23:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.61	J	1.0	0.33
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
75-09-2	Methylene Chloride	84.93	0.24	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
56-23-5	Carbon tetrachloride	153.81	0.28	J	1.3	0.069
71-43-2	Benzene	78.11	0.58	J	0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
108-88-3	Toluene	92.14	2.5		0.75	0.13
127-18-4	Tetrachloroethene	165.83	1.8		1.4	0.066
108-90-7	Chlorobenzene	112.56	0.11	J	0.92	0.12
100-41-4	Ethylbenzene	106.17	4.3		0.87	0.15
179601-23-1	m,p-Xylene	106.17	29		2.2	0.33
95-47-6	Xylene, o-	106.17	13		0.87	0.17
108-67-8	1,3,5-Trimethylbenzene	120.20	29		0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	54		0.98	0.28
541-73-1	1,3-Dichlorobenzene	147.00	2.4		1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
91-20-3	Naphthalene	128.17	1.6	J	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D
Lims ID: 200-39613-A-4
Client ID: SV-4
Sample Type: Client
Inject. Date: 07-Aug-2017 23:53:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-014
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:33:27 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:33:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
5 Chloromethane	50	3.509	3.515	-0.006	99	5131	0.2971	
7 Vinyl chloride	62		3.739				ND	
11 Chloroethane	64		4.676				ND	
21 1,1-Dichloroethene	96		6.216				ND	
27 Methylene Chloride	49	7.292	7.286	0.006	94	1484	0.0693	
29 Methyl tert-butyl ether	73		7.698				ND	
31 trans-1,2-Dichloroethene	61		7.720				ND	
34 1,1-Dichloroethane	63		8.608				ND	
37 cis-1,2-Dichloroethene	96		9.752				ND	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	95	151314	10.0	
44 1,1,1-Trichloroethane	97	10.651	10.651	0.000	1	892	0.0234	
45 Carbon tetrachloride	117	10.903	10.908	-0.005	58	1636	0.0440	
47 Benzene	78	11.406	11.411	-0.005	98	11925	0.1811	
48 1,2-Dichloroethane	62		11.620				ND	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	827545	10.0	
53 Trichloroethene	95		12.807				ND	
54 1,2-Dichloropropane	63		13.412				ND	
65 Toluene	92	15.578	15.584	-0.006	92	30264	0.6514	
68 Tetrachloroethene	166	16.712	16.702	0.005	93	9429	0.2658	M
* 74 Chlorobenzene-d5	117	18.649	18.649	0.000	91	747582	10.0	
75 Chlorobenzene	112	18.713	18.713	0.000	64	1508	0.0247	
76 Ethylbenzene	91	18.868	18.874	-0.006	99	103749	0.9813	
78 m-Xylene & p-Xylene	106	19.136	19.141	-0.005	0	265204	6.68	
79 o-Xylene	106	20.035	20.035	0.000	98	120754	3.11	
90 1,3,5-Trimethylbenzene	105	21.886	21.891	-0.005	92	552012	5.80	
93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	99	1057449	11.1	
96 1,3-Dichlorobenzene	146	22.982	22.988	-0.006	96	24782	0.4006	
101 1,2-Dichlorobenzene	146		23.683				ND	
105 Naphthalene	128	26.770	26.765	0.005	98	30678	0.2966	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

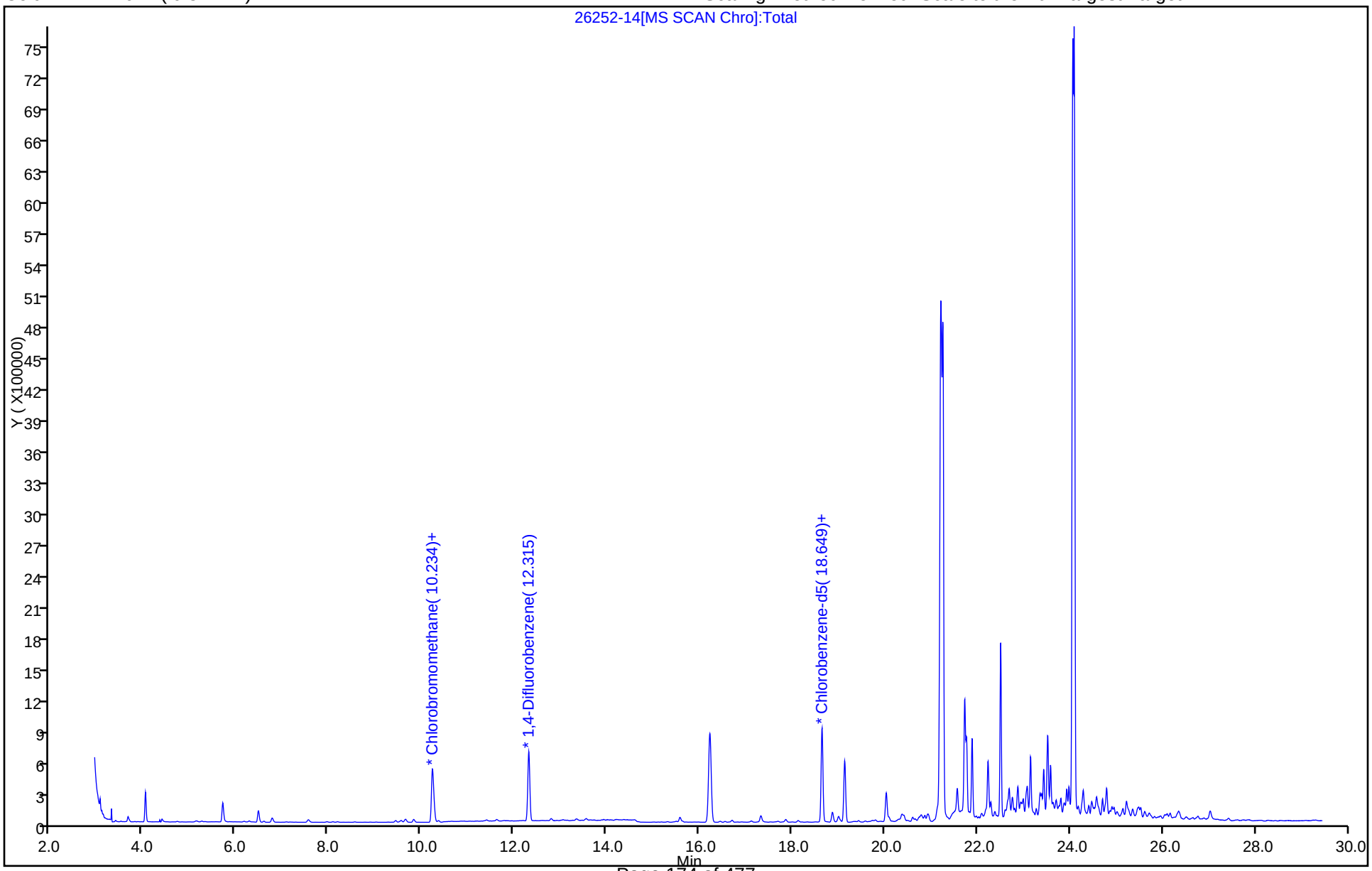
Report Date: 08-Aug-2017 14:33:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

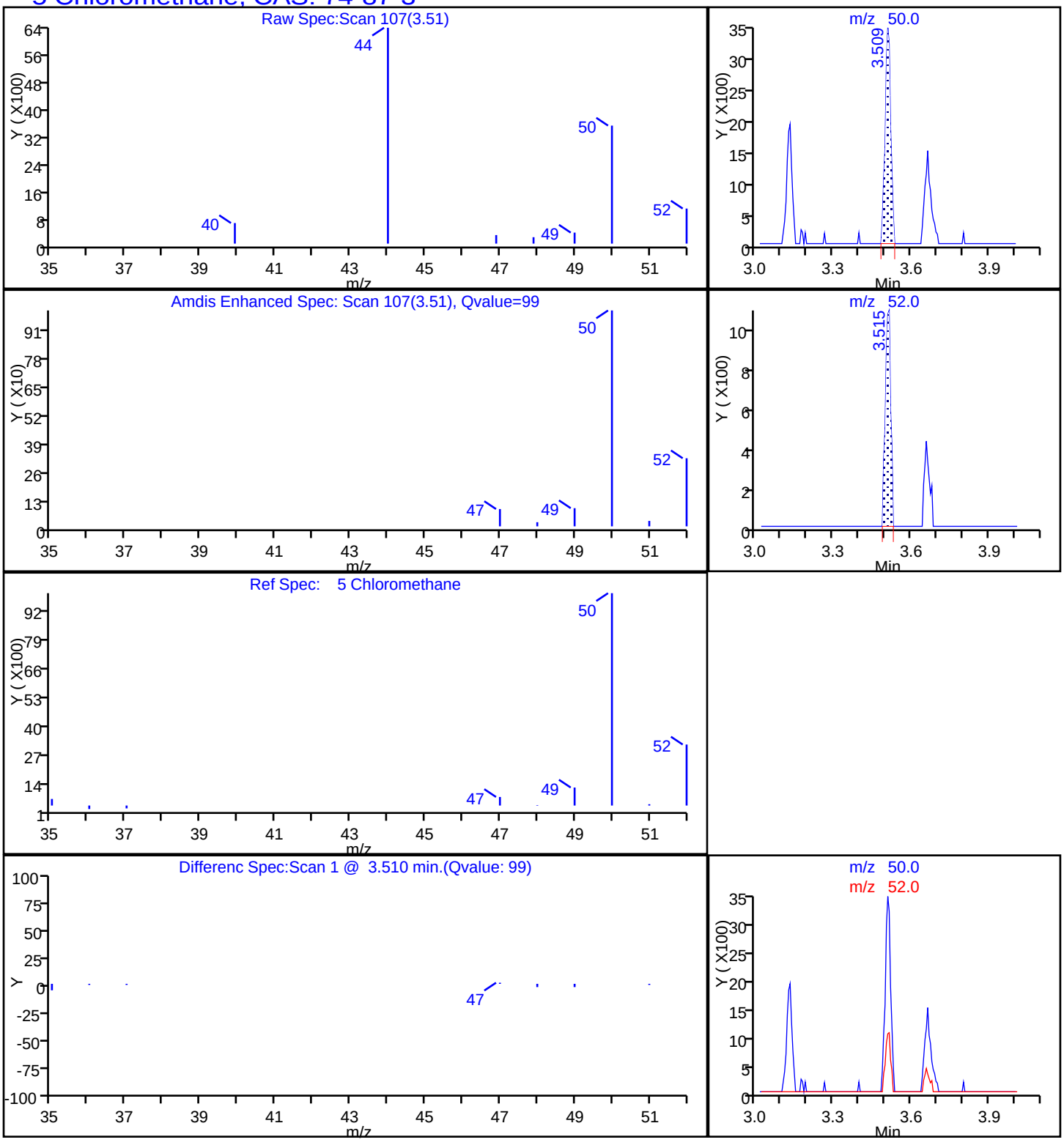
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4	Worklist Smp#:	14
Client ID:	SV-4				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D
Injection Date: 07-Aug-2017 23:53:30 Instrument ID: CHX.i
Lims ID: 200-39613-A-4 Lab Sample ID: 200-39613-4
Client ID: SV-4
Operator ID: ert ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

5 Chloromethane, CAS: 74-87-3



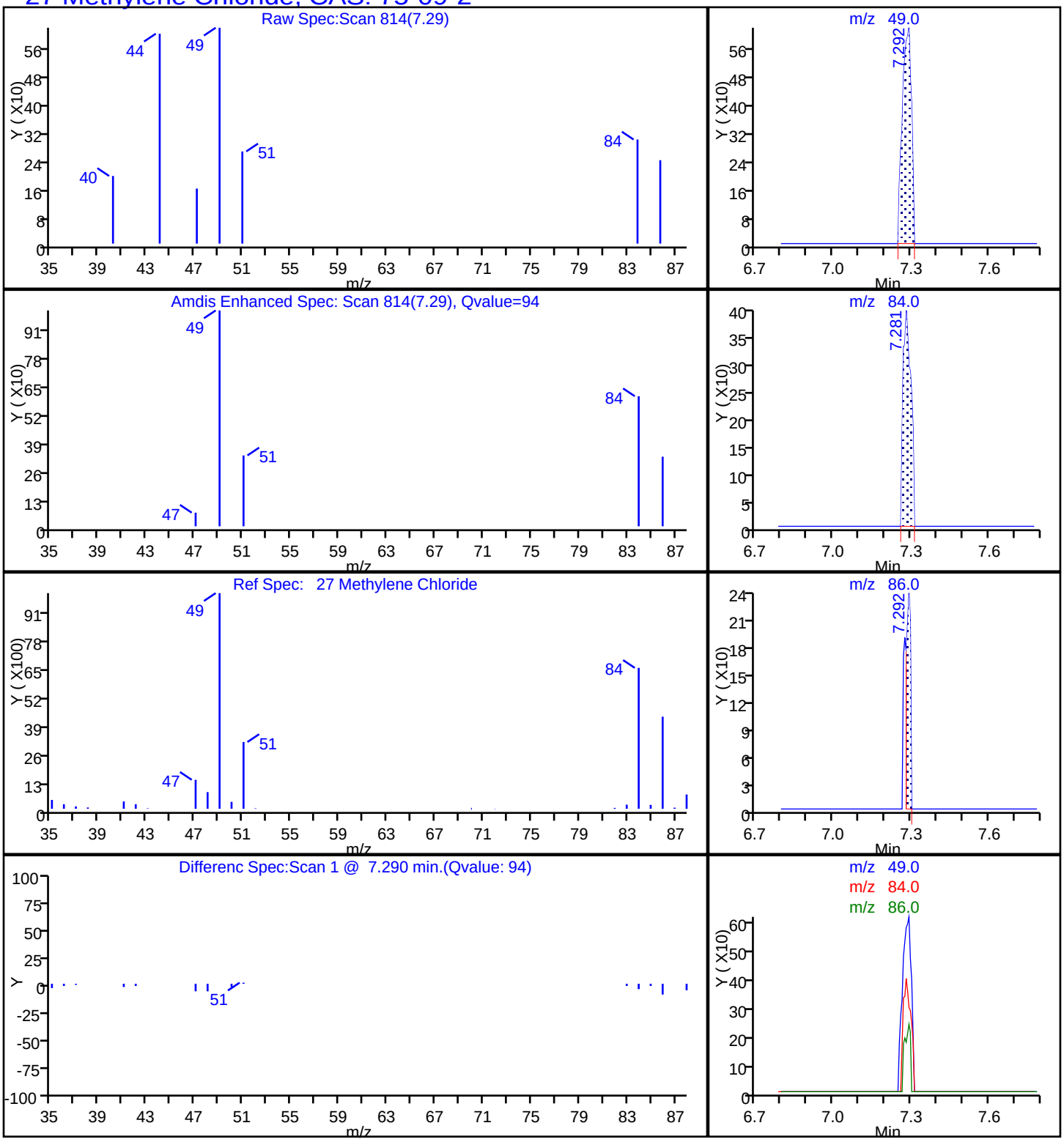
Report Date: 08-Aug-2017 14:33:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



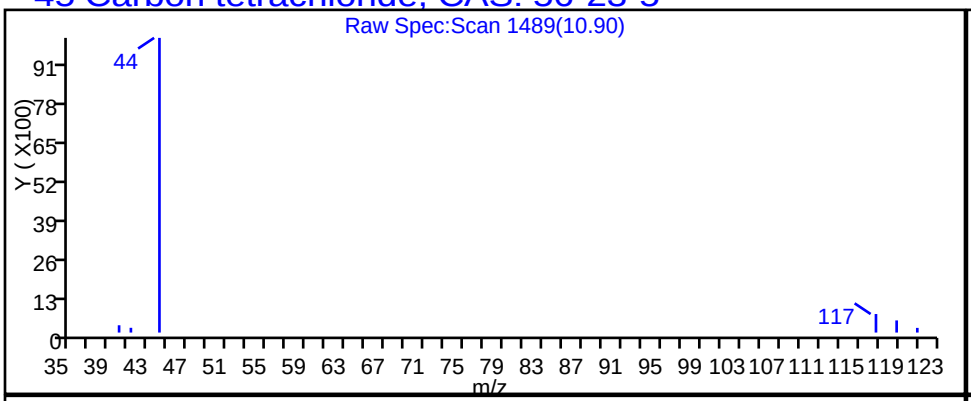
Report Date: 08-Aug-2017 14:33:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

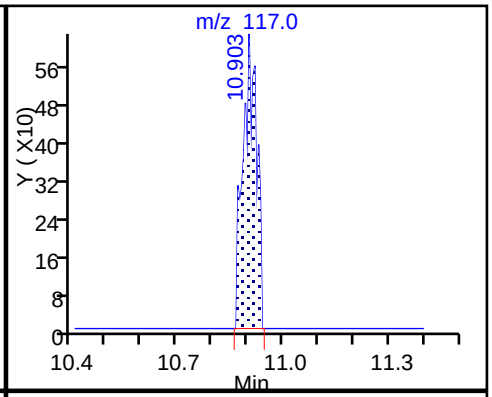
TestAmerica Burlington

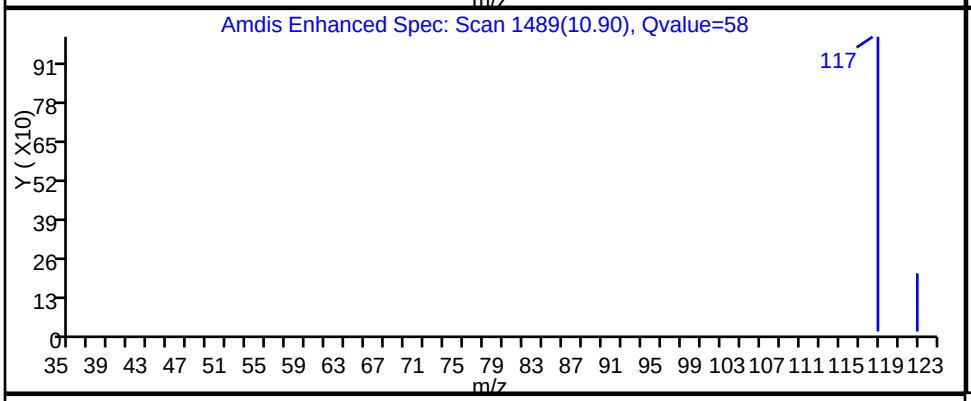
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

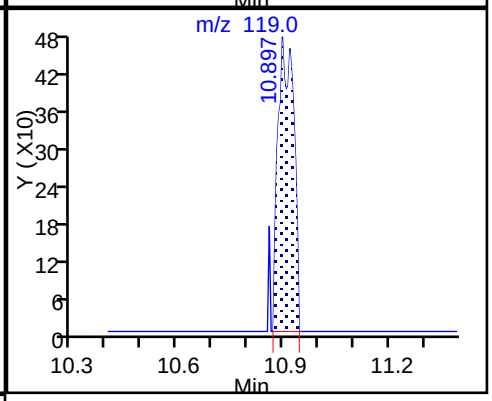
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

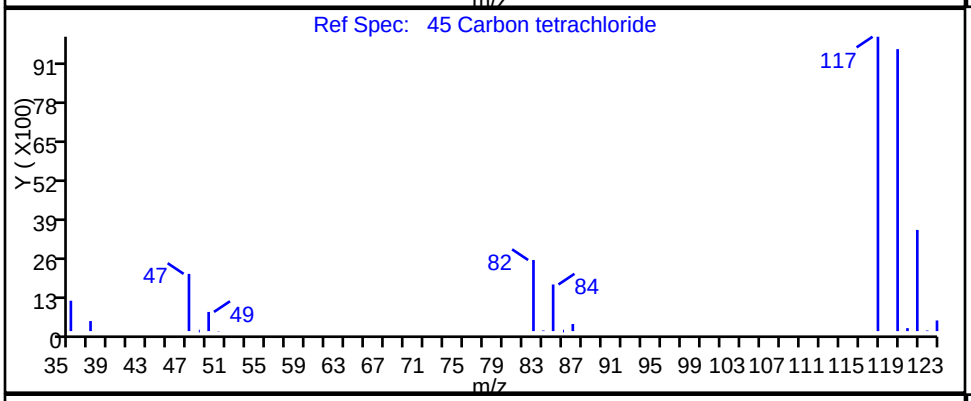
45 Carbon tetrachloride, CAS: 56-23-5

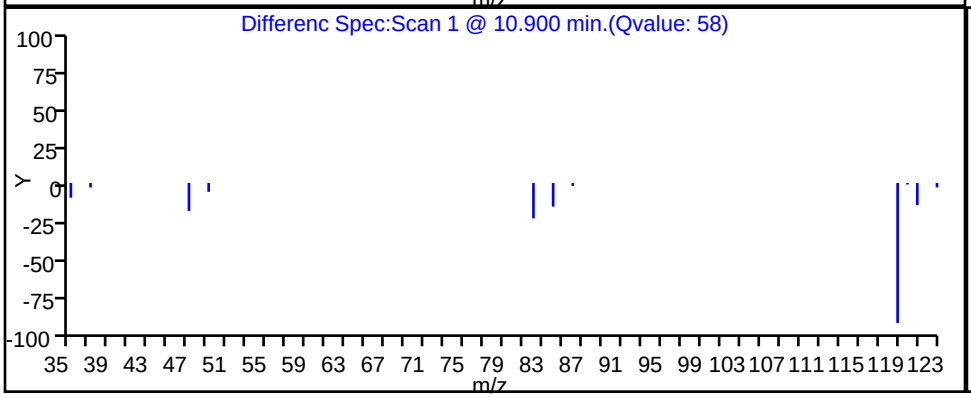


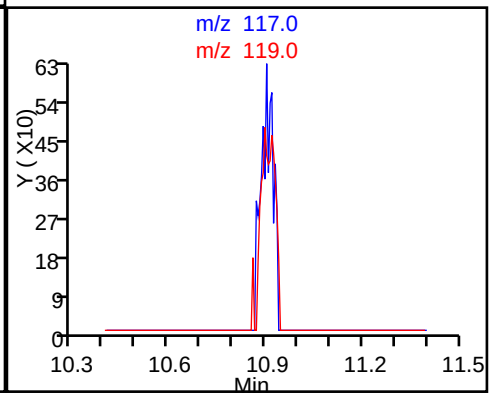












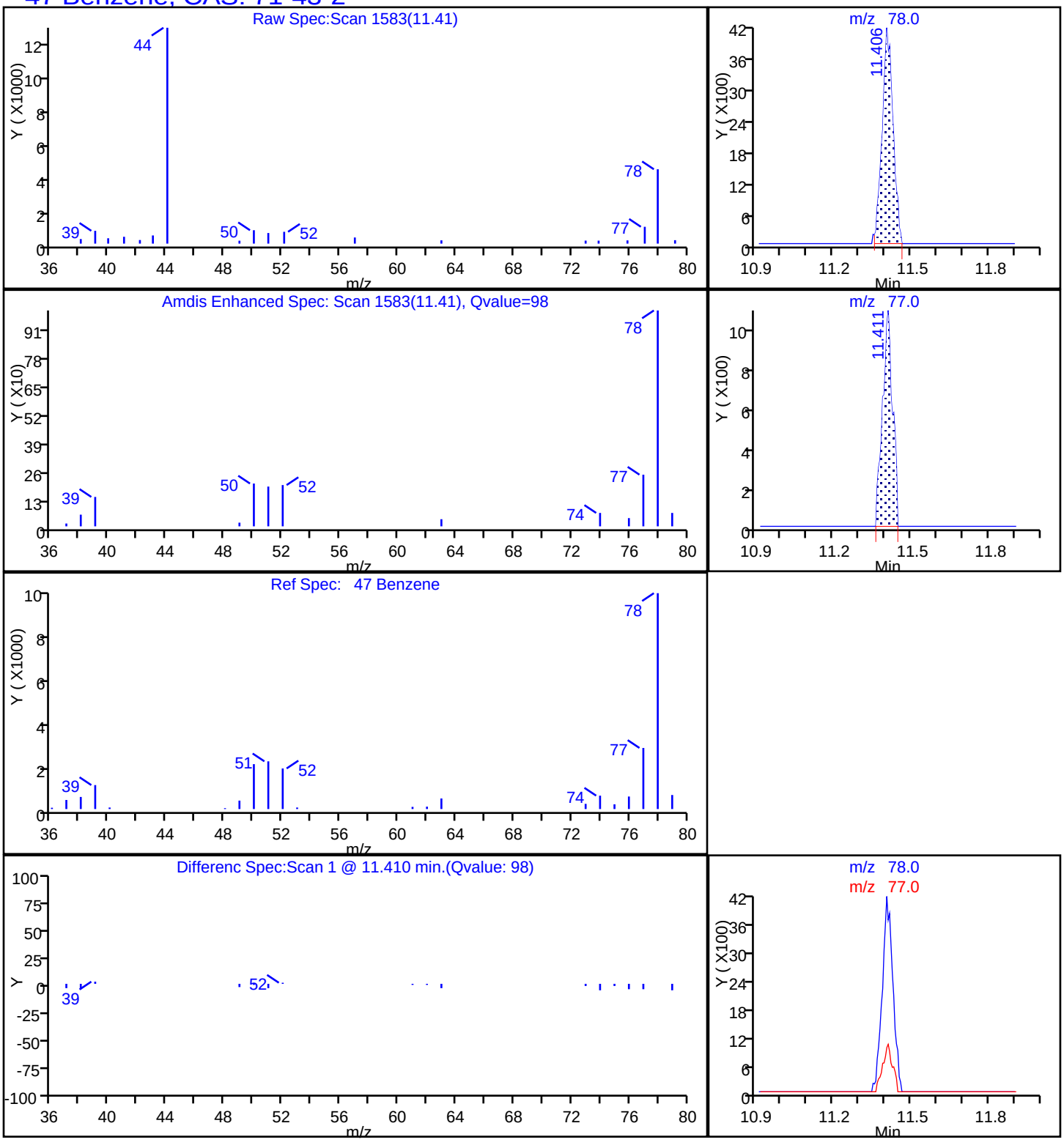
Report Date: 08-Aug-2017 14:33:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



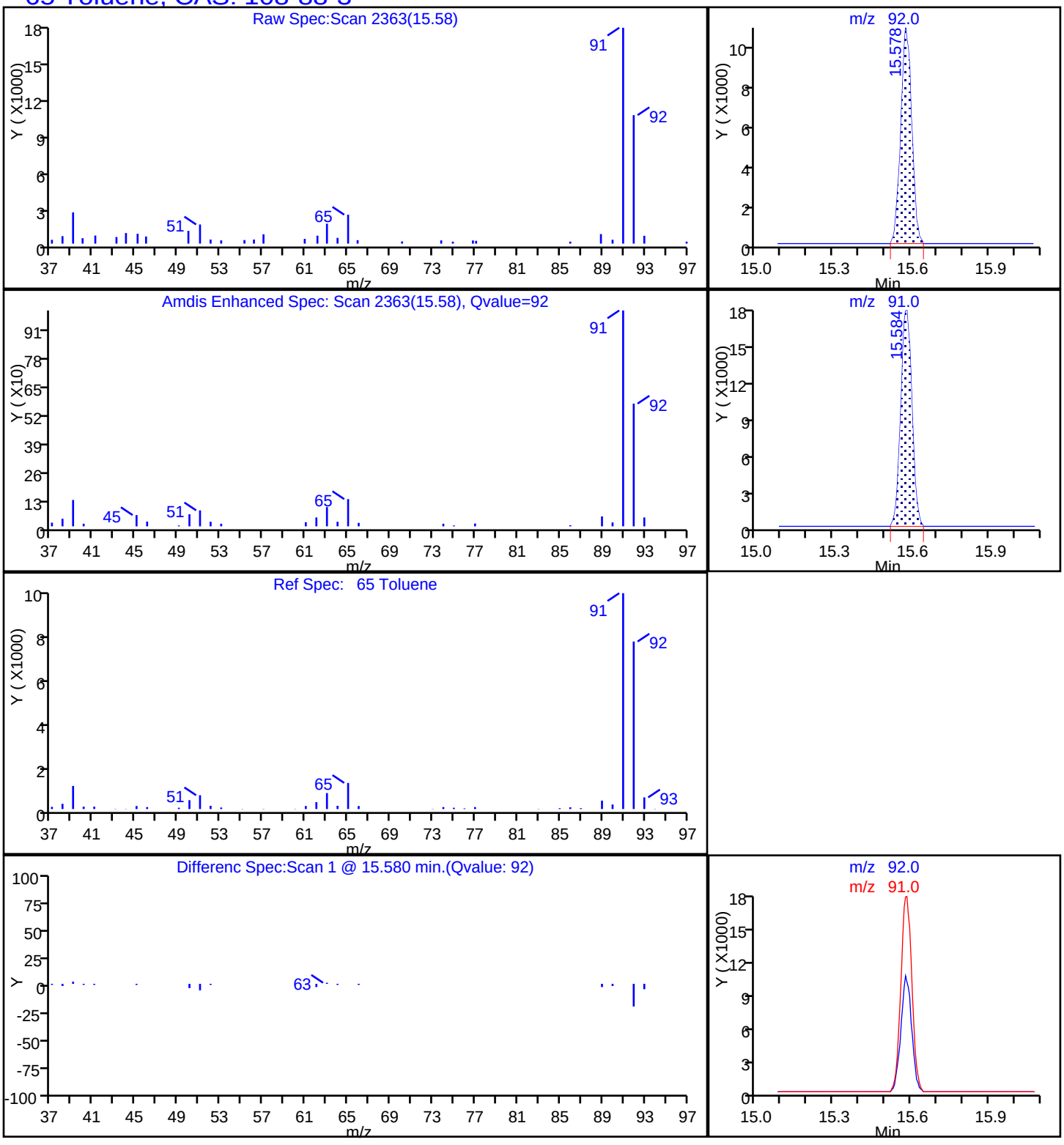
Report Date: 08-Aug-2017 14:33:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3



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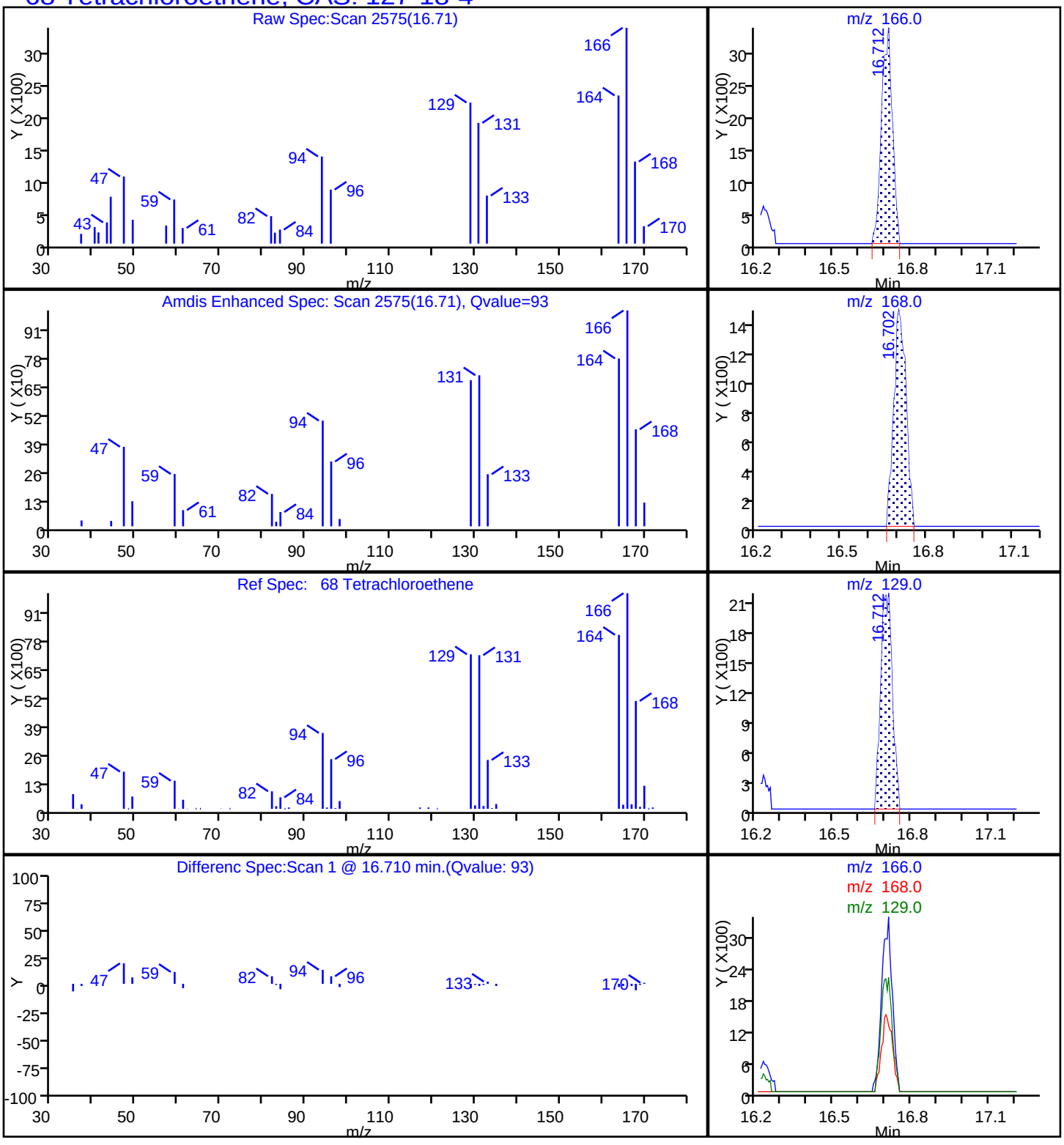
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



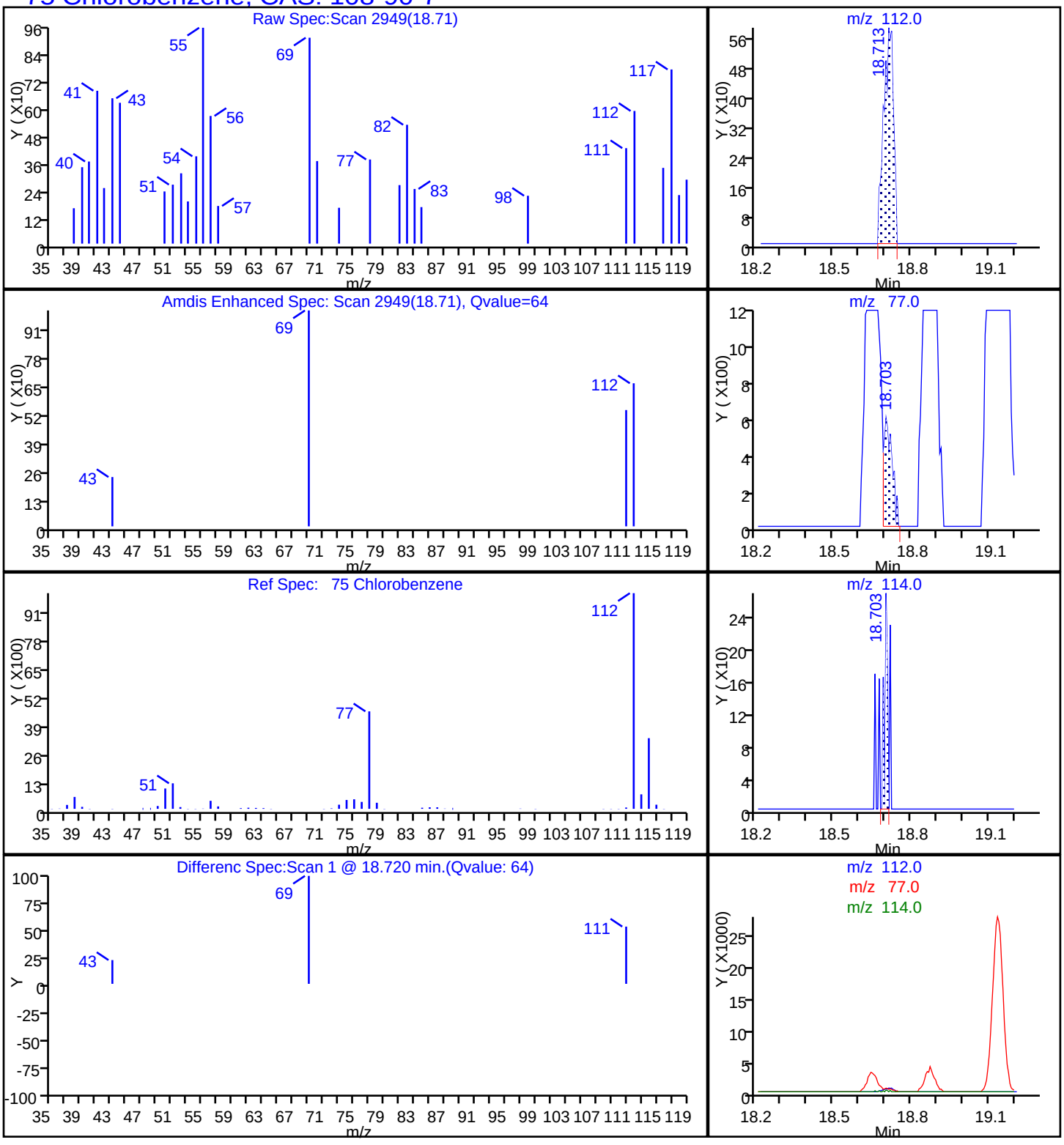
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

75 Chlorobenzene, CAS: 108-90-7



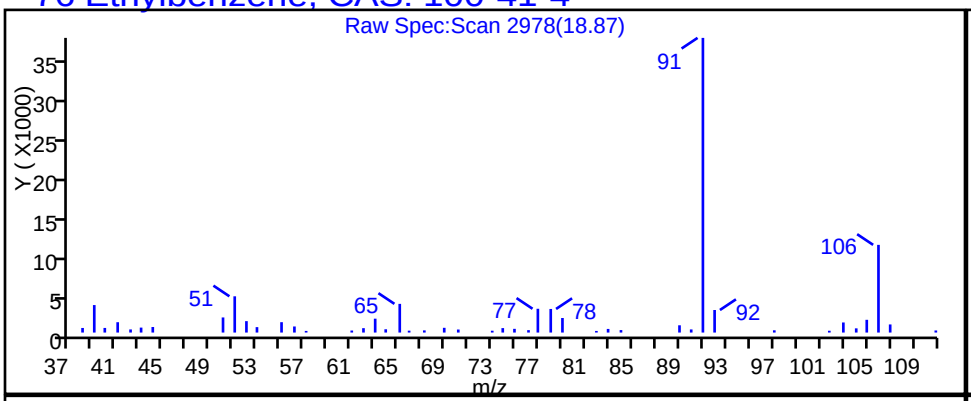
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

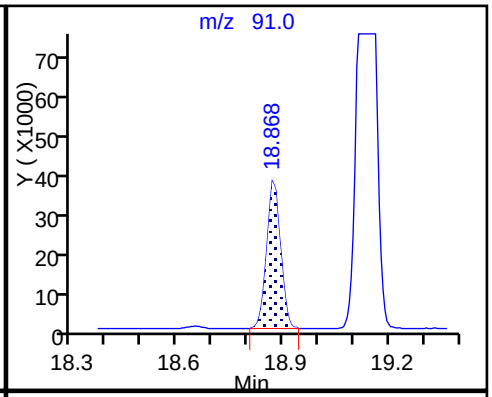
TestAmerica Burlington

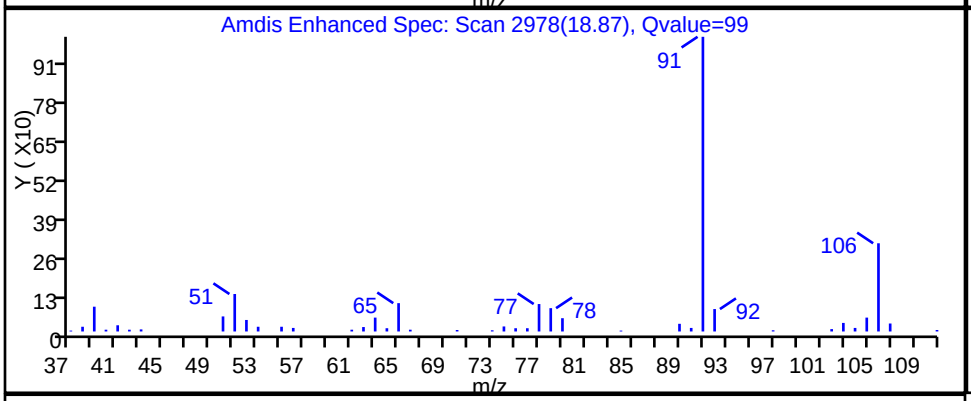
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

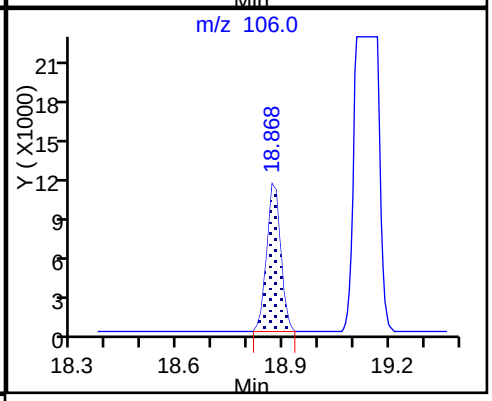
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

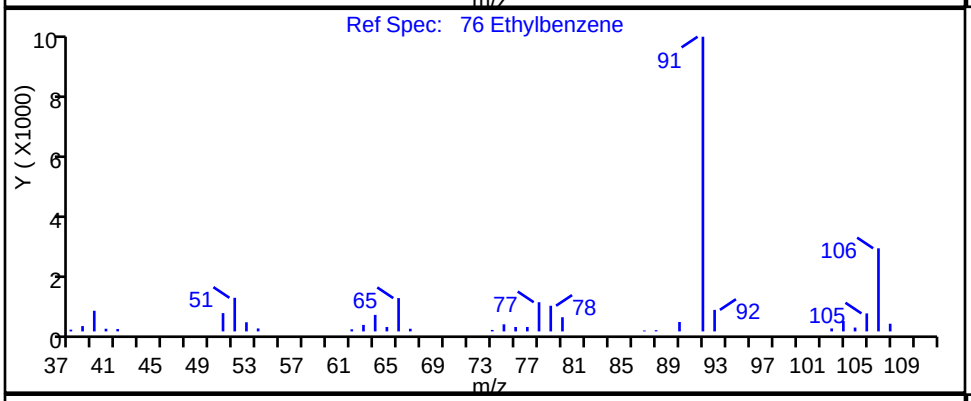
76 Ethylbenzene, CAS: 100-41-4

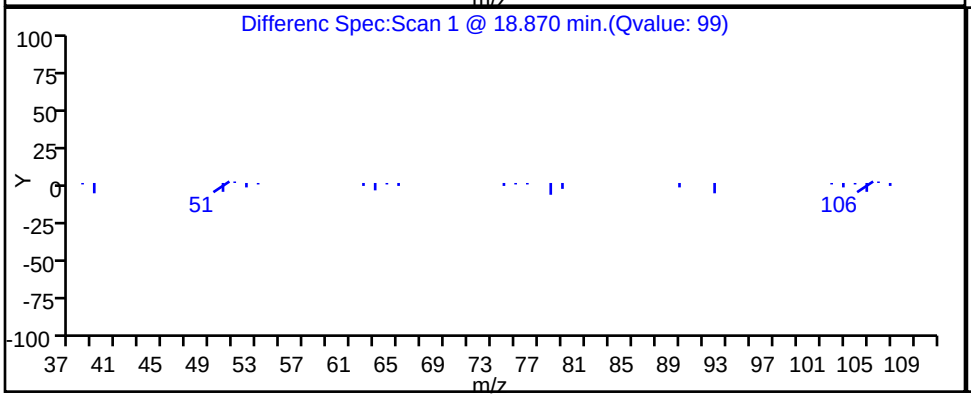


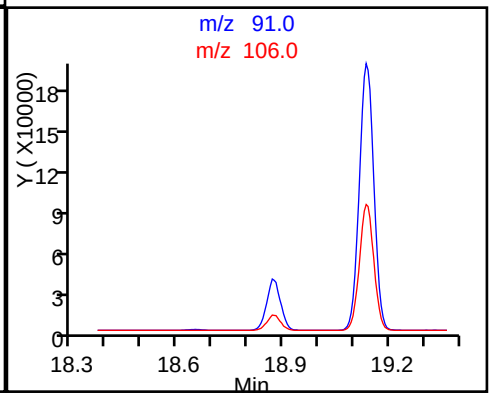












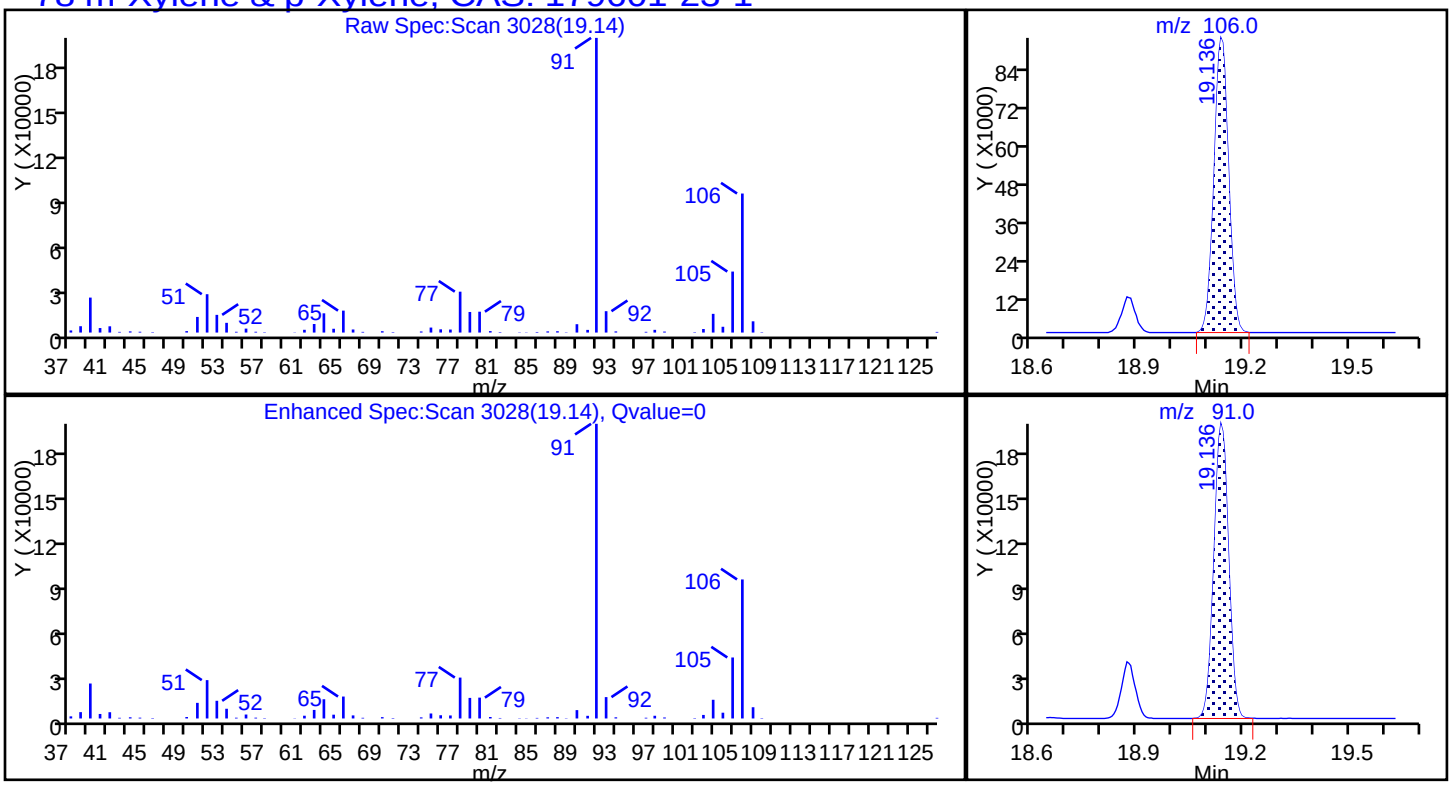
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

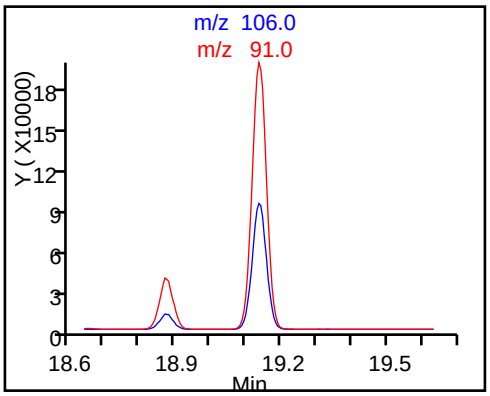
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





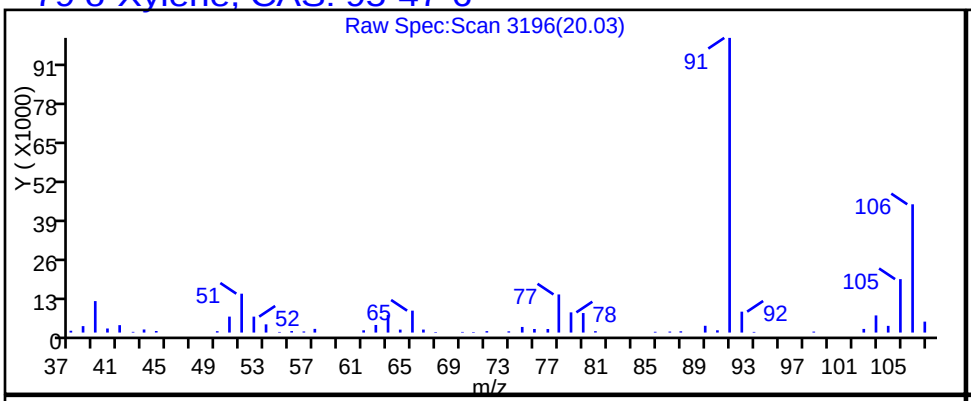
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

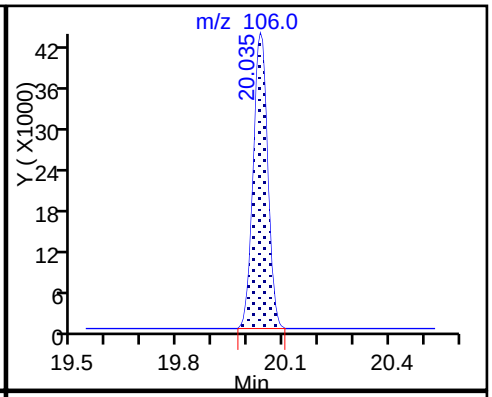
TestAmerica Burlington

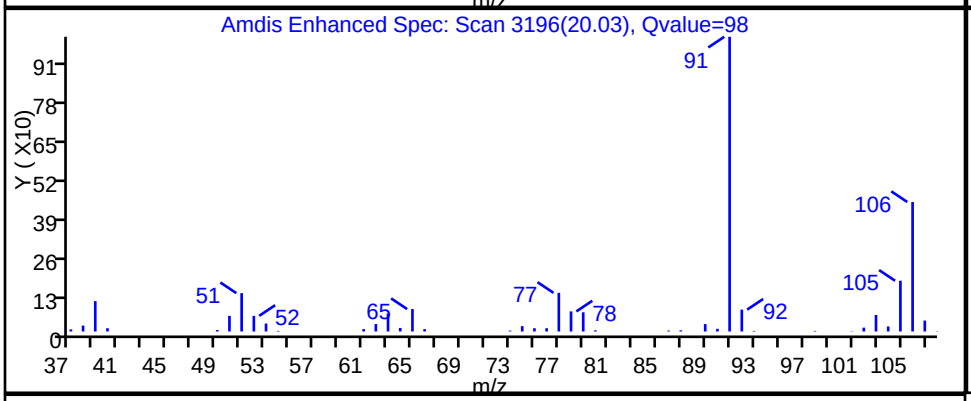
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

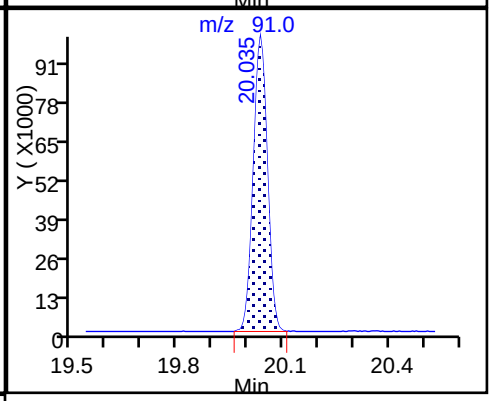
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

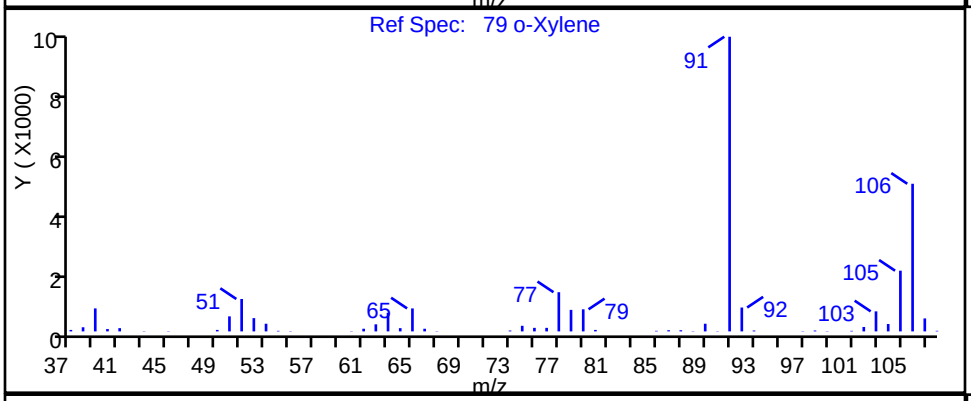
79 o-Xylene, CAS: 95-47-6

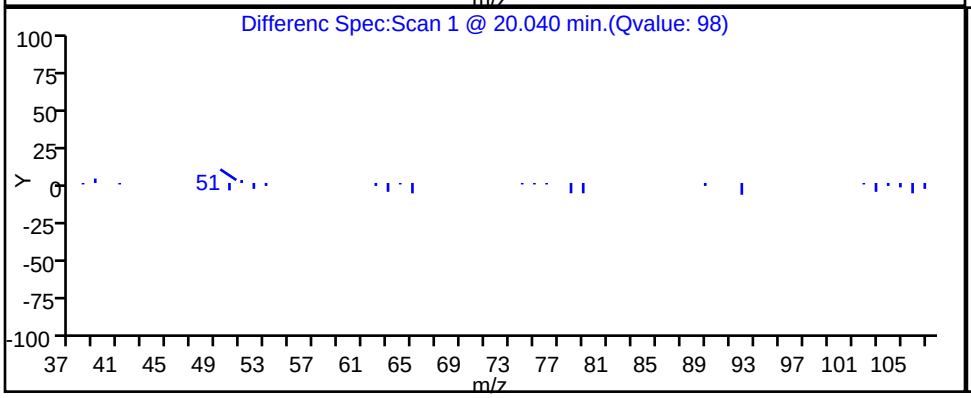


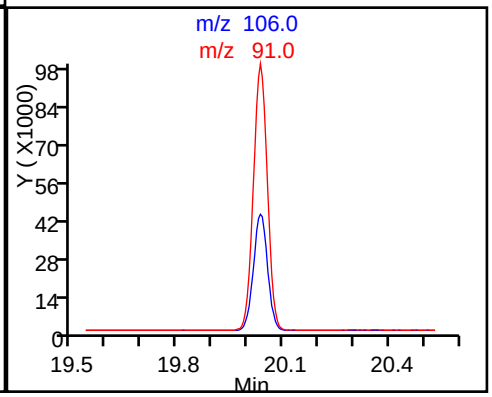












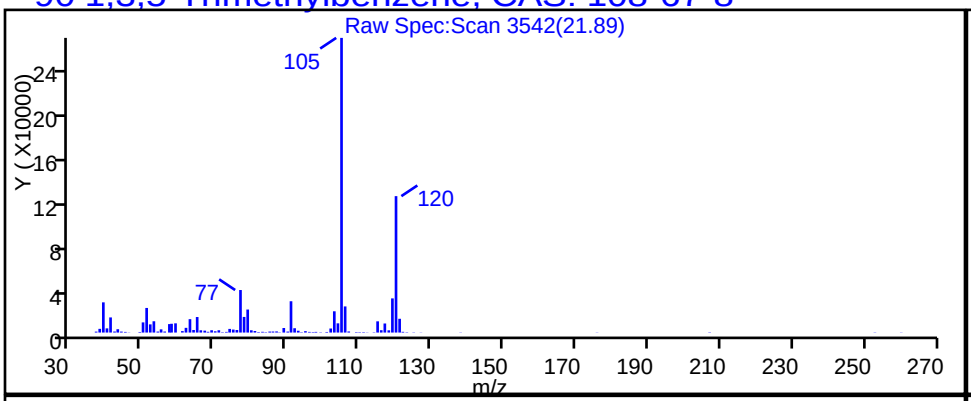
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

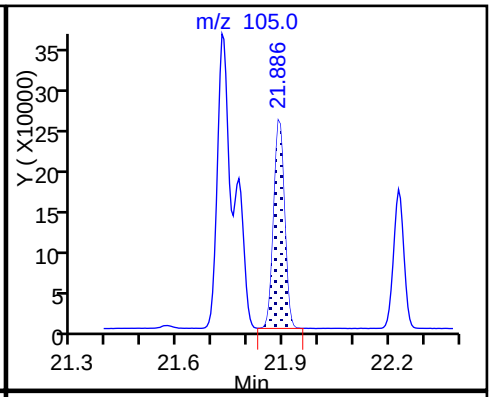
TestAmerica Burlington

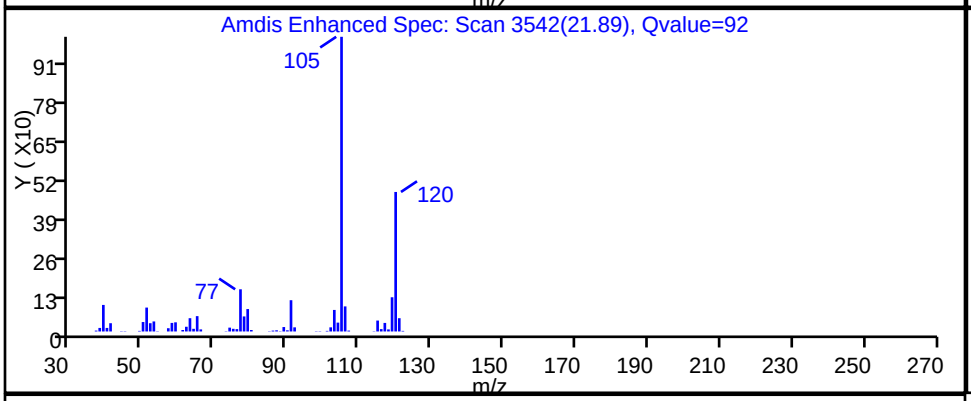
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

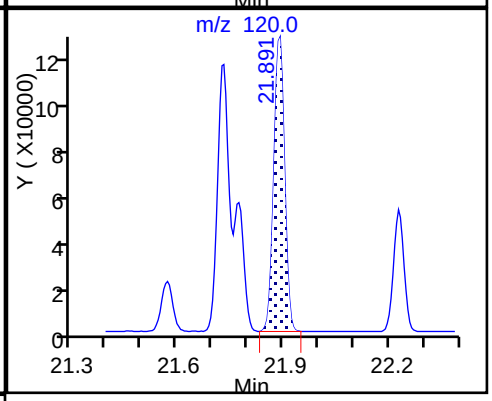
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

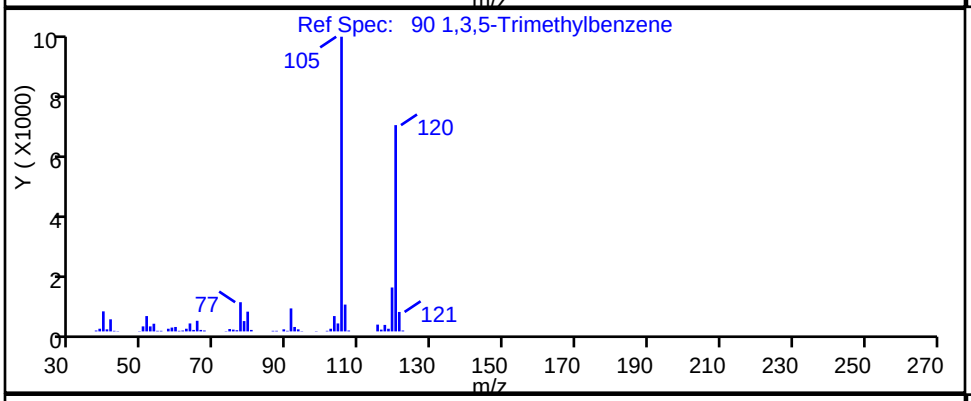
90 1,3,5-Trimethylbenzene, CAS: 108-67-8

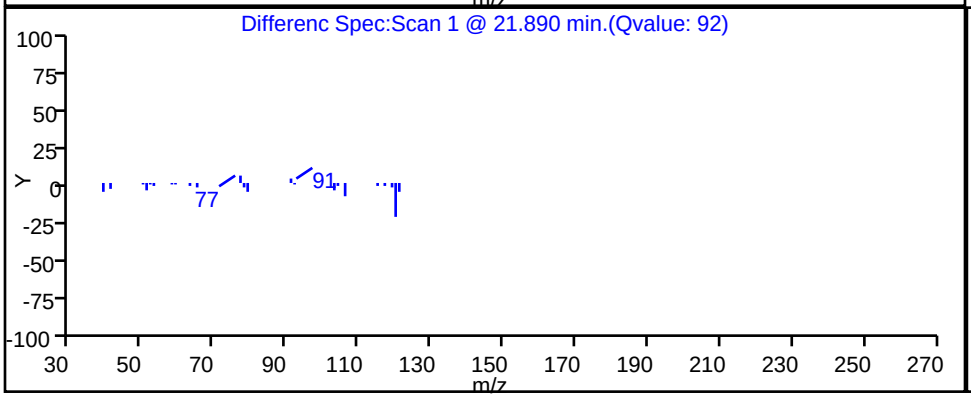


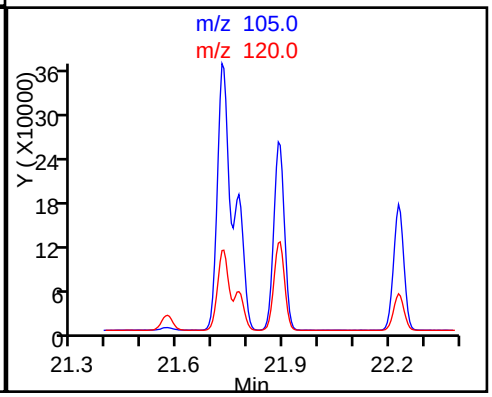












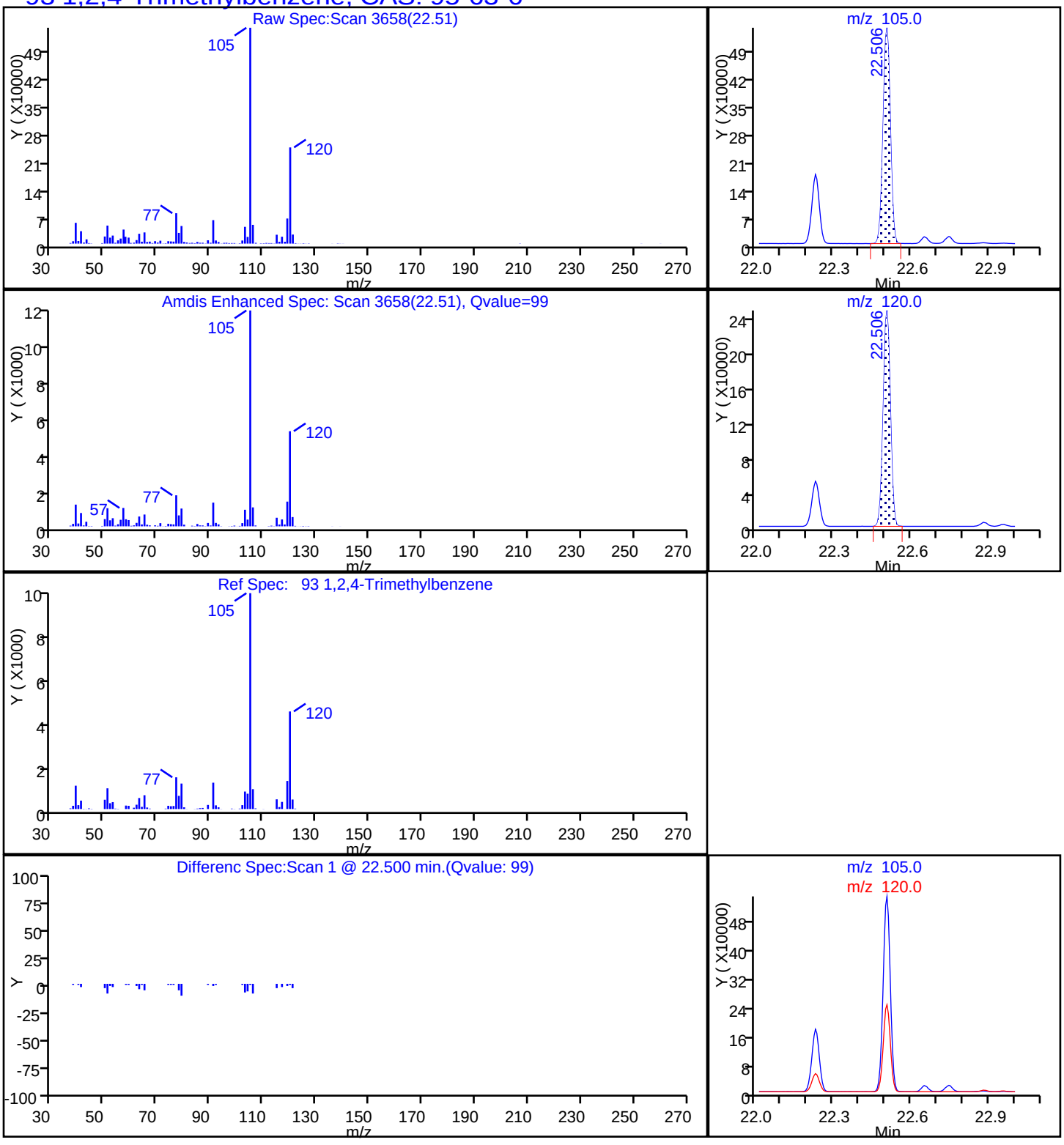
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6



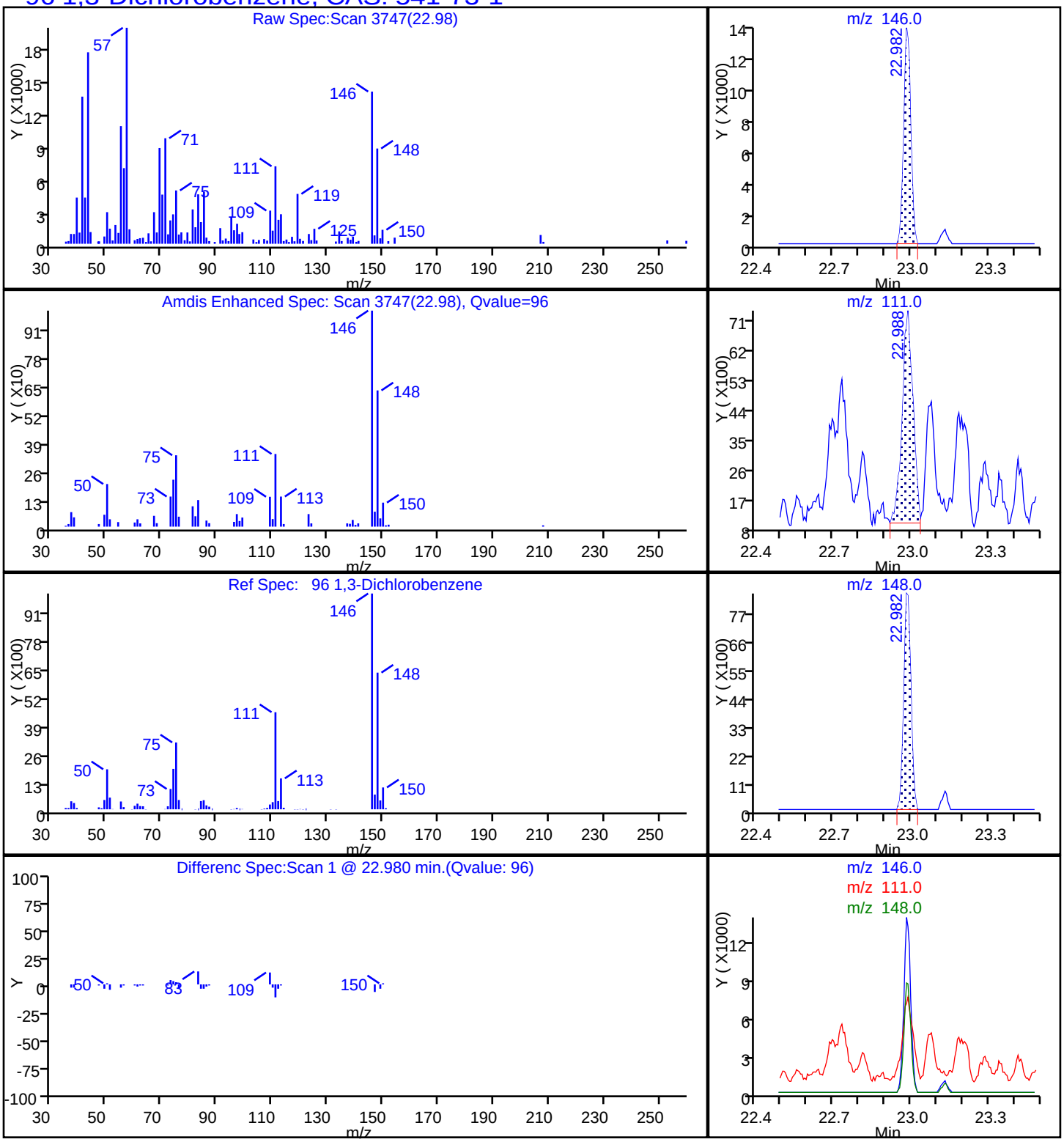
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1



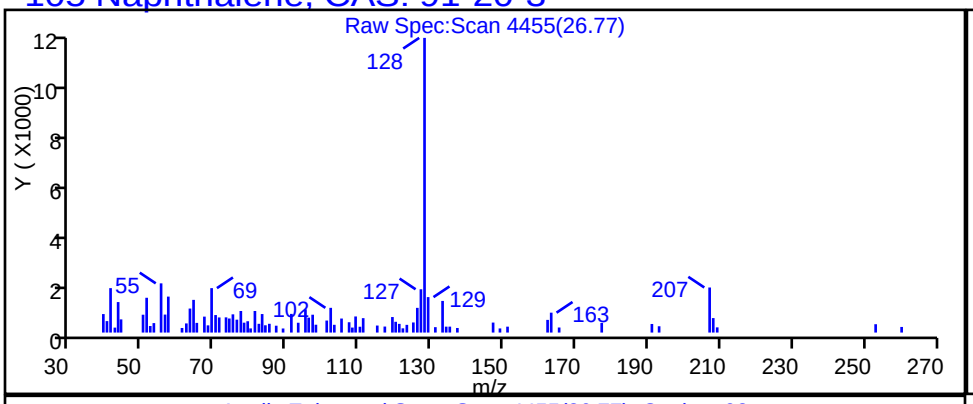
Report Date: 08-Aug-2017 14:33:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

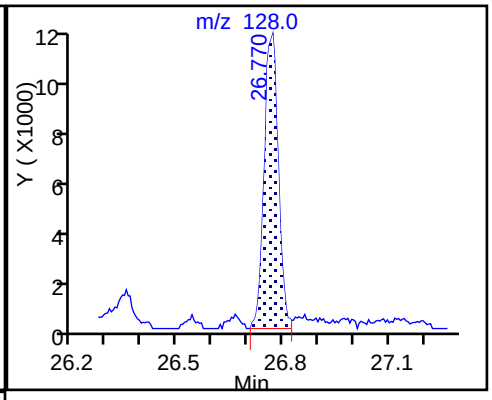
TestAmerica Burlington

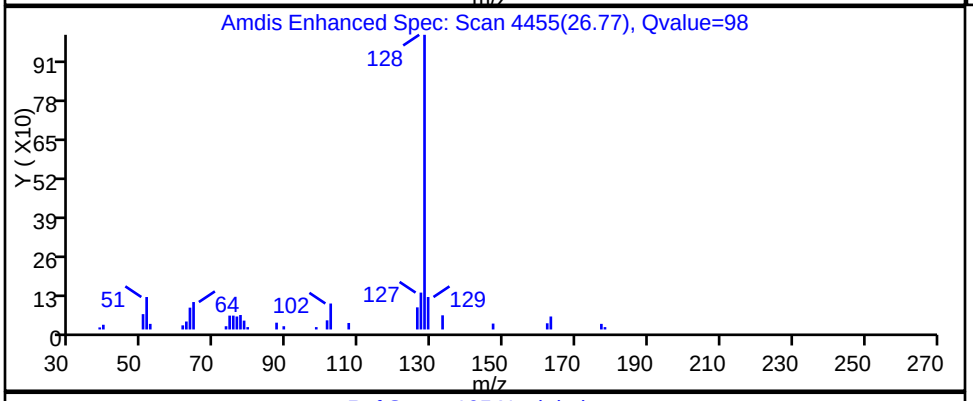
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D

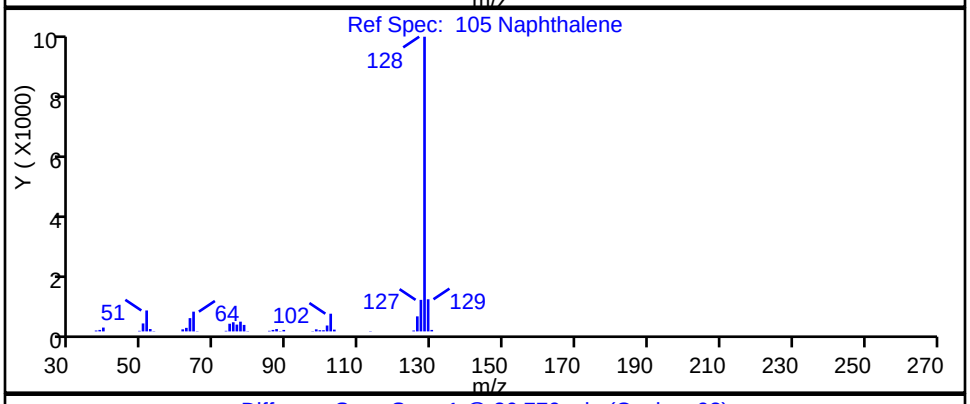
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

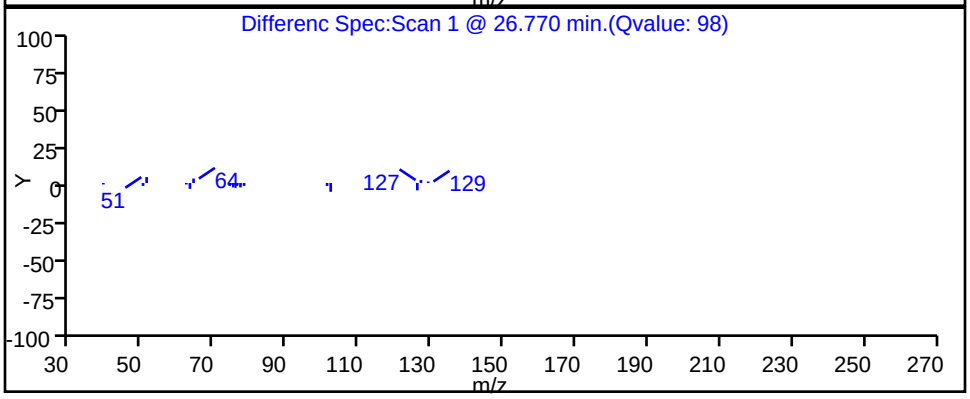
105 Naphthalene, CAS: 91-20-3











Manual Integration/User Assign Peak Report

TestAmerica Burlington

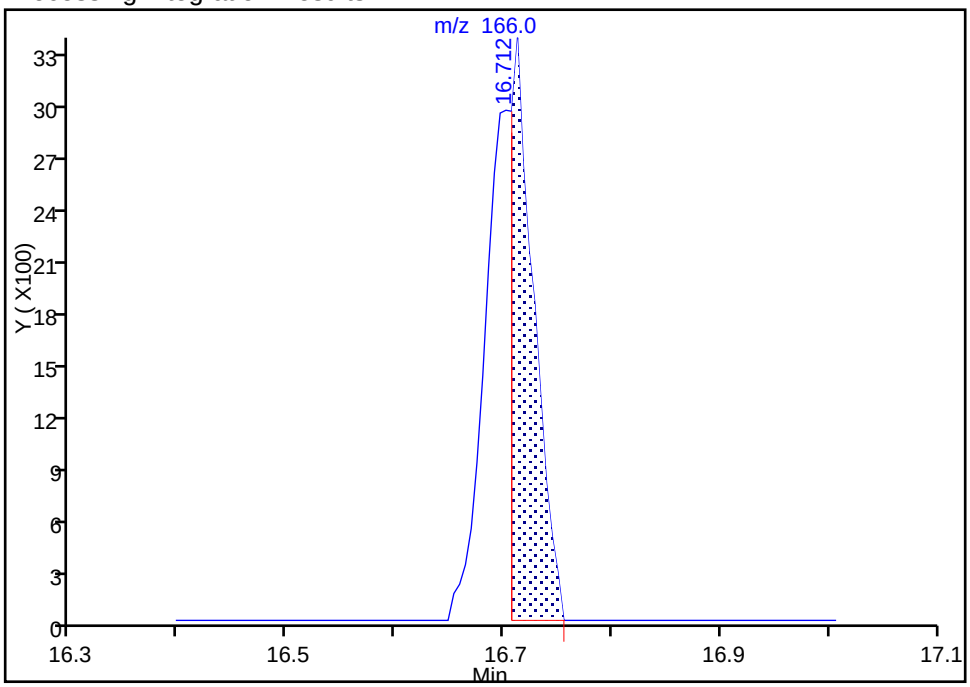
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D				
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

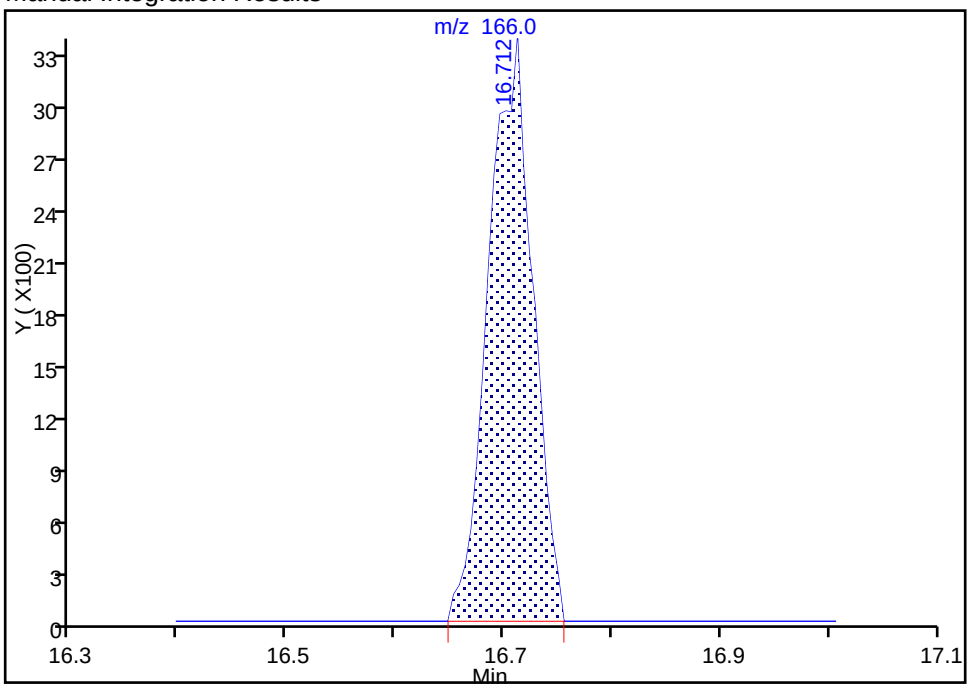
Processing Integration Results

RT: 16.71
Area: 4984
Amount: 0.140483
Amount Units: ppb v/v



Manual Integration Results

RT: 16.71
Area: 9429
Amount: 0.265773
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:32:46

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

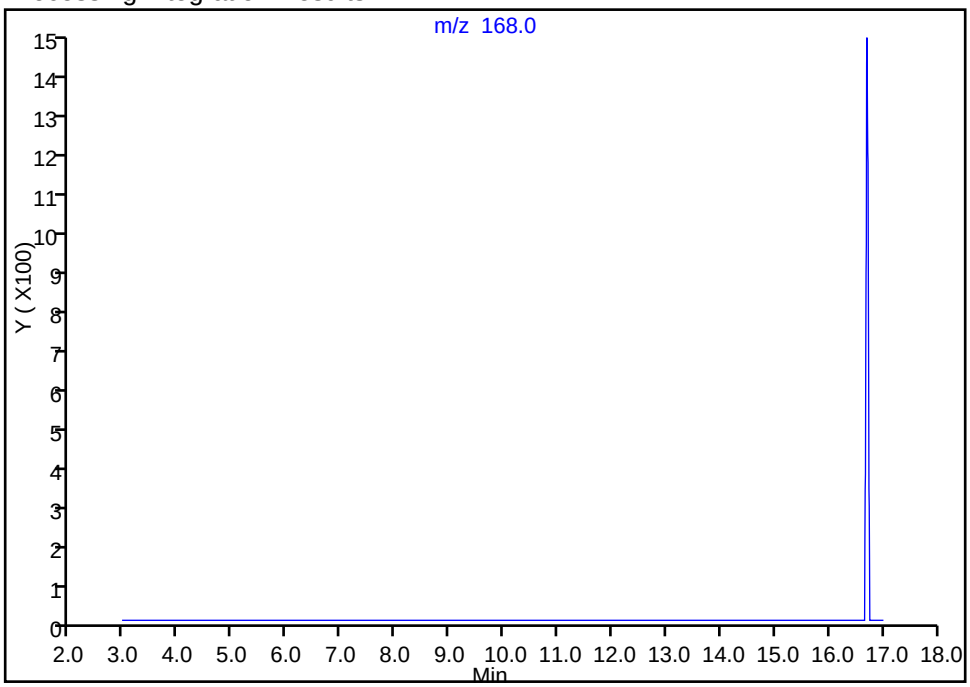
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-14.D				
Injection Date:	07-Aug-2017 23:53:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-4	Lab Sample ID:	200-39613-4		
Client ID:	SV-4				
Operator ID:	ert	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 2

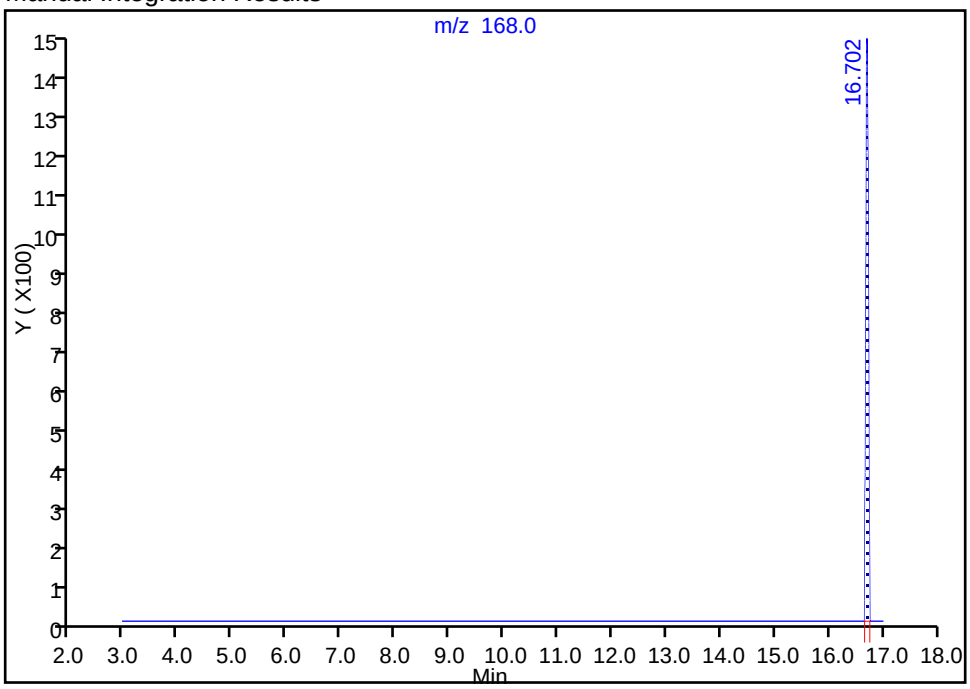
Processing Integration Results

RT: 16.71
Area: 0
Amount: 0.140483
Amount Units: ppb v/v



Manual Integration Results

RT: 16.70
Area: 4316
Amount: 0.265773
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:32:55

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-5 Lab Sample ID: 200-39613-5

Matrix: Air Lab File ID: 26252-15.D

Analysis Method: TO-15 Date Collected: 08/03/2017 11:30

Sample wt/vol: 200(mL) Date Analyzed: 08/08/2017 00:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.24	J	0.50	0.16
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
75-09-2	Methylene Chloride	84.93	0.13	J	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	0.035	J	0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	0.034	J	0.20	0.026
56-23-5	Carbon tetrachloride	153.81	0.055	J	0.20	0.011
71-43-2	Benzene	78.11	0.16	J	0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
108-88-3	Toluene	92.14	0.43		0.20	0.035
127-18-4	Tetrachloroethene	165.83	0.43		0.20	0.0098
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.11	J	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.50		0.50	0.077
95-47-6	Xylene, o-	106.17	0.35		0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.30		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.82		0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	0.050	U	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
91-20-3	Naphthalene	128.17	0.12	J	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: SV-5 Lab Sample ID: 200-39613-5

Matrix: Air Lab File ID: 26252-15.D

Analysis Method: TO-15 Date Collected: 08/03/2017 11:30

Sample wt/vol: 200(mL) Date Analyzed: 08/08/2017 00:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.49	J	1.0	0.33
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
75-09-2	Methylene Chloride	84.93	0.43	J	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
156-59-2	cis-1,2-Dichloroethene	96.94	0.14	J	0.79	0.11
71-55-6	1,1,1-Trichloroethane	133.41	0.19	J	1.1	0.14
56-23-5	Carbon tetrachloride	153.81	0.34	J	1.3	0.069
71-43-2	Benzene	78.11	0.50	J	0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
108-88-3	Toluene	92.14	1.6		0.75	0.13
127-18-4	Tetrachloroethene	165.83	2.9		1.4	0.066
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.48	J	0.87	0.15
179601-23-1	m,p-Xylene	106.17	2.2		2.2	0.33
95-47-6	Xylene, o-	106.17	1.5		0.87	0.17
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5		0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	4.0		0.98	0.28
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
91-20-3	Naphthalene	128.17	0.63	J	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D
Lims ID: 200-39613-A-5
Client ID: SV-5
Sample Type: Client
Inject. Date: 08-Aug-2017 00:43:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-015
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:35:28 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:35:28

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	5 Chloromethane	50	3.515	3.515	0.000	98	4482	0.2394	
	7 Vinyl chloride	62		3.739				ND	
	11 Chloroethane	64		4.676				ND	
	21 1,1-Dichloroethene	96		6.216				ND	
	27 Methylene Chloride	49	7.281	7.286	-0.005	97	2902	0.1251	
	29 Methyl tert-butyl ether	73		7.698				ND	
	31 trans-1,2-Dichloroethene	61		7.720				ND	
	34 1,1-Dichloroethane	63		8.608				ND	
	37 cis-1,2-Dichloroethene	96	9.747	9.752	-0.005	24	718	0.0351	
*	40 Chlorobromomethane	128	10.234	10.234	0.000	96	164002	10.0	
	44 1,1,1-Trichloroethane	97	10.651	10.646	0.000	89	1453	0.0340	M
	45 Carbon tetrachloride	117	10.908	10.908	0.000	57	2275	0.0547	
	47 Benzene	78	11.411	11.411	0.000	98	11526	0.1564	
	48 1,2-Dichloroethane	62		11.620				ND	
*	50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	925942	10.0	
	53 Trichloroethene	95		12.807				ND	
	54 1,2-Dichloropropane	63		13.412				ND	
	65 Toluene	92	15.584	15.584	0.000	93	20620	0.4254	
	68 Tetrachloroethene	166	16.712	16.707	0.005	94	16085	0.4345	
*	74 Chlorobenzene-d5	117	18.649	18.649	0.000	90	779997	10.0	
	75 Chlorobenzene	112		18.713				ND	
	76 Ethylbenzene	91	18.874	18.874	0.000	98	12079	0.1095	
	78 m-Xylene & p-Xylene	106	19.136	19.141	-0.005	0	20832	0.5032	
	79 o-Xylene	106	20.035	20.035	0.000	97	14021	0.3457	
	90 1,3,5-Trimethylbenzene	105	21.886	21.891	-0.005	91	29412	0.2961	
	93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	99	81900	0.8208	
	96 1,3-Dichlorobenzene	146		22.988				ND	
	101 1,2-Dichlorobenzene	146		23.683				ND	
	105 Naphthalene	128	26.764	26.765	-0.001	98	12947	0.1200	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

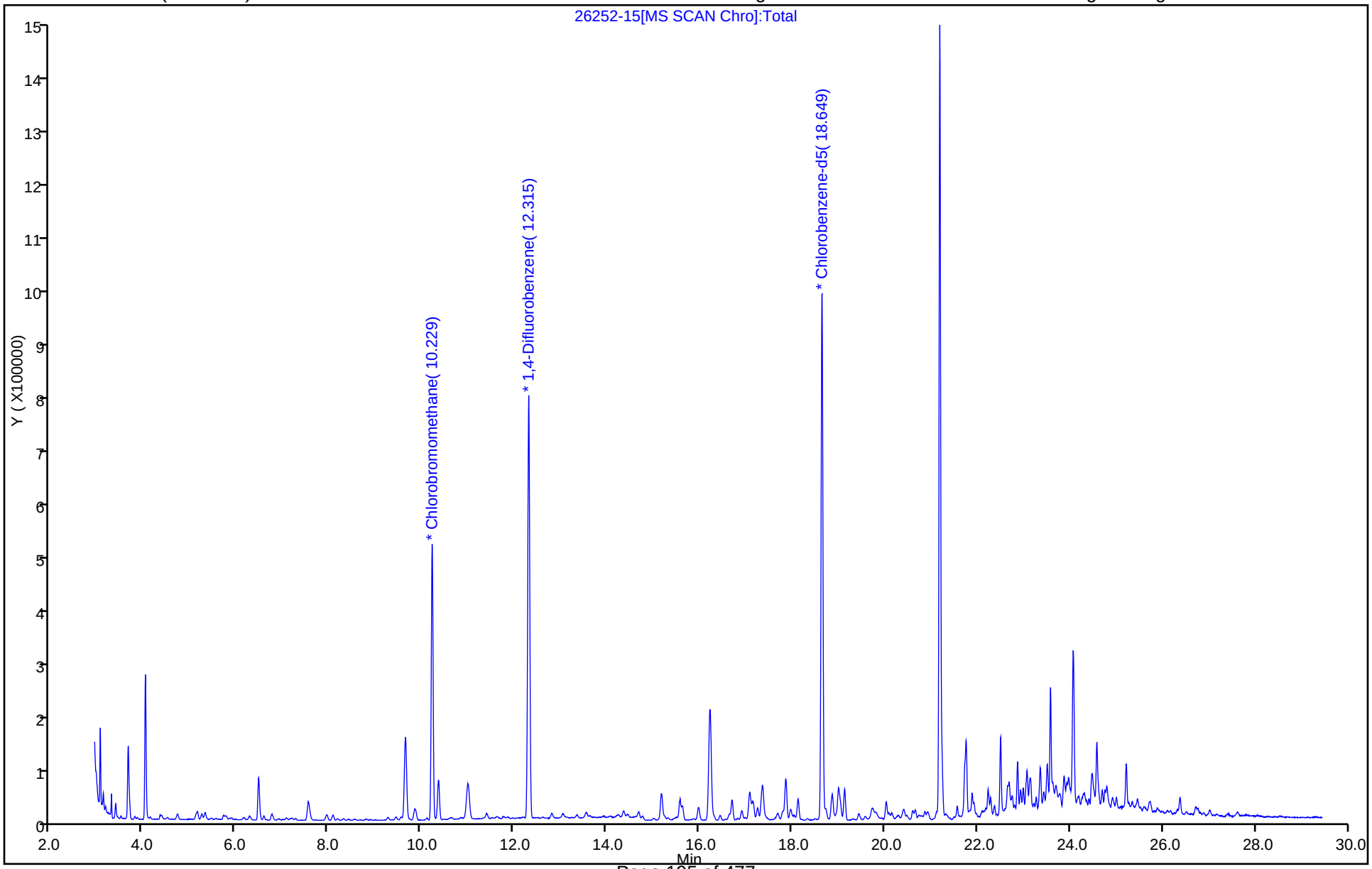
Report Date: 08-Aug-2017 14:35:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5	Worklist Smp#:	15
Client ID:	SV-5				
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



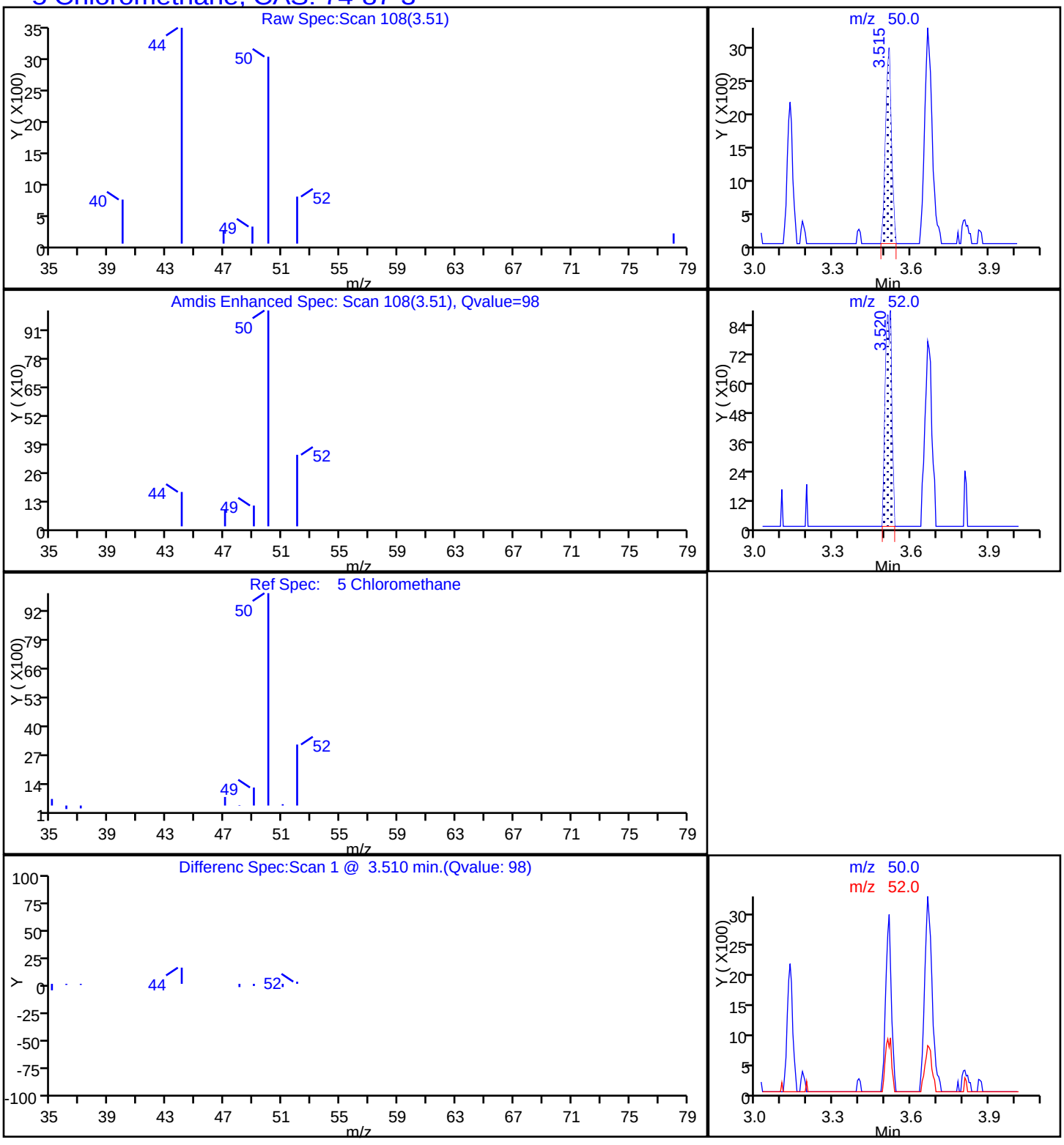
Report Date: 08-Aug-2017 14:35:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3



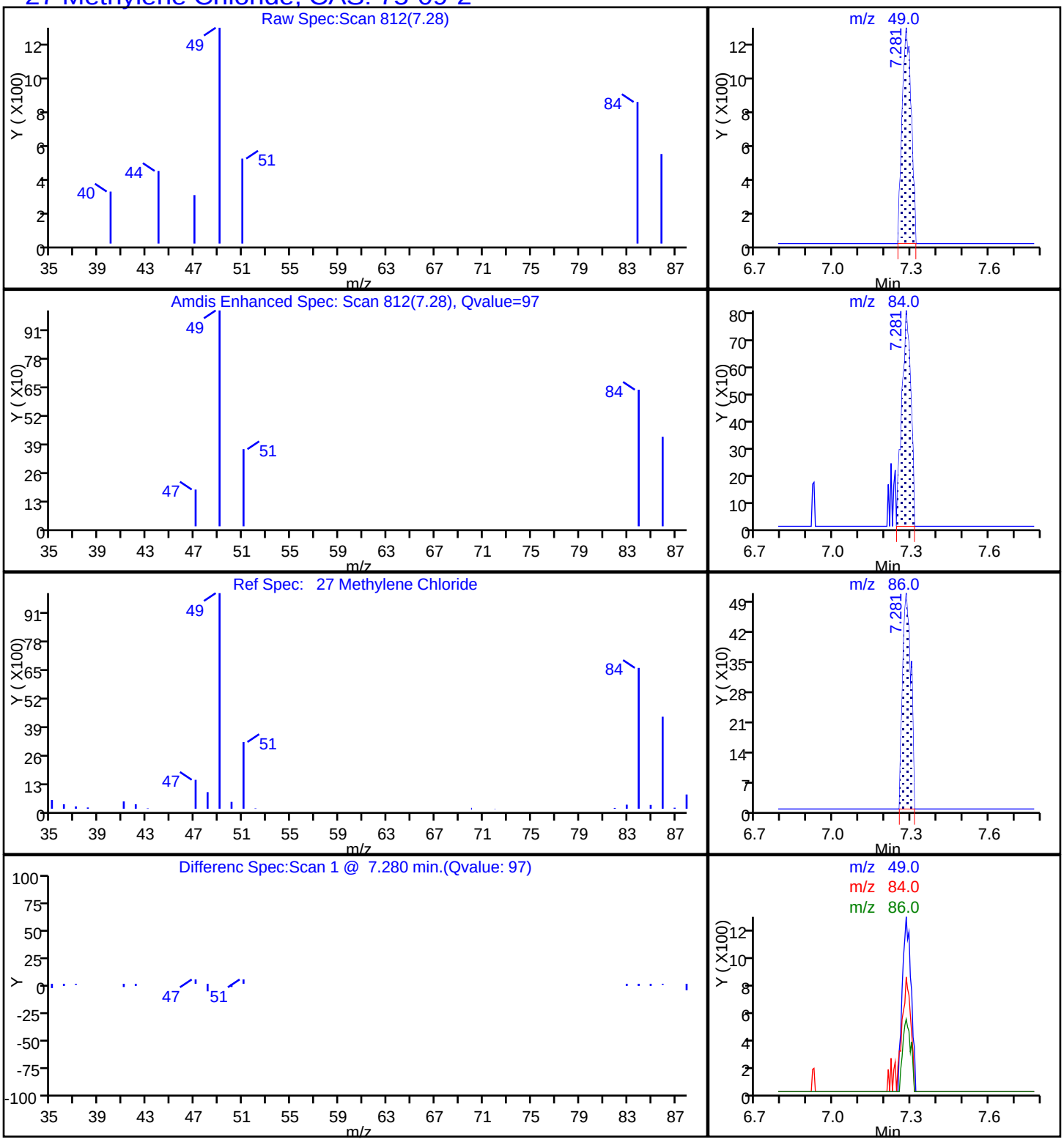
Report Date: 08-Aug-2017 14:35:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

27 Methylene Chloride, CAS: 75-09-2



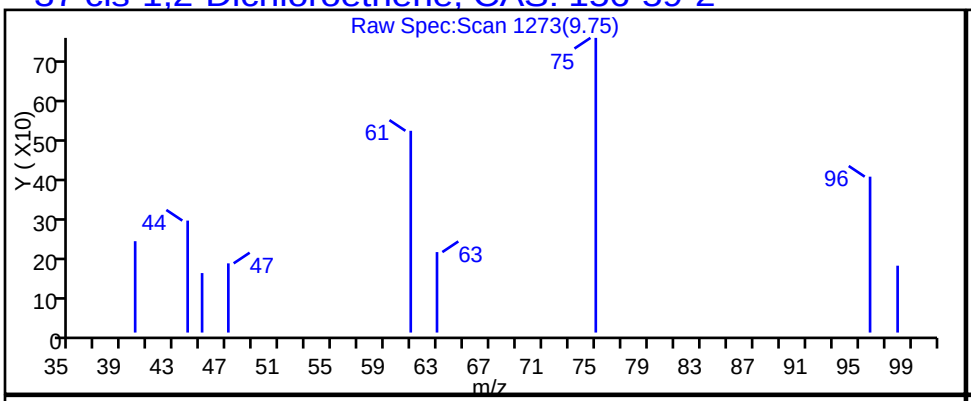
Report Date: 08-Aug-2017 14:35:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

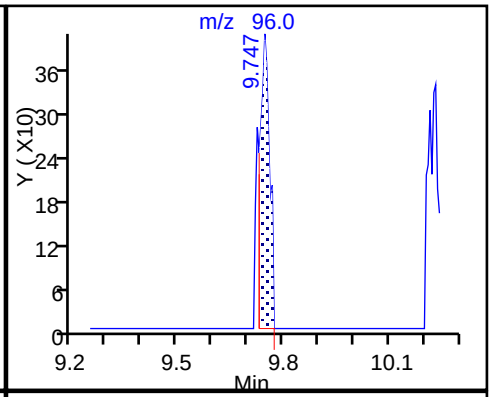
TestAmerica Burlington

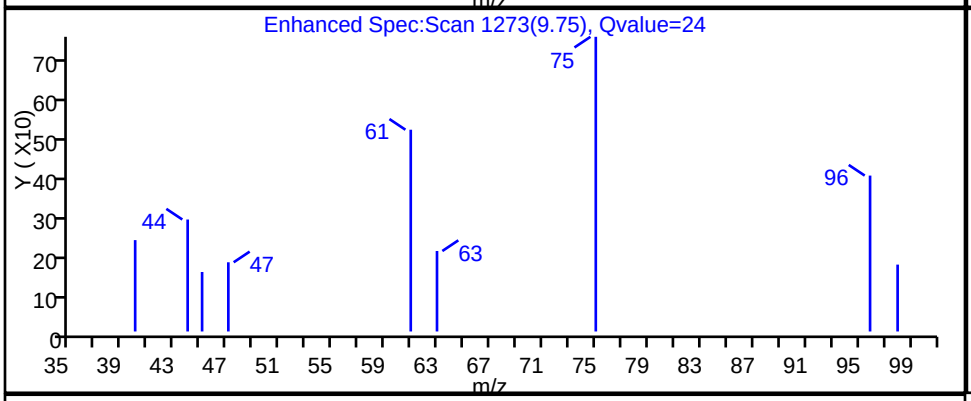
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

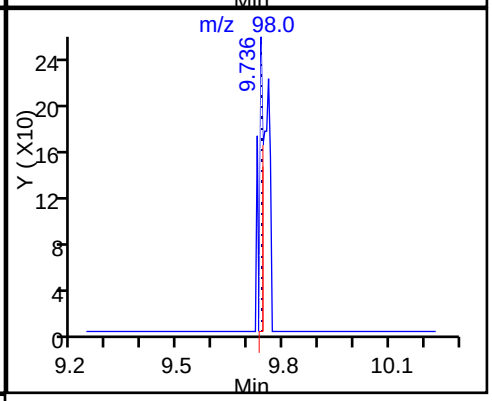
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

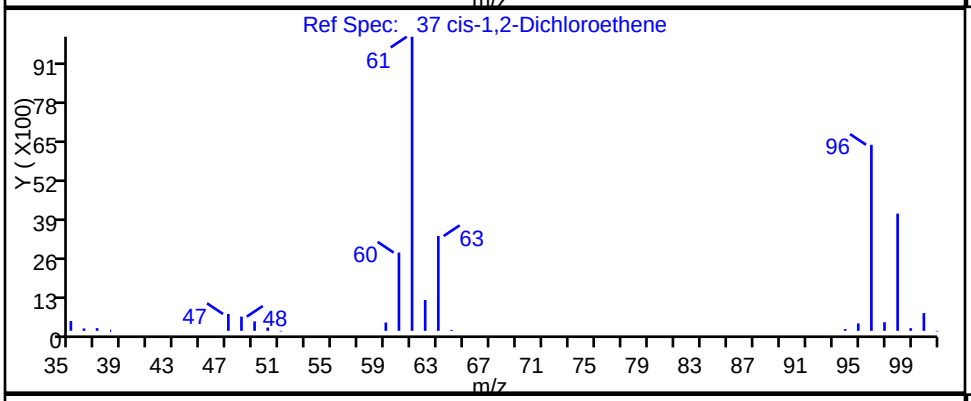
37 cis-1,2-Dichloroethene, CAS: 156-59-2

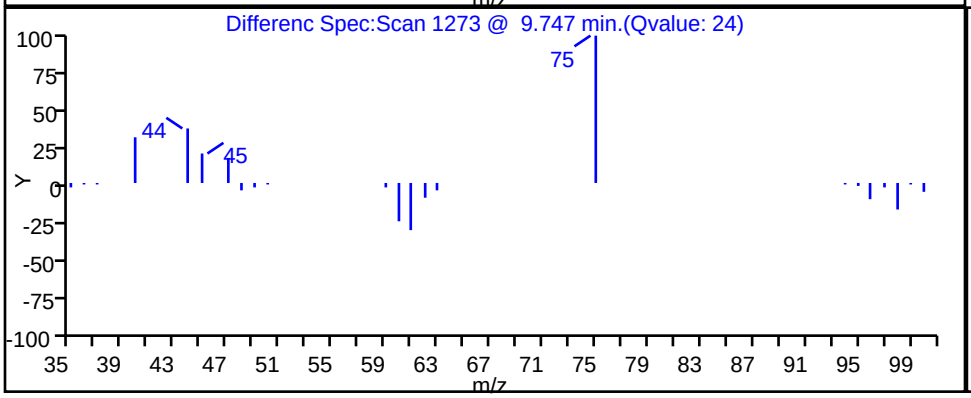


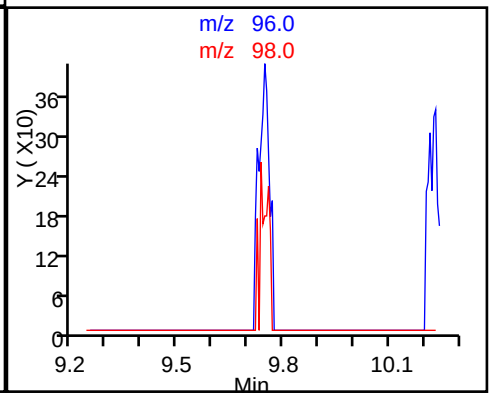












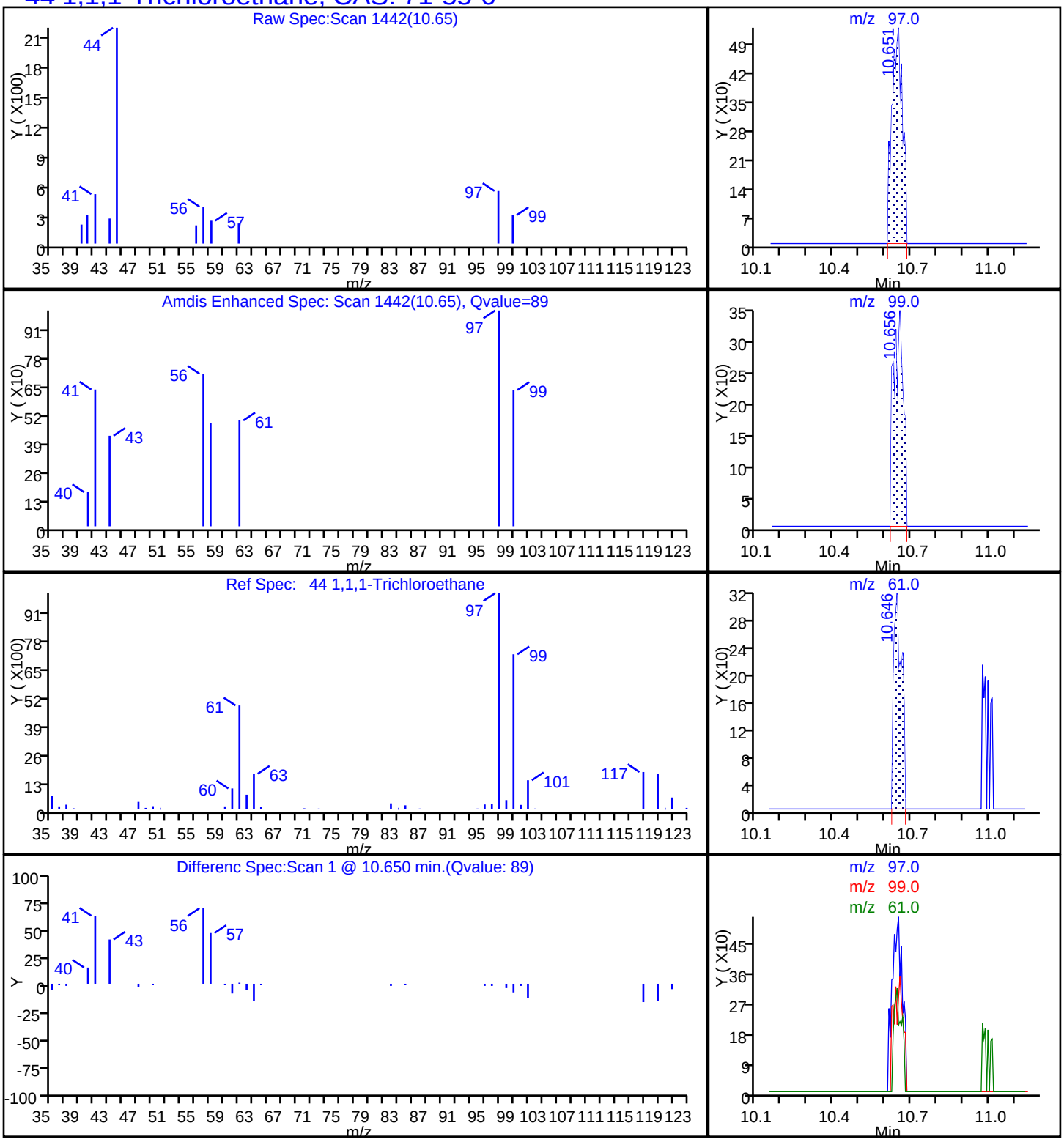
Report Date: 08-Aug-2017 14:35:28 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6



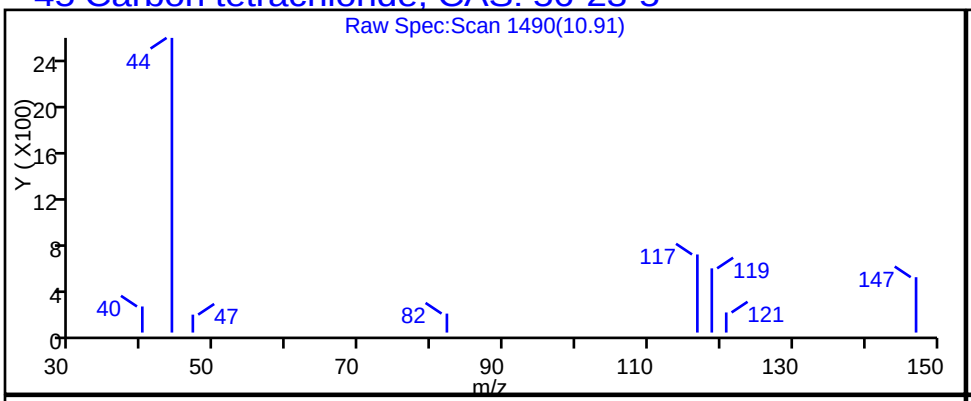
Report Date: 08-Aug-2017 14:35:29 Chrom Revision: 2.2 26-Jun-2017 09:07:56

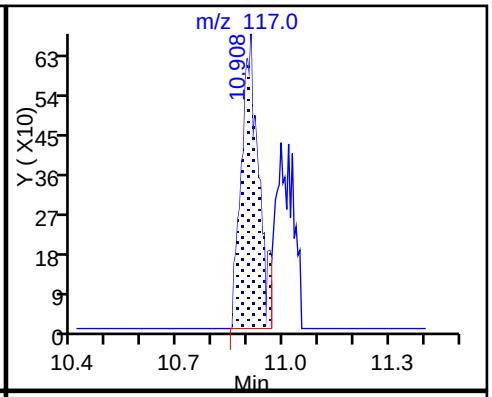
TestAmerica Burlington

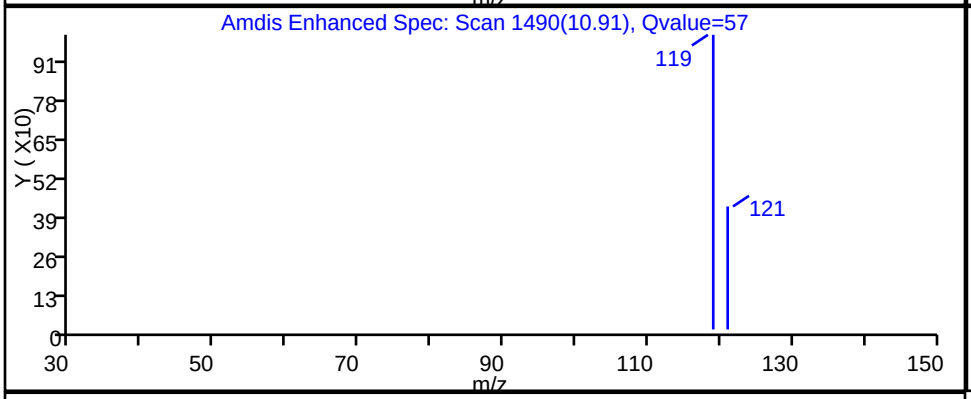
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

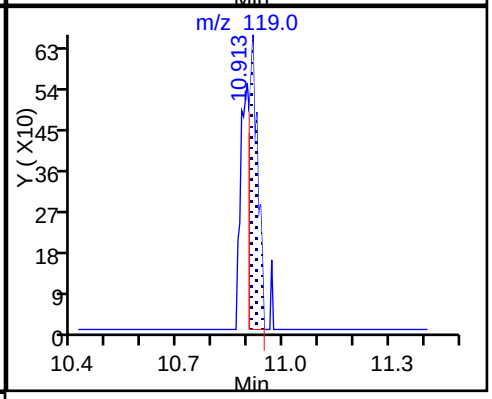
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

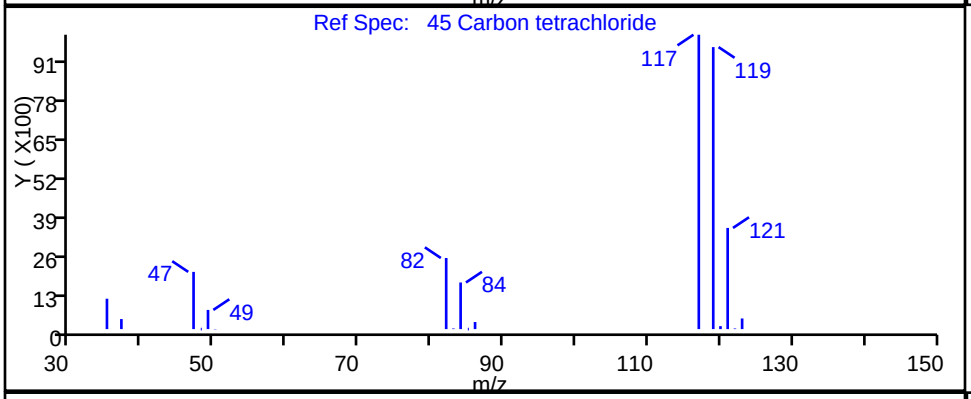
45 Carbon tetrachloride, CAS: 56-23-5

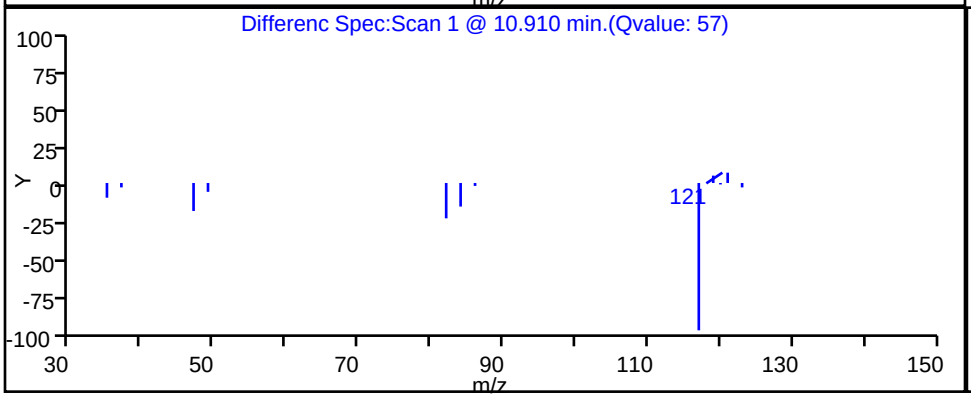


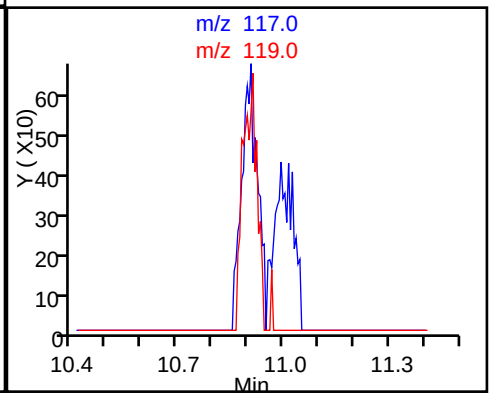












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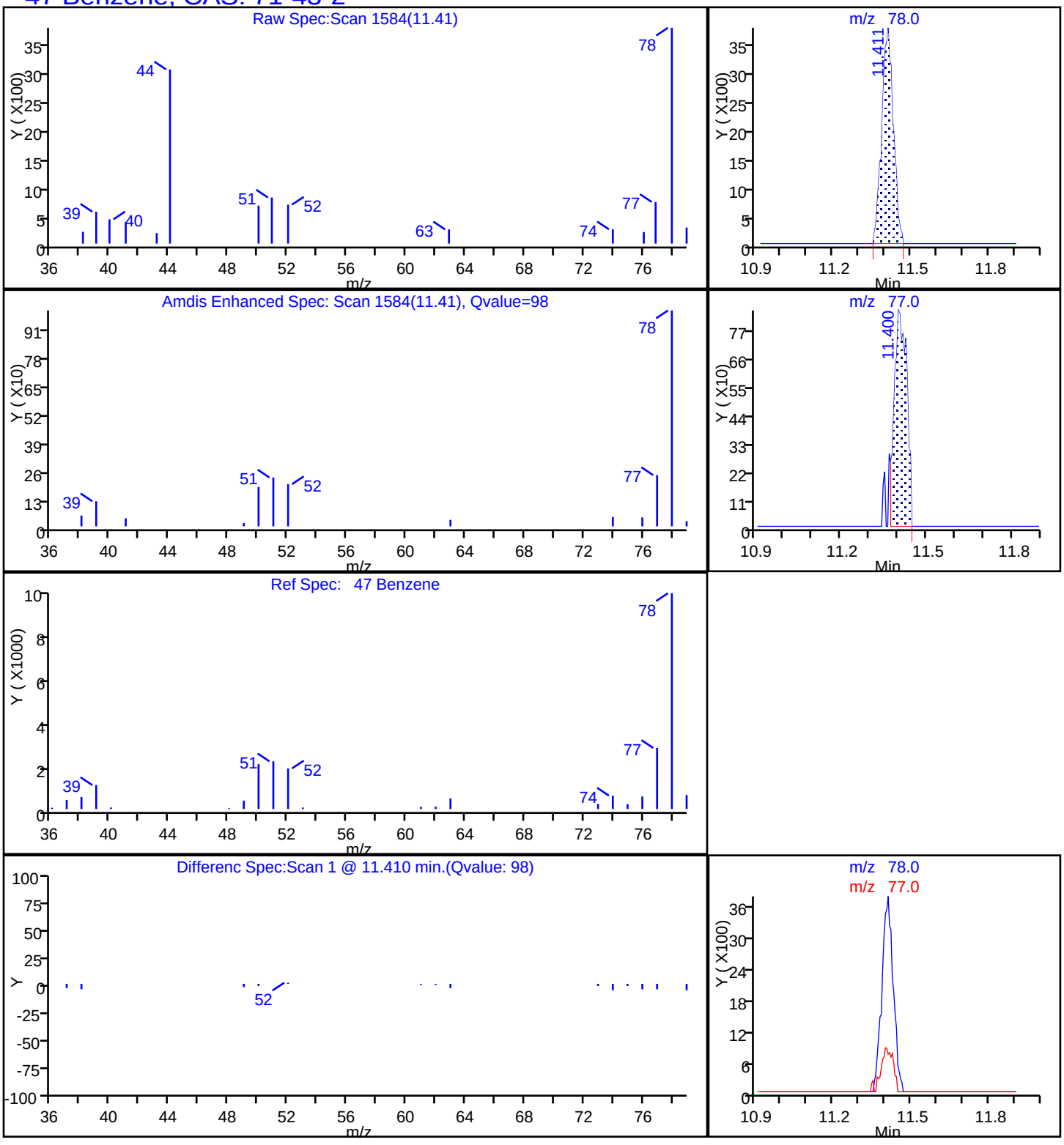
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2



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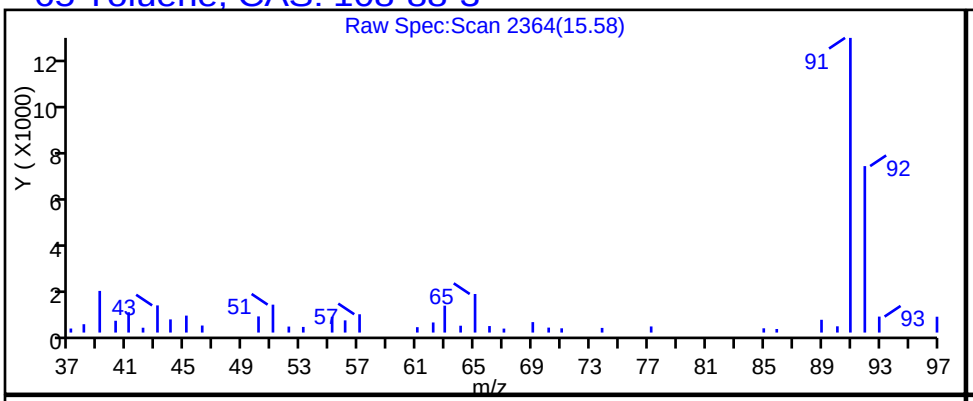
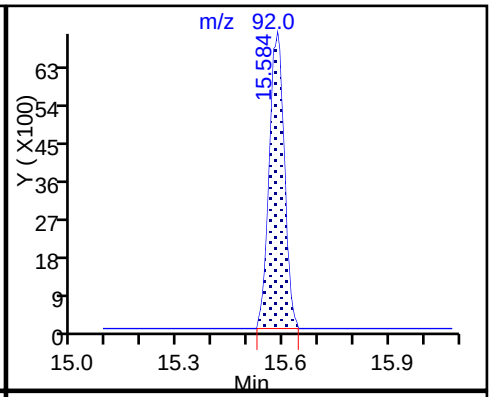
TestAmerica Burlington

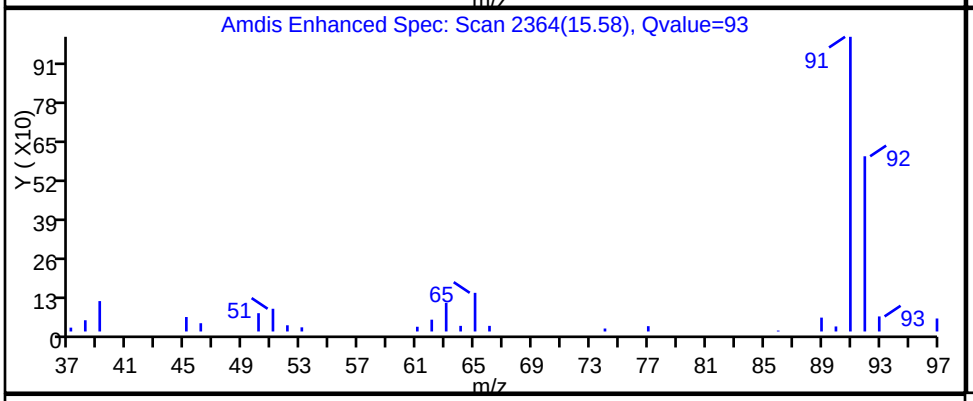
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

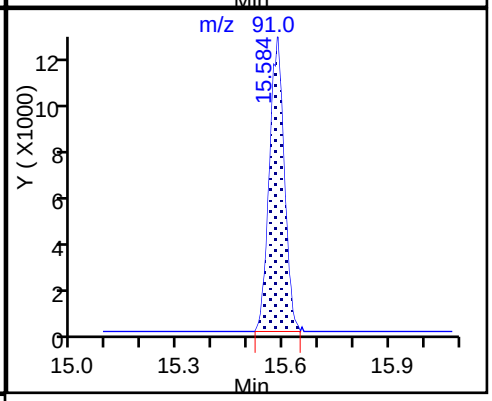
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

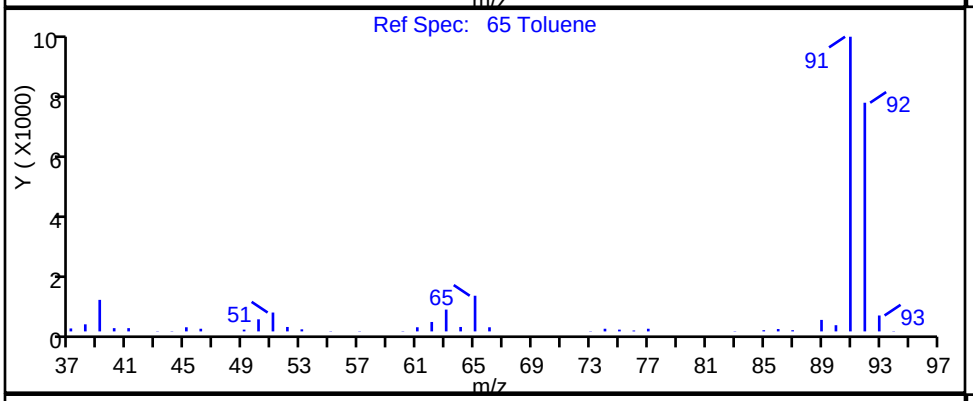
65 Toluene, CAS: 108-88-3

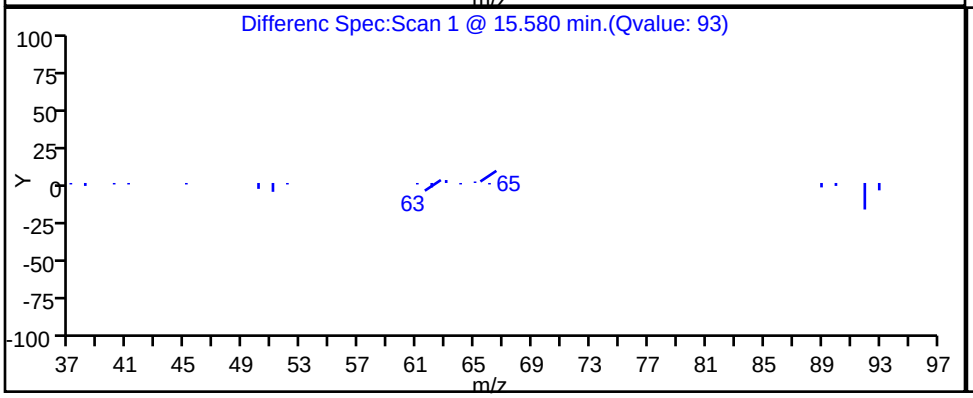


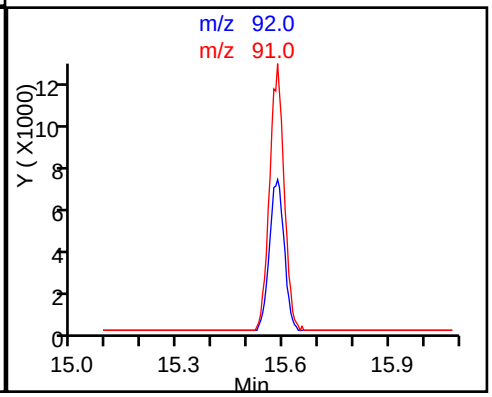












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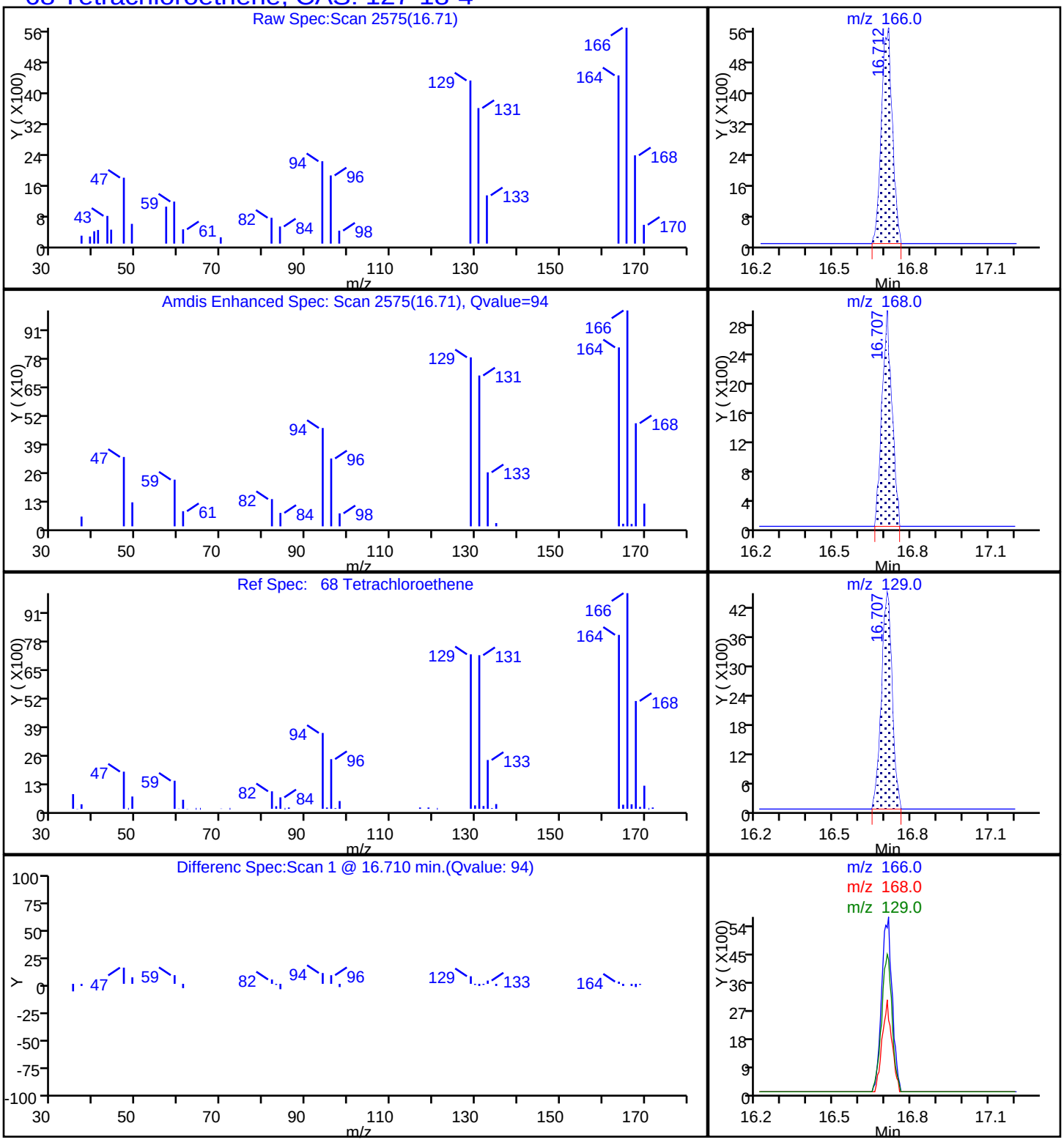
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4



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TestAmerica Burlington

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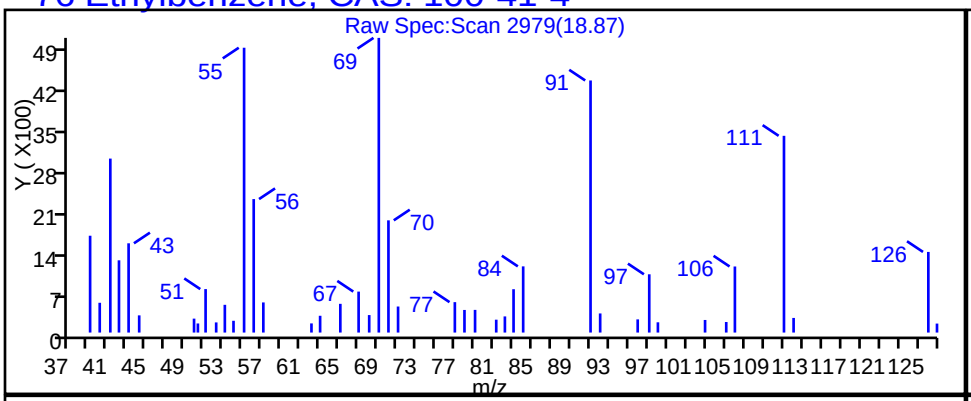
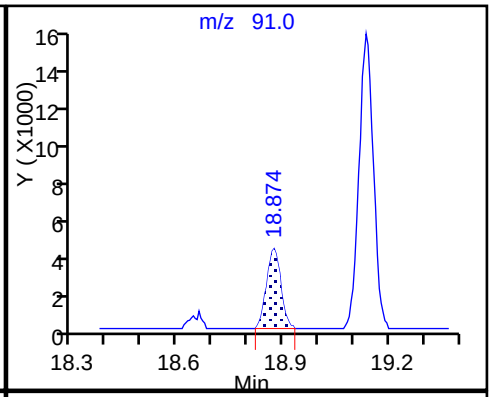
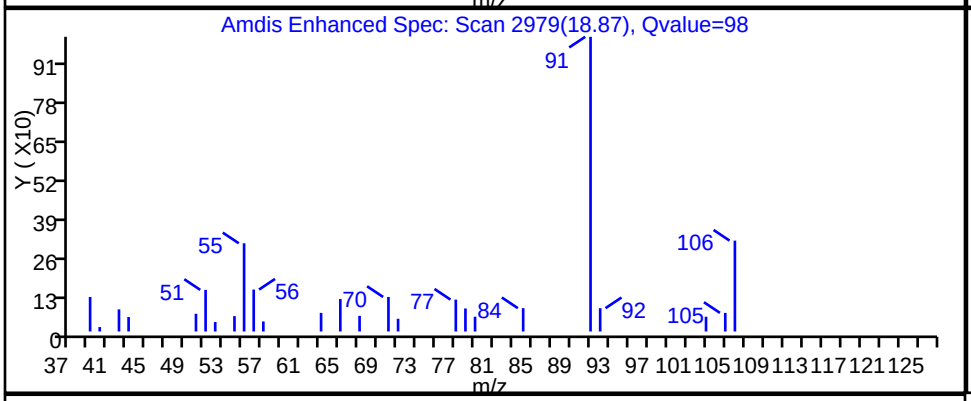
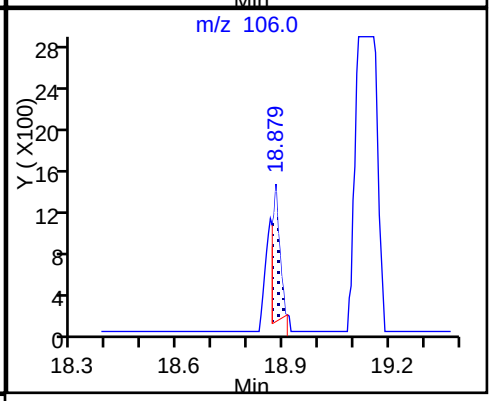
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

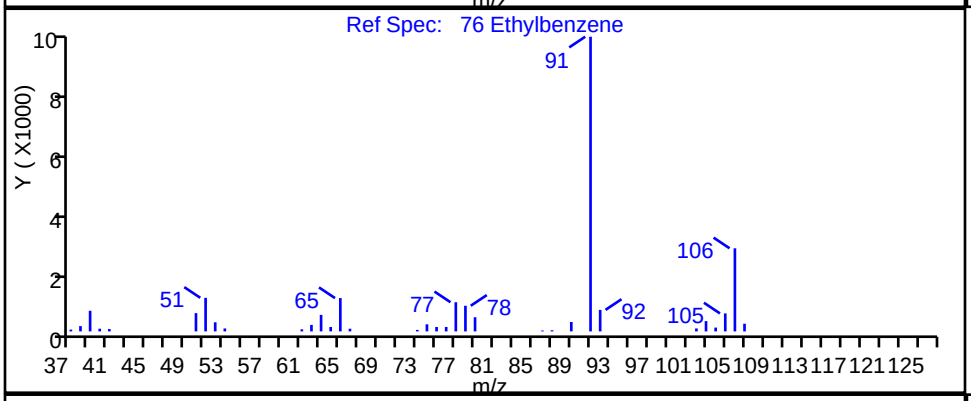
76 Ethylbenzene, CAS: 100-41-4

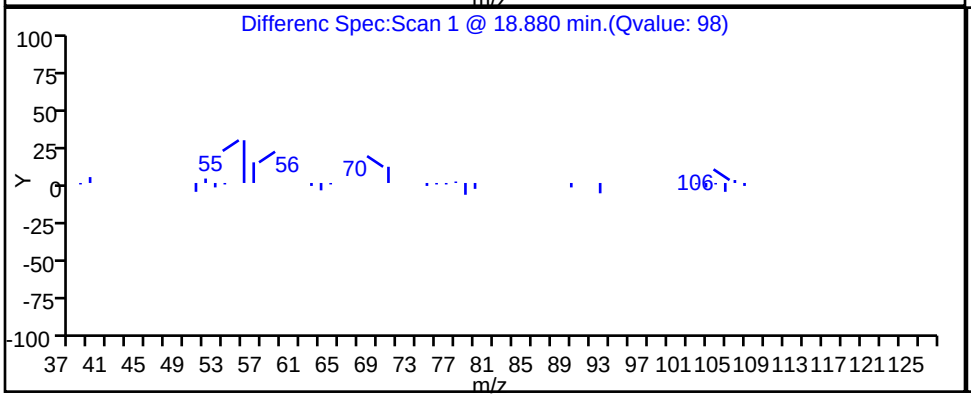


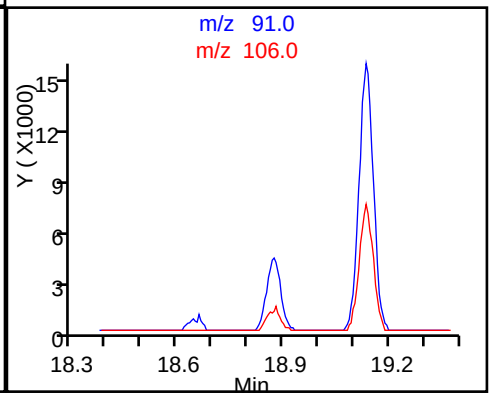












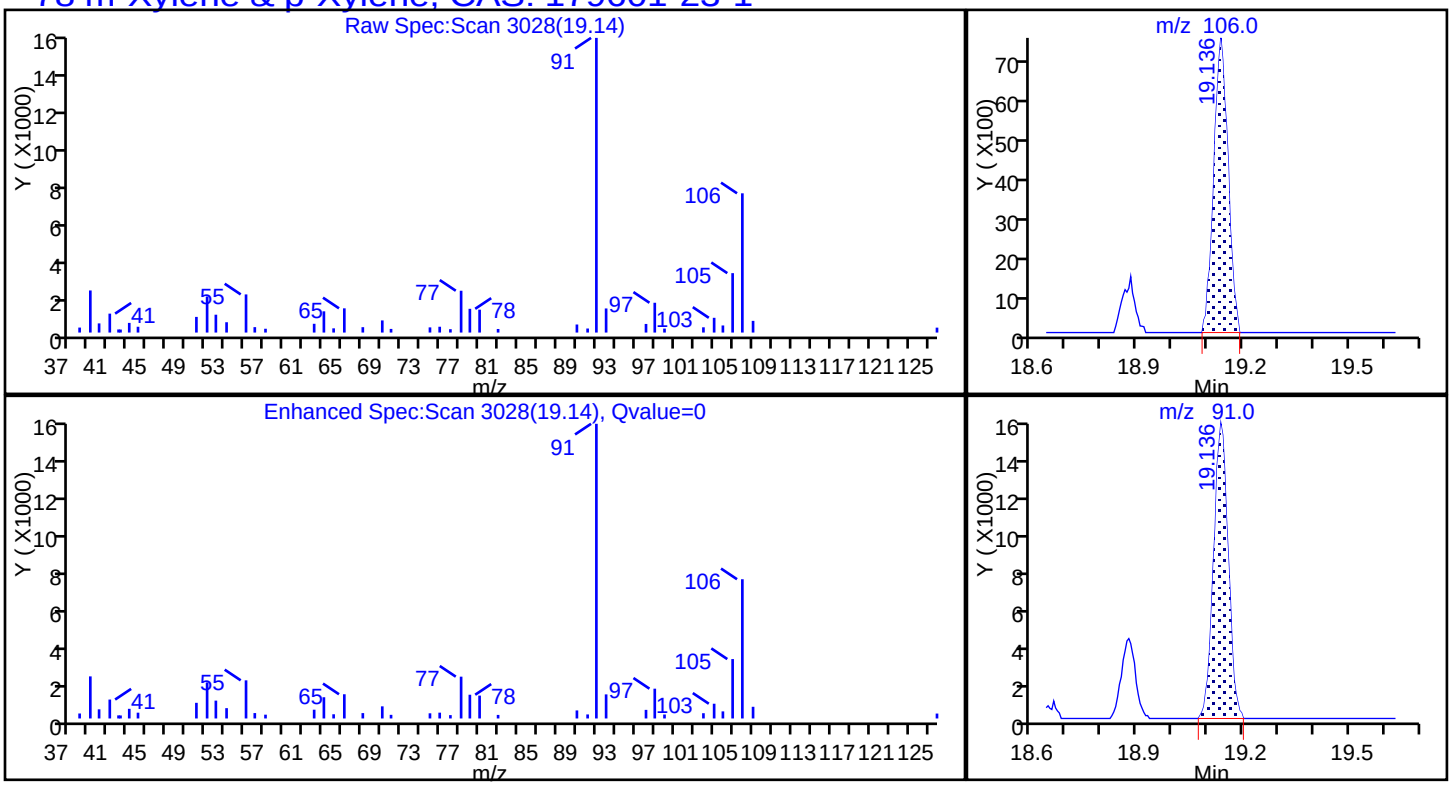
Report Date: 08-Aug-2017 14:35:29 Chrom Revision: 2.2 26-Jun-2017 09:07:56

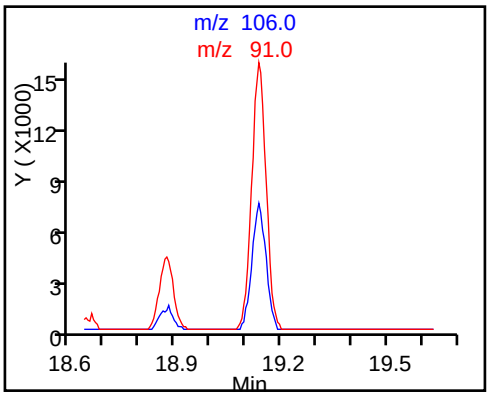
TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

78 m-Xylene & p-Xylene, CAS: 179601-23-1





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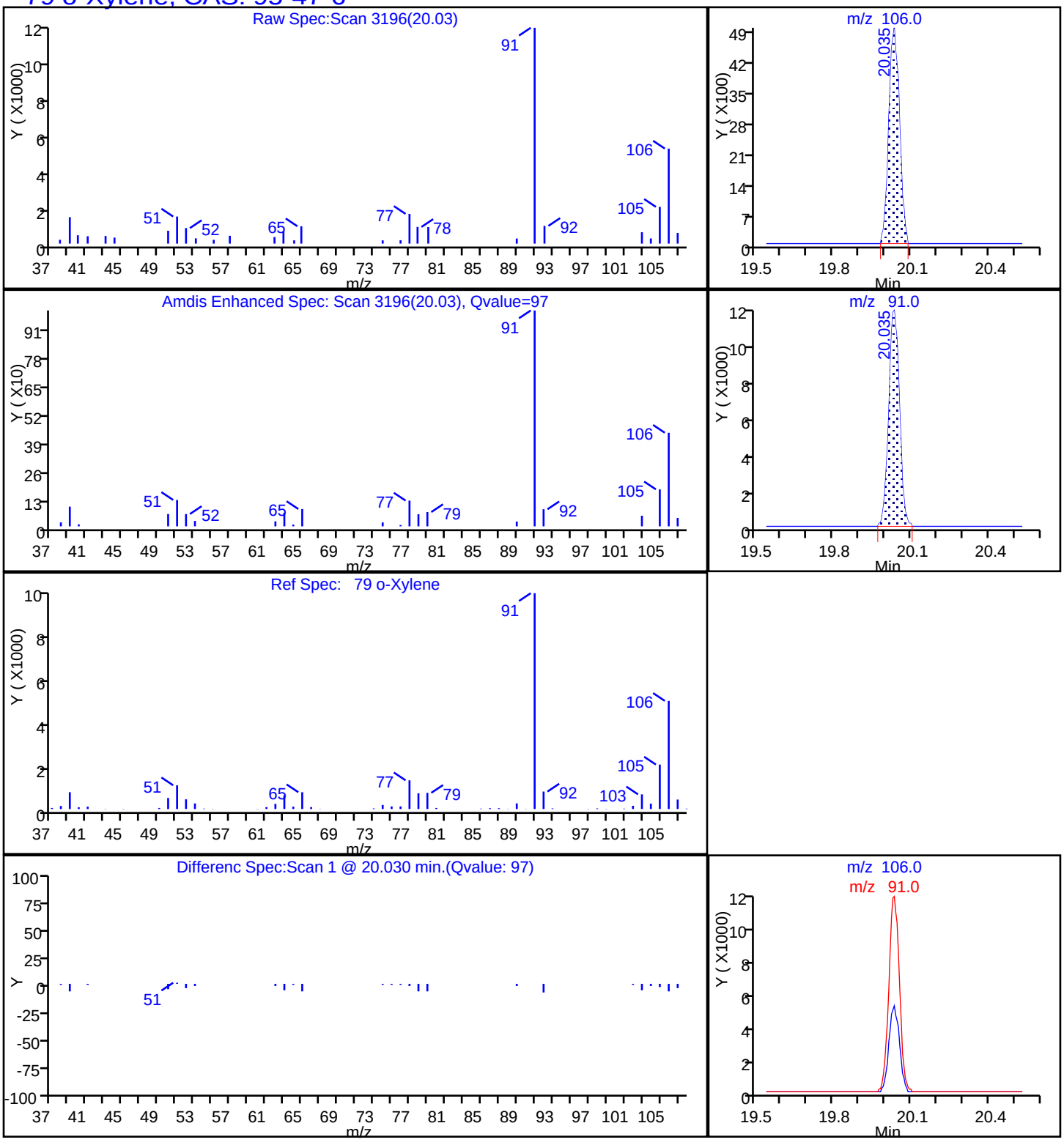
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

79 o-Xylene, CAS: 95-47-6



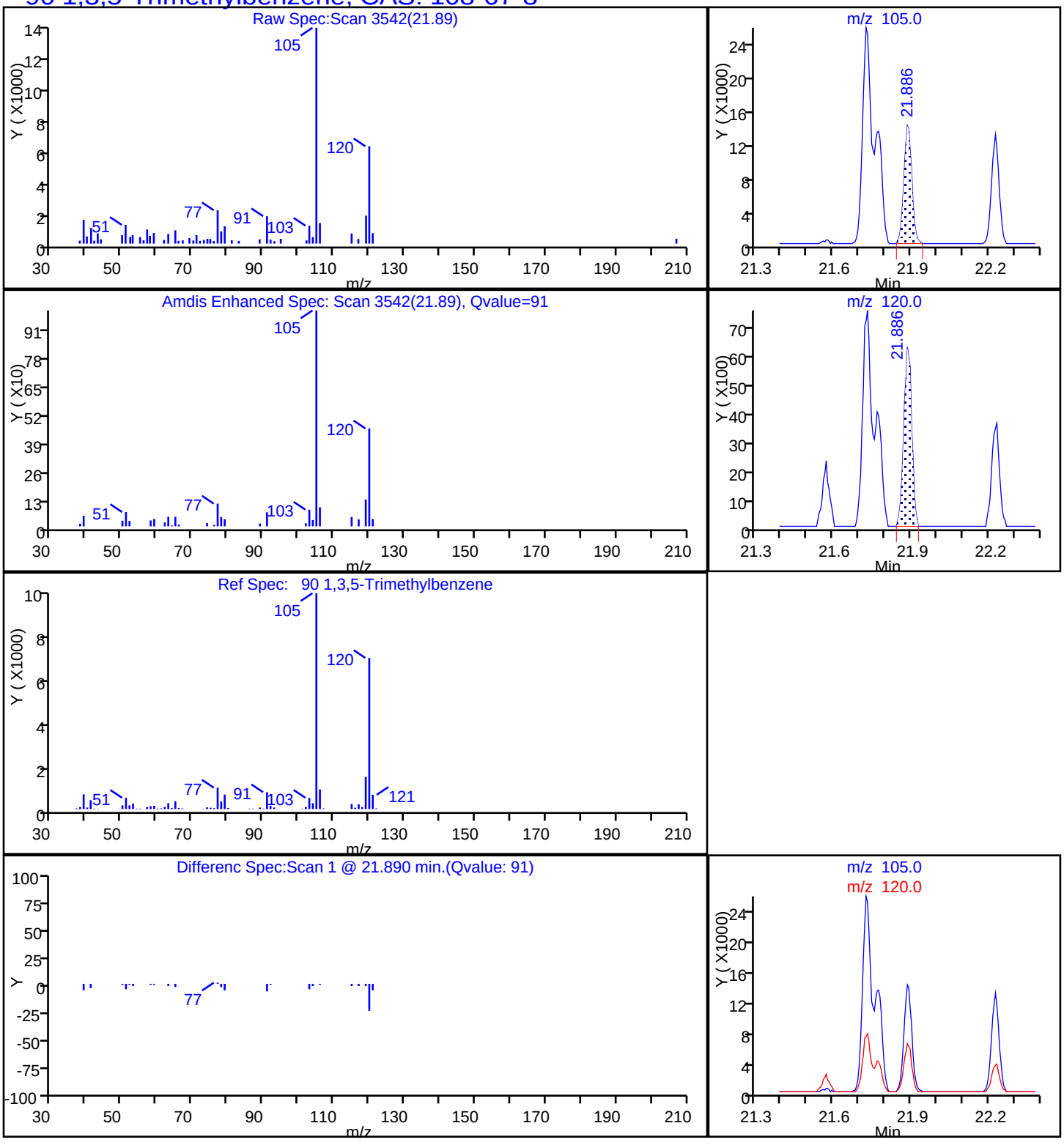
Report Date: 08-Aug-2017 14:35:29 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8



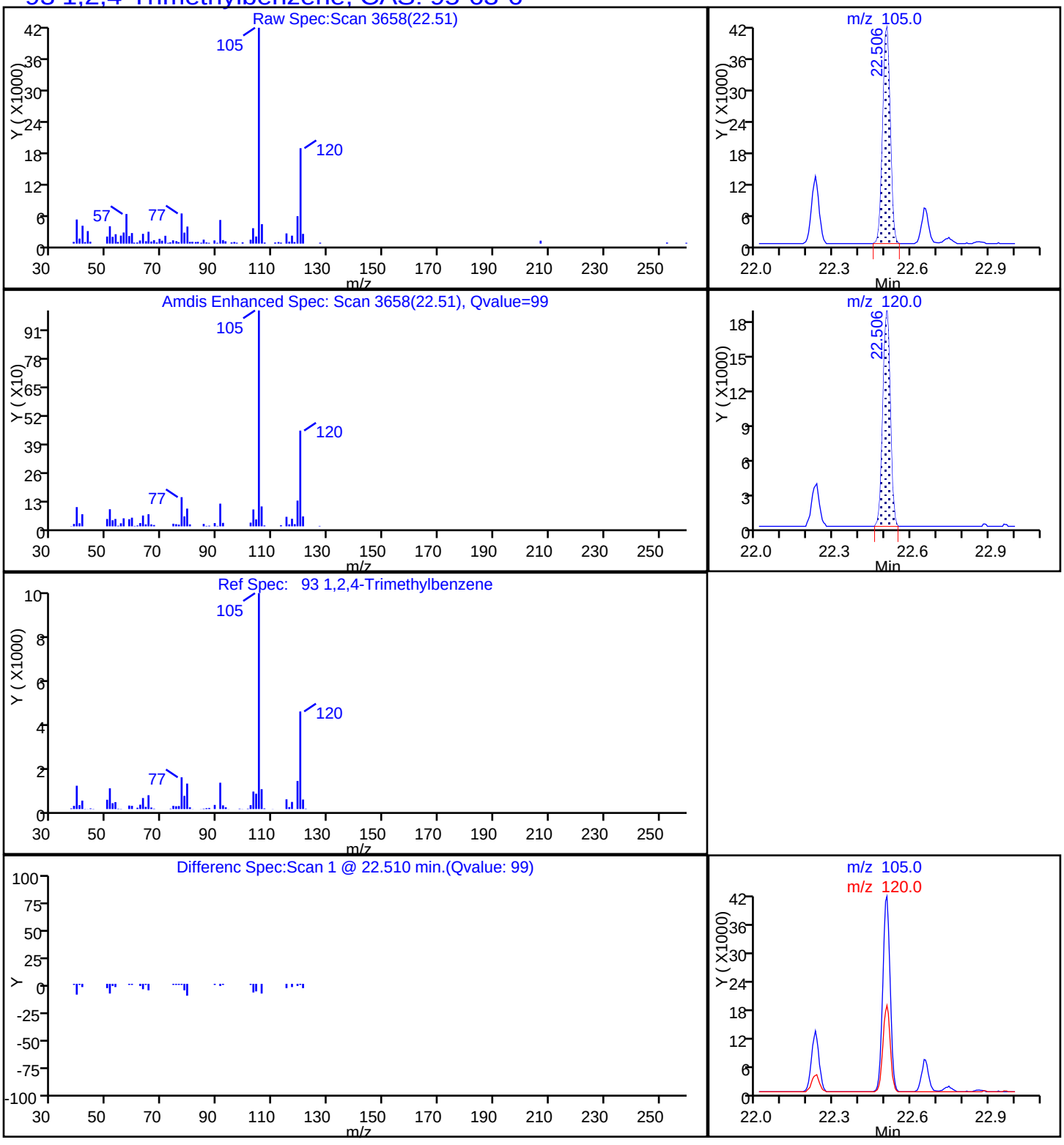
Report Date: 08-Aug-2017 14:35:29 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

93 1,2,4-Trimethylbenzene, CAS: 95-63-6



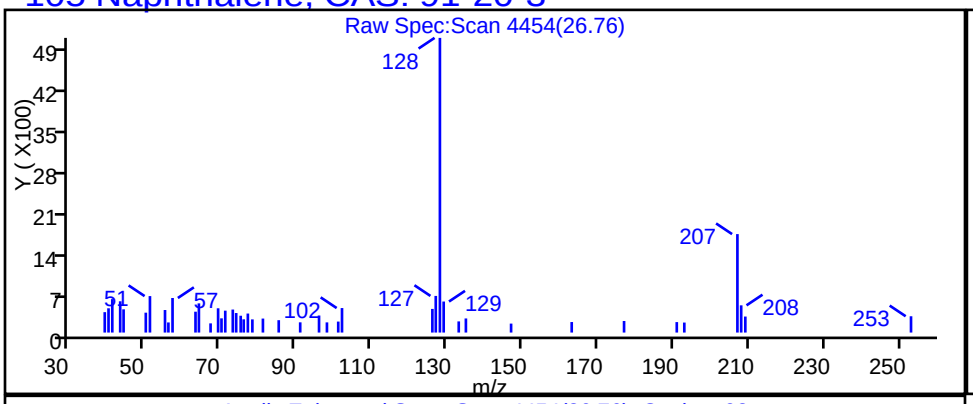
Report Date: 08-Aug-2017 14:35:29 Chrom Revision: 2.2 26-Jun-2017 09:07:56

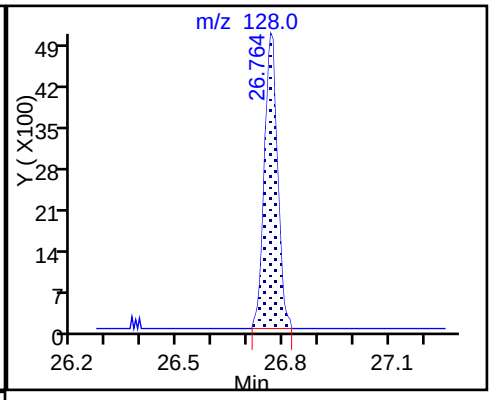
TestAmerica Burlington

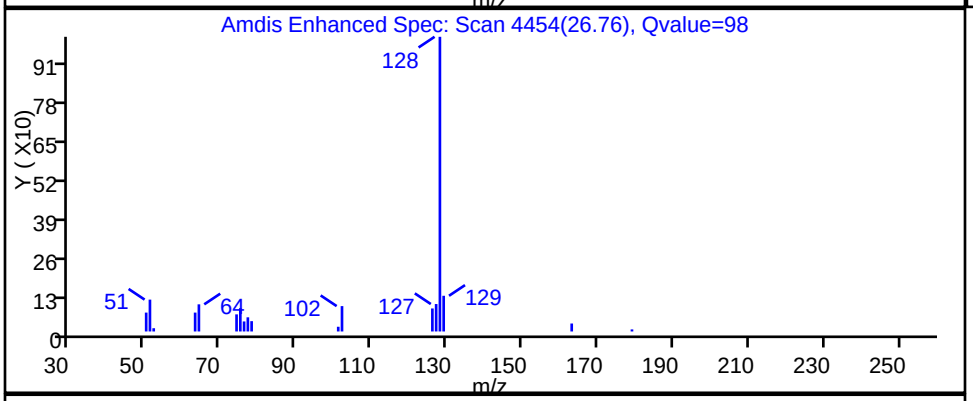
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D

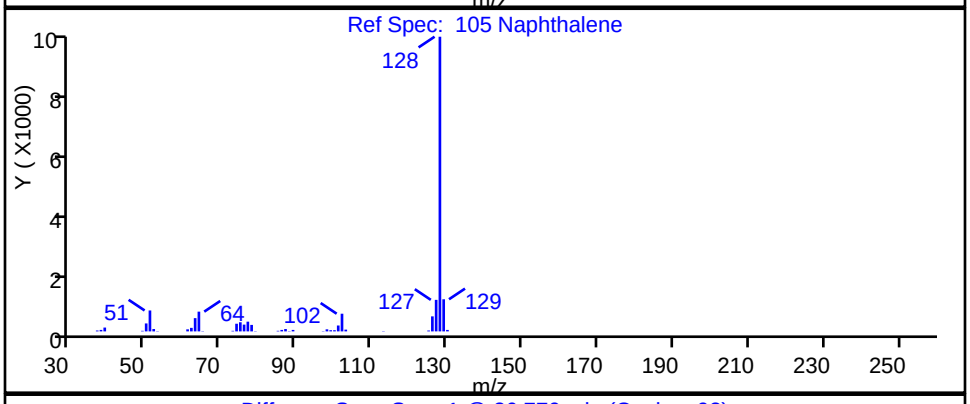
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

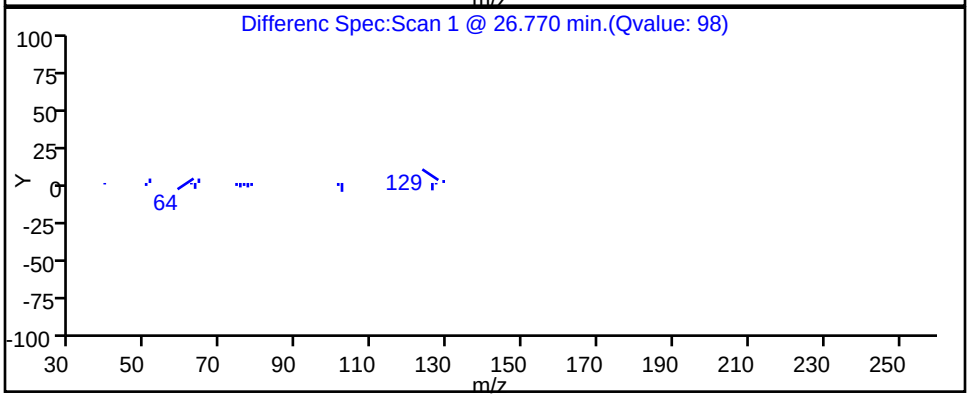
105 Naphthalene, CAS: 91-20-3











Manual Integration/User Assign Peak Report

TestAmerica Burlington

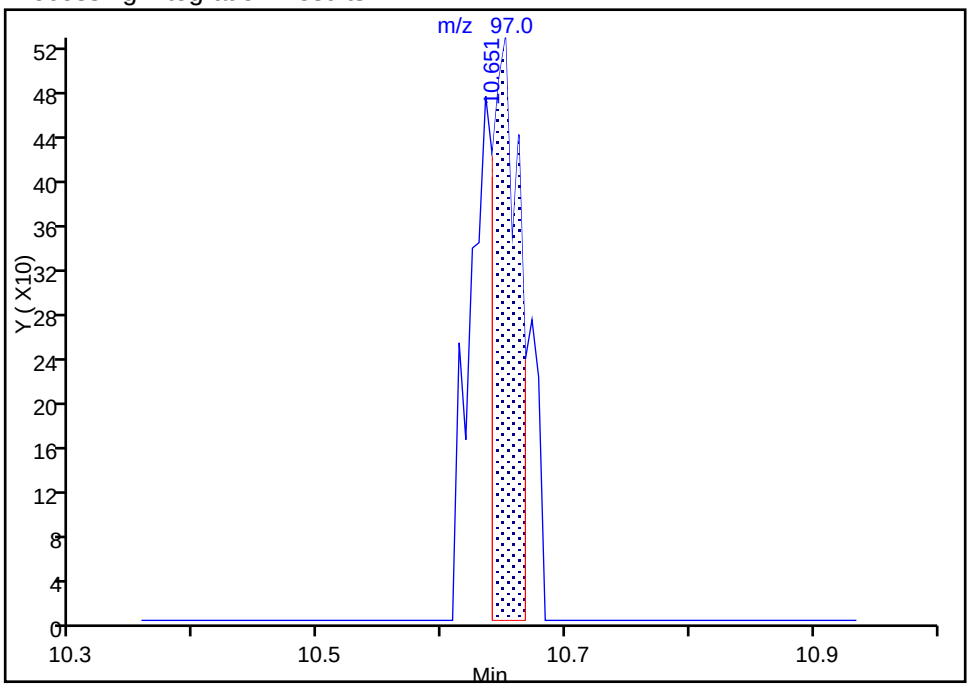
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D				
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

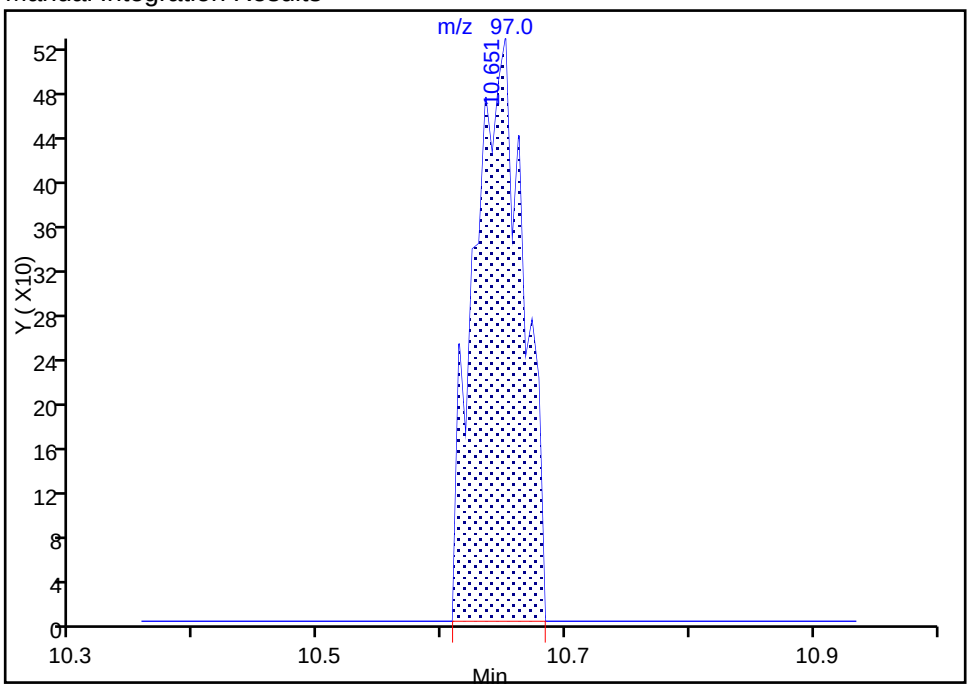
Processing Integration Results

RT: 10.65
Area: 790
Amount: 0.018501
Amount Units: ppb v/v



Manual Integration Results

RT: 10.65
Area: 1453
Amount: 0.034028
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:34:25

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

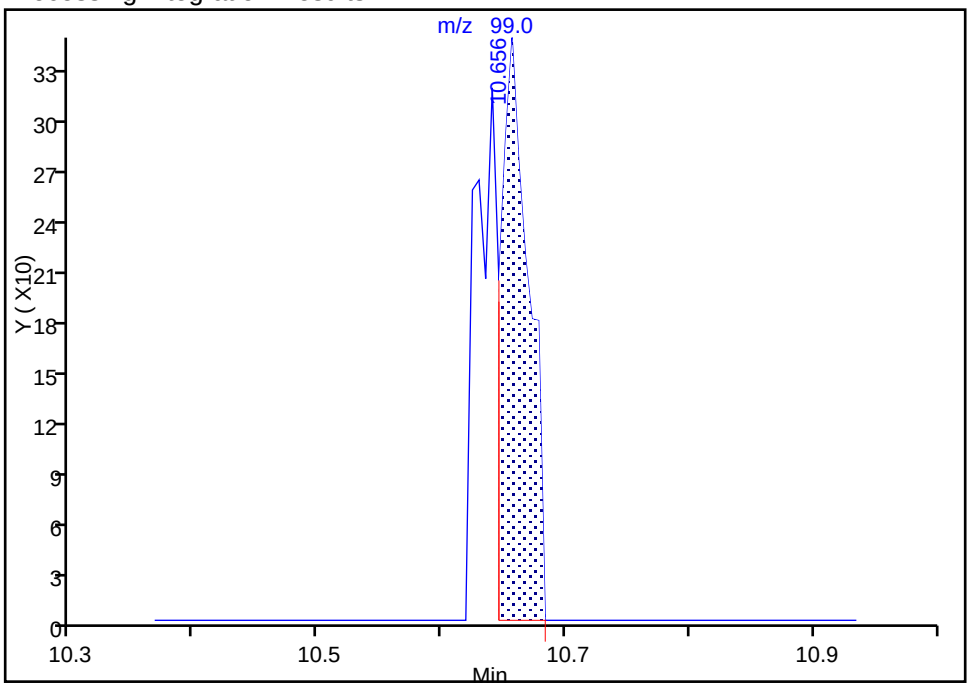
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D				
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 2

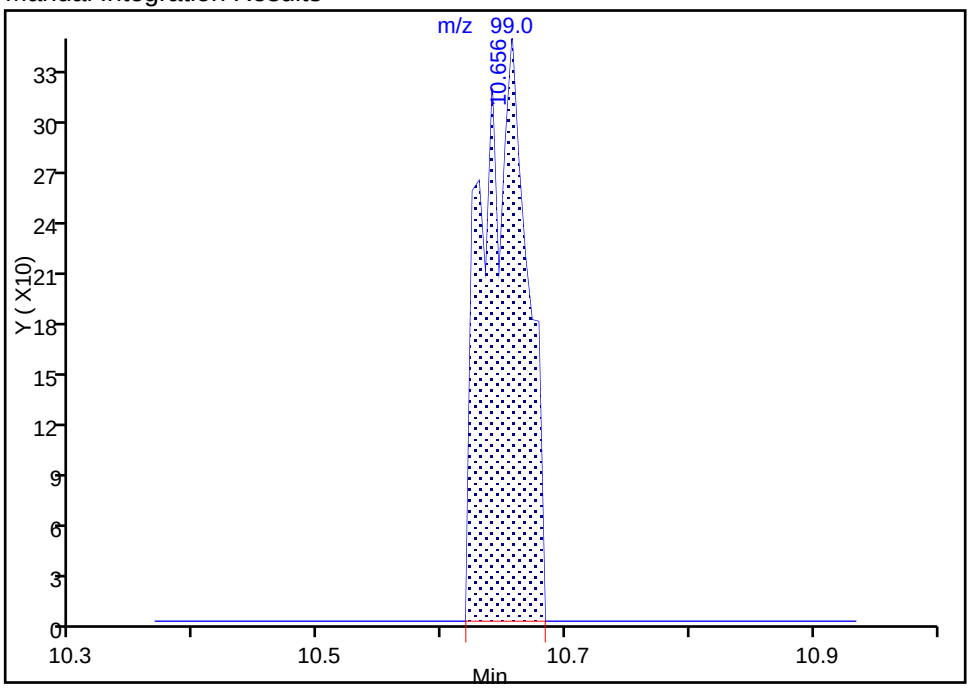
Processing Integration Results

RT: 10.66
Area: 542
Amount: 0.018501
Amount Units: ppb v/v



Manual Integration Results

RT: 10.66
Area: 877
Amount: 0.034028
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:34:34
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

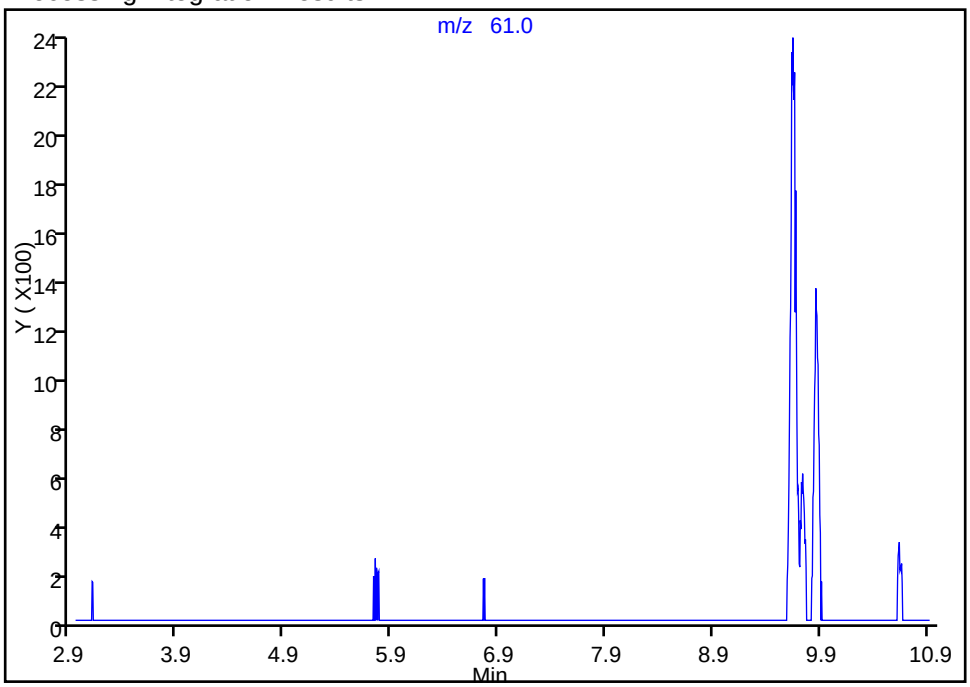
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-15.D				
Injection Date:	08-Aug-2017 00:43:30	Instrument ID:	CHX.i		
Lims ID:	200-39613-A-5	Lab Sample ID:	200-39613-5		
Client ID:	SV-5				
Operator ID:	ert	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 3

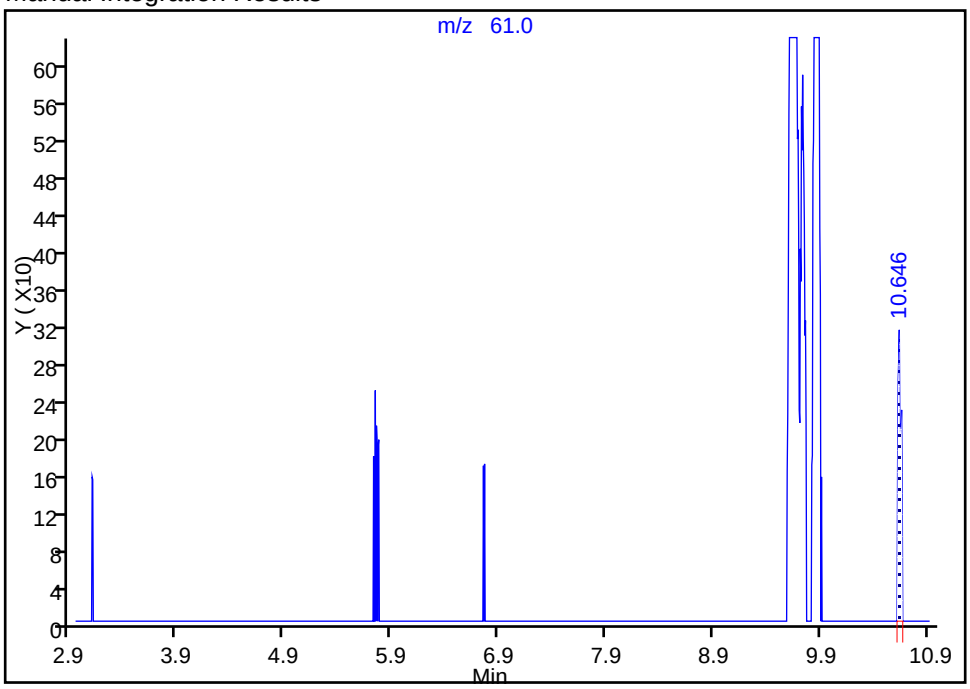
Processing Integration Results

RT: 10.65
Area: 0
Amount: 0.018501
Amount Units: ppb v/v



Manual Integration Results

RT: 10.65
Area: 647
Amount: 0.034028
Amount Units: ppb v/v



Reviewer: puangmaleek, 08-Aug-2017 14:34:47

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118373/4	25833_04.D
Level 2	IC 200-118373/5	25833_05.D
Level 3	IC 200-118373/6	25833_06.D
Level 4	IC 200-118373/7	25833_07.D
Level 5	ICIS 200-118373/8	25833_08.D
Level 6	IC 200-118373/9	25833_09.D
Level 7	IC 200-118373/10	25833_10.D
Level 8	IC 200-118373/11	25833_11.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9459	+++++ 0.8575	+++++ 0.8067	1.0684	0.8722	Ave		0.9101				11.2		30.0			
Dichlorodifluoromethane	+++++ 2.8830	+++++ 2.7265	3.4131 2.6373	2.9175	2.5134	Ave		2.8485				11.1		30.0			
Freon 22	+++++ 1.9142	+++++ 1.7822	2.4702 1.7027	2.0571	1.7310	Ave		1.9429				14.9		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.8300	2.9766 2.6601	3.2779 2.5407	2.8270	2.4756	Ave		2.7983				9.8		30.0			
Chloromethane	+++++ 1.1323	+++++ 1.0352	1.4764 0.9936	1.1954	1.0149	Ave		1.1413				15.9		30.0			
n-Butane	+++++ 1.9020	+++++ 1.7264	2.4760 1.6118	2.0668	1.7249	Ave		1.9180				16.5		30.0			
Vinyl chloride	1.5947 1.2497	1.2740 1.1620	1.4448 1.1183	1.2538	1.0981	Ave		1.2744				13.3		30.0			
1,3-Butadiene	1.1549 0.9291	1.0236 0.8653	1.1075 0.8201	0.9503	0.8286	Ave		0.9599				13.1		30.0			
Bromomethane	+++++ 0.9928	1.0524 0.9415	1.1312 0.9303	0.9913	0.8634	Ave		0.9861				8.8		30.0			
Chloroethane	+++++ 0.5813	+++++ 0.5450	0.6817 0.5361	0.5953	0.5086	Ave		0.5747				10.6		30.0			
Isopentane	+++++ 1.2638	1.6664 1.1540	1.6958 1.0979	1.4019	1.1618	Ave		1.3488				18.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.0200	1.0699 0.9704	1.1561 0.9434	0.9834	0.8680	Ave		1.0016				9.2		30.0			
Trichlorofluoromethane	+++++ 2.6923	2.9994 2.5742	3.0538 2.5057	2.6445	2.3252	Ave		2.6850				9.7		30.0			
n-Pentane	+++++ 1.9288	+++++ 1.7538	2.5917 1.6210	2.1189	1.7394	Ave		1.9589				18.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.6080	+++++ 0.5164	0.8138 0.3781	0.6786	0.5717	Ave		0.5944				24.8		30.0			
Ethyl ether	+++++ 0.8103	0.8535 0.7660	0.9411 0.7387	0.8054	0.6965	Ave		0.8017				10.0		30.0			
Freon TF	+++++ 2.0767	2.3132 1.9976	2.3713 1.9607	2.0184	1.7560	Ave		2.0706				10.2		30.0			
Acrolein	+++++ 0.3024	+++++ 0.3331	+++++ 0.2997	0.3466	0.3279	Ave		0.3219				6.3		30.0			
1,1-Dichloroethene	+++++ 1.0097	1.0688 0.9758	1.1322 0.9670	0.9697	0.8540	Ave		0.9967				8.8		30.0			
Acetone	+++++ 1.8375	+++++ 1.6840	+++++ 1.5859	1.9762	1.6620	Ave		1.7491				8.9		30.0			
Carbon disulfide	+++++ 3.0323	+++++ 2.8960	3.5691 2.8321	3.0184	2.5957	Ave		2.9906				10.9		30.0			
Isopropyl alcohol	+++++ 2.1656	+++++ 1.9665	+++++ 1.8545	2.4433	1.9622	Ave		2.0784				11.2		30.0			
3-Chloropropene	+++++ 1.5229	1.7906 1.3857	1.8877 1.2078	1.7160	1.3979	Ave		1.5584				15.9		30.0			
Acetonitrile	+++++ 0.9573	+++++ 0.8690	+++++ 0.8271	1.0295	0.8756	Ave		0.9117				8.9		30.0			
Methylene Chloride	+++++ 1.3974	+++++ 1.2989	1.8128 1.2406	1.4923	1.2466	Ave		1.4148				15.4		30.0			
tert-Butyl alcohol	+++++ 2.6879	+++++ 2.5127	+++++ 2.4368	2.6842	2.3324	Ave		2.5308				6.1		30.0			
Methyl tert-butyl ether	+++++ 3.3717	3.4104 3.2075	3.7585 3.1220	3.2636	2.8712	Ave		3.2864				8.3		30.0			
trans-1,2-Dichloroethene	+++++ 1.8035	1.9194 1.6987	2.1049 1.6142	1.8320	1.5716	Ave		1.7921				10.3		30.0			
Acrylonitrile	+++++ 0.9278	+++++ 0.8705	1.1075 0.8423	0.9385	0.8119	Ave		0.9164				11.5		30.0			
n-Hexane	+++++ 1.8899	2.2031 1.7865	2.3398 1.7002	1.9417	1.6648	Ave		1.9323				13.2		30.0			
1,1-Dichloroethane	2.7507 2.3127	2.4441 2.1923	2.7056 2.1300	2.3451	2.0042	Ave		2.3606				11.2		30.0			
Vinyl acetate	+++++ 3.4291	+++++ 3.1738	+++++ 3.0028	3.5958	3.0597	Ave		3.2522				7.8		30.0			
cis-1,2-Dichloroethene	+++++ 1.2576	1.2759 1.2293	1.4627 1.2286	1.2094	1.0631	Ave		1.2467				9.5		30.0			
Methyl Ethyl Ketone	+++++ 0.6655	+++++ 0.6350	0.8716 0.6340	0.6223	0.5584	Ave		0.6645				16.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0964	+++++ 0.0939	+++++ 0.0955	0.0926	0.0804	Ave		0.0918				7.1		30.0			
Tetrahydrofuran	+++++ 0.3144	+++++ 0.2858	+++++ 0.2858	0.3318	0.2794	Ave		0.2994				7.6		30.0			
Chloroform	+++++ 2.6422	2.7409 2.5656	2.9962 2.5747	2.5296	2.2235	Ave		2.6104				8.9		30.0			
Cyclohexane	+++++ 0.3277	0.3307 0.3150	0.3591 0.3305	0.3144	0.2733	Ave		0.3215				8.1		30.0			
1,1,1-Trichloroethane	+++++ 0.4733	0.4657 0.4555	0.5150 0.4824	0.4450	0.3912	Ave		0.4612				8.3		30.0			
Carbon tetrachloride	0.4318 0.4788	0.4193 0.4630	0.4657 0.4948	0.4518	0.3879	Ave		0.4491				7.7		30.0			
2,2,4-Trimethylpentane	+++++ 1.4249	1.4900 1.3453	1.6129 1.3861	1.3964	1.2069	Ave		1.4089				8.9		30.0			
Benzene	+++++ 0.8039	0.8308 0.7726	0.9135 0.8098	0.7700	0.6707	Ave		0.7959				9.2		30.0			
1,2-Dichloroethane	+++++ 0.3334	0.3416 0.3170	0.3825 0.3330	0.3280	0.2838	Ave		0.3313				8.9		30.0			
n-Heptane	+++++ 0.5525	0.6332 0.5113	0.6605 0.5195	0.5627	0.4794	Ave		0.5599				11.8		30.0			
n-Butanol	+++++ 0.1904	+++++ 0.1798	+++++ 0.1853	0.1803	0.1616	Ave		0.1795				6.1		30.0			
Trichloroethene	0.3588 0.3412	0.3397 0.3335	0.3716 0.3625	0.3183	0.2807	Ave		0.3383				8.6		30.0			
1,2-Dichloropropane	+++++ 0.3386	0.3315 0.3236	0.3736 0.3418	0.3257	0.2838	Ave		0.3312				8.1		30.0			
Methyl methacrylate	+++++ 0.3155	+++++ 0.3040	0.3179 0.3277	0.2823	0.2606	Ave		0.3013				8.4		30.0			
1,4-Dioxane	+++++ 0.1776	+++++ 0.1668	+++++ 0.1720	0.1692	0.1513	Ave		0.1674				5.9		30.0			
Dibromomethane	+++++ 0.2927	0.2763 0.2870	0.3105 0.3185	0.2865	0.2407	Ave		0.2875				8.8		30.0			
Bromodichloromethane	+++++ 0.5800	0.5081 0.5603	0.5927 0.5940	0.5304	0.4767	Ave		0.5489				8.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.4752	0.4459 0.4599	0.4984 0.4943	0.4476	0.3952	Ave		0.4595				7.7		30.0			
Methyl isobutyl ketone	+++++ 0.7263	+++++ 0.6720	0.8411 0.6926	0.6968	0.6245	Ave		0.7089				10.3		30.0			
Toluene	+++++ 0.6226	0.6428 0.6298	0.6674 0.6668	0.6070	0.5140	Ave		0.6215				8.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.8019	0.8661 0.7403	0.9309 0.7442	0.8147	0.6966	Ave		0.7992				10.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.4851	0.5509 0.4690	0.5640 0.4997	0.4539	0.3999	Ave		0.4889				11.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3271	0.3161 0.3316	0.3517 0.3530	0.3163	0.2697	Ave		0.3237				8.7		30.0			
Tetrachloroethene	0.5516 0.4664	0.4569 0.4764	0.5005 0.5155	0.4458	0.3835	Ave		0.4746				10.6		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.7587	+++++ 0.7391	0.9723 0.7538	0.6770	0.6514	Ave		0.7587				14.9		30.0			
Dibromochloromethane	+++++ 0.6041	0.4597 0.6116	0.5481 0.6421	0.5069	0.4864	Ave		0.5513				12.7		30.0			
1,2-Dibromoethane	+++++ 0.5652	0.5206 0.5743	0.5721 0.6125	0.5347	0.4620	Ave		0.5488				8.8		30.0			
Chlorobenzene	+++++ 0.8280	0.7939 0.8411	0.8777 0.8957	0.7980	0.6839	Ave		0.8169				8.5		30.0			
Ethylbenzene	+++++ 1.4413	1.3936 1.4476	1.5177 1.5318	1.3824	1.1856	Ave		1.4143				8.2		30.0			
n-Nonane	+++++ 0.7918	0.7670 0.7856	0.8436 0.8062	0.7827	0.6678	Ave		0.7778				7.0		30.0			
m,p-Xylene	+++++ 0.5522	0.5076 0.5552	0.5615 0.5635	0.5224	0.4530	Ave		0.5308				7.6		30.0			
Xylene, o-	+++++ 0.5332	0.4946 0.5392	0.5556 0.5691	0.5089	0.4389	Ave		0.5199				8.4		30.0			
Styrene	+++++ 0.8560	0.6677 0.8698	0.7853 0.9273	0.7893	0.6955	Ave		0.7987				11.8		30.0			
Bromoform	+++++ 0.5742	0.3190 0.5707	0.4515 0.5428	0.3775	0.4586	Ave		0.4706				20.9		30.0			
Cumene	+++++ 1.5881	1.4205 1.6007	1.5981 1.6368	1.5759	1.3078	Ave		1.5326				7.9		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8920	0.8098 0.8856	0.9176 0.8691	0.8703	0.7397	Ave		0.8549				7.1		30.0			
n-Propylbenzene	+++++ 2.0524	1.8534 2.0298	2.0969 1.9971	1.9856	1.7042	Ave		1.9599				6.9		30.0			
1,2,3-Trichloropropane	+++++ 0.7152	+++++ 0.7117	0.7551 0.7080	0.6975	0.5934	Ave		0.6968				7.8		30.0			
n-Decane	+++++ 1.0053	+++++ 0.9496	1.0785 0.8149	1.0762	0.9230	Ave		0.9746				10.3		30.0			
4-Ethyltoluene	+++++ 1.6596	1.4098 1.5807	1.6513 1.3126	1.6054	1.3946	Ave		1.5163				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.4524	1.2973 1.4052	1.4144 1.1910	1.3970	1.2167	Ave		1.3392				7.8		30.0			
1,3,5-Trimethylbenzene	+++++ 1.3226	1.1751 1.2951	1.3447 1.3447	1.3045	1.1270	Ave		1.2734				6.8		30.0			
Alpha Methyl Styrene	+++++ 0.6399	0.4690 0.6263	0.5643 0.6642	0.5716	0.5426	Ave		0.5826				11.5		30.0			
tert-Butylbenzene	+++++ 1.2035	1.1002 1.1764	1.2568 1.2174	1.2192	1.0501	Ave		1.1748				6.3		30.0			
1,2,4-Trimethylbenzene	+++++ 1.2999	1.1783 1.2785	1.3514 1.3615	1.3333	1.1514	Ave		1.2792				6.5		30.0			
sec-Butylbenzene	+++++ 1.8620	1.7355 1.8289	2.0059 1.8934	1.9436	1.6727	Ave		1.8489				6.2		30.0			
4-Isopropyltoluene	+++++ 1.4963	1.4017 1.5138	1.5954 1.5443	1.6098	1.3968	Ave		1.5083				5.6		30.0			
1,3-Dichlorobenzene	+++++ 0.8502	0.7605 0.8313	0.8887 0.8476	0.8654	0.7492	Ave		0.8276				6.4		30.0			
1,4-Dichlorobenzene	+++++ 0.8288	0.7528 0.8232	0.8914 0.8980	0.8628	0.7378	Ave		0.8278				7.6		30.0			
Benzyl chloride	+++++ 1.0894	0.9560 1.1200	1.0757 1.2889	1.1957	0.9908	Ave		1.1024				10.4		30.0			
n-Butylbenzene	+++++ 1.4831	1.3738 1.5355	1.6212 1.5353	1.6353	1.3823	Ave		1.5095				6.9		30.0			
n-Undecane	+++++ 1.0630	+++++ 1.0678	+++++ 1.0065	1.0797	0.8871	Ave		1.0208				7.8		30.0			
1,2-Dichlorobenzene	+++++ 0.7625	0.7282 0.7736	0.8532 0.8589	0.8260	0.7058	Ave		0.7869				7.7		30.0			
n-Dodecane	+++++ 0.8608	+++++ 0.8792	+++++ 0.7410	0.9343	0.8164	Ave		0.8463				8.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6278	+++++ 0.6833	0.5850 0.7105	0.5676	0.5101	Ave		0.6141				12.2		30.0			
Hexachlorobutadiene	+++++ 0.5905	0.4772 0.5945	0.5602 0.5487	0.5324	0.4754	Ave		0.5398				9.0		30.0			
Naphthalene	+++++ 1.3590	+++++ 1.5363	1.2032 1.6896	1.3961	1.1875	Ave		1.3953				13.9		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5744	+++++ 0.6248	0.5007 0.6015	0.5815	0.4998	Ave		0.5638				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-118373/4	25833_04.D
Level 2	IC 200-118373/5	25833_05.D
Level 3	IC 200-118373/6	25833_06.D
Level 4	IC 200-118373/7	25833_07.D
Level 5	ICIS 200-118373/8	25833_08.D
Level 6	IC 200-118373/9	25833_09.D
Level 7	IC 200-118373/10	25833_10.D
Level 8	IC 200-118373/11	25833_11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 409436	+++++ 528341	+++++ 1084524	132075	230010	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1247965	+++++ 1680004	39727 3545740	360659	662792	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 828600	+++++ 1098125	28752 2289249	254297	456457	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1225051	14142 1639083	38153 3415858	349472	652830	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 490165	+++++ 637878	17185 1335882	147772	267636	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 823311	+++++ 1063760	28819 2167002	255501	454867	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1541 540983	6053 715977	16817 1503519	154992	289557	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1116 402198	4863 533150	12891 1102552	117472	218501	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 429756	5000 580136	13166 1250765	122548	227687	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 251644	+++++ 335832	7935 720765	73594	134131	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 547060	7917 711074	19738 1476063	173297	306378	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 441543	5083 597956	13456 1268342	121565	228882	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1165426	14250 1586133	35544 3368894	326906	613154	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 834915	+++++ 1080617	30166 2179461	261940	458670	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 351650	+++++ 636523	94841 1271008	167884	226240	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 350760	4055 472009	10954 993203	99565	183672	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 898964	10990 1230888	27600 2636070	249509	463068	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 130906	+++++ 205220	+++++ 402954	42847	86466	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 437073	5078 601269	13178 1300155	119872	225190	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 795427	+++++ 1037630	+++++ 2132136	244292	438279	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1312618	+++++ 1784428	41542 3807623	373131	684486	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 937424	+++++ 1211718	+++++ 2493271	302036	517433	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 659243	8507 853805	21972 1623891	212129	368638	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 414370	+++++ 535433	+++++ 1112045	127270	230906	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 604903	+++++ 800321	21100 1667968	184476	328742	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1163529	+++++ 1548244	+++++ 3276217	331817	615060	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1459522	16203 1976383	43747 4197409	403440	757127	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 780702	9119 1046713	24500 2170267	226470	414437	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 401643	+++++ 536375	12891 1132458	116021	214109	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 818079	10467 1100784	27234 2285870	240030	439022	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2658 1001115	11612 1350820	31492 2863767	289894	528520	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1484365	+++++ 1955593	+++++ 4037213	444513	806853	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 544402	6062 757477	17025 1651832	149503	280353	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 288077	+++++ 391282	10145 852362	76927	147242	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 41717	+++++ 57834	+++++ 128414	11452	21199	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 750204	+++++ 984940	+++++ 2057466	225463	407906	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1143737	13022 1580829	34874 3461613	312713	586330	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 782089	8769 1085661	23066 2379636	213635	399017	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1129514	12350 1569965	33075 3473058	302372	571077	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2335 1142667	11119 1595715	29910 3562491	306946	566382	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3400263	39509 4636879	103590 9979903	948713	1762033	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1918424	22031 2662904	58669 5831102	523126	979111	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 795592	9059 1092547	24567 2397889	222855	414260	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1318380	16790 1762244	42421 3740223	382283	699906	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 454259	+++++ 619693	+++++ 1333844	122532	235893	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	1940 814302	9007 1149521	23863 2610094	216292	409801	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 807893	8791 1115218	23993 2460869	221295	414266	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 752768	+++++ 1047665	20414 2359709	191806	380407	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 423767	+++++ 574898	+++++ 1238608	114925	220870	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 698454	7326 989065	19943 2293204	194655	351467	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1384127	13473 1931199	38067 4276973	360366	696002	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1134061	11824 1585309	32008 3558960	304081	576973	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl isobutyl ketone	DFBZ	Ave	+++++ 1733183	+++++ 2316136	54022 4986911	473436	911696	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1389802	15920 1934393	40485 4308270	376522	703666	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1913507	22966 2551704	59784 5358468	553525	1016929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1157609	14608 1616519	36226 3598250	308392	583846	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 730126	7828 1018474	21337 2280571	196233	369275	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2672 1041099	11314 1463151	30364 3330350	276511	525025	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1693782	+++++ 2269972	58982 4869982	419962	891794	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1348608	11384 1878316	33248 4148288	314423	665893	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1261758	12893 1763744	34704 3957297	331712	632536	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1848362	19660 2583186	53241 5787010	494984	936316	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3217601	34513 4445888	92065 9896464	857519	1623125	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1767598	18994 2412605	51177 5208658	485505	914199	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2465555	25142 3410064	68122 7280780	648081	1240293	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1190352	12250 1655938	33706 3676525	315658	600849	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1910862	16536 2671205	47639 5990955	489592	952142	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1281762	7901 1752784	27389 3506866	234149	627800	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3545298	35180 4916112	96944 10574982	977561	1790406	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1991311	20054 2719823	55664 5615285	539839	1012699	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4581825	45899 6234105	127200 12902837	1231713	2333117	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1596513	+++++ 2185790	45805 4574330	432653	812466	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2244221	+++++ 2916548	65422 5264975	667561	1263692	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3705002	34915 4854676	100172 8480222	995829	1909235	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3242371	32129 4315821	85803 7694565	866602	1665670	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2952552	29101 3977660	81573 8687812	809215	1542986	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1428633	11616 1923499	34231 4291539	354585	742913	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2686697	27246 3613084	76242 7865464	756262	1437614	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39613-1 Analy Batch No.: 118373

SDG No.: 200-39613-1

Instrument ID: CHX.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/10/2017 15:17 Calibration End Date: 07/10/2017 21:09 Calibration ID: 37504

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2901936	29180 3926526	81980 8796547	827042	1576352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4156724	42980 5616978	121683 12232648	1205655	2289995	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3340357	34713 4649212	96781 9977397	998602	1912352	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1898049	18833 2553083	53913 5476084	536849	1025661	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1850331	18644 2528381	54073 5801528	535187	1010115	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2431926	23675 3439799	65254 8327257	741736	1356520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 3310867	34023 4715831	98346 9918939	1014430	1892414	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2373158	+++++ 3279464	+++++ 6502755	669786	1214541	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1702205	18034 2375928	51755 5548990	512402	966260	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1921741	+++++ 2700240	+++++ 4787636	579531	1117714	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1401522	+++++ 2098646	35489 4590416	352066	698419	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1318241	11819 1825774	33982 3544768	330280	650915	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 3033846	+++++ 4718376	72990 10916262	866011	1625697	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1282192	+++++ 1919042	30375 3886463	360740	684291	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_04.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Jul-2017 15:17:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-004
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:16 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:44:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.065	3.060	0.005	91	2423	0.0401	0.1104	
2 Dichlorodifluoromethane	85	3.129	3.124	0.005	98	3371	0.0401	0.0491	
3 Chlorodifluoromethane	51	3.183	3.172	0.011	97	2856	0.0401	0.0610	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.376	0.005	92	3421	0.0401	0.0507	
5 Chloromethane	50	3.514	3.509	0.005	94	1628	0.0401	0.0592	
6 Butane	43	3.691	3.691	0.000	98	3035	0.0401	0.0656	
7 Vinyl chloride	62	3.739	3.739	0.000	95	1541	0.0401	0.0502	
8 Butadiene	54	3.809	3.809	0.000	95	1116	0.0401	0.0482	
10 Bromomethane	94	4.451	4.451	0.000	75	1256	0.0401	0.0528	
11 Chloroethane	64	4.681	4.670	0.011	1	632	0.0401	0.0456	
12 2-Methylbutane	43	4.729	4.734	-0.005	98	1975	0.0401	0.0607	
13 Vinyl bromide	106	5.039	5.045	-0.006	77	1025	0.0401	0.0425	
14 Trichlorofluoromethane	101	5.135	5.130	0.005	94	3137	0.0401	0.0485	
16 Pentane	43	5.258	5.259	-0.001	96	3191	0.0401	0.0676	
17 Ethanol	45	5.745	5.713	0.032	99	3722	0.0802	0.2598	
18 Ethyl ether	59	5.815	5.778	0.037	55	817	0.0401	0.0423	
20 1,1,2-Trichloro-1,2,2-trif	101	6.141	6.163	-0.022	93	2492	0.0401	0.0499	
19 Acrolein	56	6.179	6.168	0.011	80	840	0.0401	0.1082	
21 1,1-Dichloroethene	96	6.221	6.216	0.005	59	1125	0.0401	0.0468	
22 Acetone	43	6.516	6.478	0.038	98	13465	0.0401	0.3194	
23 Carbon disulfide	76	6.601	6.601	0.000	99	3612	0.0401	0.0501	
24 Isopropyl alcohol	45	6.815	6.773	0.042	99	6390	0.0401	0.1275	
25 3-Chloro-1-propene	41	6.997	6.992	0.005	90	1403	0.0401	0.0373	
26 Acetonitrile	41	7.179	7.163	0.016	95	1906	0.0401	0.0867	
27 Methylene Chloride	49	7.291	7.286	0.005	96	2183	0.0401	0.0640	
28 2-Methyl-2-propanol	59	7.607	7.543	0.064	92	2620	0.0401	0.0429	
29 Methyl tert-butyl ether	73	7.762	7.704	0.058	62	3811	0.0401	0.0481	
31 trans-1,2-Dichloroethene	61	7.714	7.720	-0.006	94	2007	0.0401	0.0465	
32 Acrylonitrile	53	7.912	7.907	0.005	92	1056	0.0401	0.0478	
33 Hexane	57	8.099	8.094	0.005	75	2517	0.0401	0.0540	
34 1,1-Dichloroethane	63	8.607	8.613	-0.006	94	2658	0.0401	0.0467	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.698	8.693	0.005	98	4085	0.0401	0.0521	
S 30 1,2-Dichloroethene, Total	61				0		0.0802	0.0943	
37 cis-1,2-Dichloroethene	96	9.742	9.752	-0.010	78	1437	0.0401	0.0478	
38 2-Butanone (MEK)	72	9.870	9.833	0.037	95	1025	0.0401	0.0640	
39 Ethyl acetate	88		9.870				ND	ND	
* 40 Chlorobromomethane	128	10.234	10.239	-0.005	97	241047	10.0	10.0	
41 Tetrahydrofuran	42	10.325	10.271	0.054	77	2280	0.0401	0.0565	
42 Chloroform	83	10.373	10.378	-0.005	89	3055	0.0401	0.0486	
43 Cyclohexane	84	10.614	10.608	0.006	92	1608	0.0401	0.0371	
44 1,1,1-Trichloroethane	97	10.662	10.657	0.005	63	1351	0.0401	0.0217	
45 Carbon tetrachloride	117	10.908	10.913	-0.005	96	2335	0.0401	0.0385	
46 Isooctane	57	11.357	11.363	-0.006	99	9429	0.0401	0.0496	
47 Benzene	78	11.421	11.416	0.005	95	5519	0.0401	0.0514	
48 1,2-Dichloroethane	62		11.625				ND	ND	
49 n-Heptane	43	11.780	11.780	0.000	90	3897	0.0401	0.0516	
* 50 1,4-Difluorobenzene	114	12.320	12.326	-0.006	96	1348861	10.0	10.0	
52 n-Butanol	56	12.850	12.802	0.048	77	1935	0.0401	0.0799	
53 Trichloroethene	95	12.807	12.813	-0.005	93	1940	0.0401	0.0425	
A 51 GRO	1	13.251	(4.724-21.778)		0	5451157	0.0401	0	
54 1,2-Dichloropropane	63	13.411	13.417	-0.006	24	1323	0.0401	0.0296	
55 Methyl methacrylate	69		13.610				ND	ND	
56 1,4-Dioxane	88	13.754	13.685	0.070	82	1329	0.0401	0.0589	
57 Dibromomethane	174	13.679	13.690	-0.011	97	1749	0.0401	0.0451	
58 Dichlorobromomethane	83	13.989	14.000	-0.011	92	3109	0.0401	0.0420	
60 cis-1,3-Dichloropropene	75	14.974	14.979	-0.005	41	1548	0.0401	0.0250	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	5848135	0.0401	0	
61 4-Methyl-2-pentanone (MIBK	43	15.337	15.311	0.026	93	5886	0.0401	0.0616	
65 Toluene	92	15.589	15.589	0.000	93	3894	0.0401	0.0519	
64 n-Octane	43	15.637	15.637	0.000	94	5324	0.0401	0.0494	
66 trans-1,3-Dichloropropene	75	16.231	16.236	-0.005	48	3596	0.0401	0.0545	
67 1,1,2-Trichloroethane	83	16.621	16.632	-0.011	91	1686	0.0401	0.0431	
68 Tetrachloroethene	166	16.707	16.712	-0.005	94	2672	0.0401	0.0466	M
69 2-Hexanone	43	17.151	17.130	0.021	93	6338	0.0401	0.0691	
71 Chlorodibromomethane	129	17.424	17.429	-0.005	92	2543	0.0401	0.0382	
72 Ethylene Dibromide	107	17.702	17.713	-0.011	95	2861	0.0401	0.0431	
* 74 Chlorobenzene-d5	117	18.654	18.654	0.000	89	1208282	10.0	10.0	
75 Chlorobenzene	112	18.724	18.719	0.005	81	4670	0.0401	0.0473	
76 Ethylbenzene	91	18.879	18.879	0.000	98	8239	0.0401	0.0482	
77 n-Nonane	57	19.007	19.007	0.000	92	4740	0.0401	0.0504	
78 m-Xylene & p-Xylene	106	19.146	19.152	-0.006	0	5896	0.0802	0.0919	
S 73 Xylenes, Total	106				0		0.1203	0.1342	
79 o-Xylene	106	20.040	20.045	-0.005	96	2654	0.0401	0.0422	
80 Styrene	104	20.099	20.104	-0.005	95	3914	0.0401	0.0406	
81 Bromoform	173	20.569	20.570	-0.001	93	1962	0.0401	0.0345	
82 Isopropylbenzene	105	20.789	20.794	-0.005	97	7942	0.0401	0.0429	
84 1,1,2,2-Tetrachloroethane	83	21.511	21.516	-0.005	96	4688	0.0401	0.0454	
85 N-Propylbenzene	91	21.575	21.575	0.000	98	10859	0.0401	0.0459	
86 1,2,3-Trichloropropane	75	21.618	21.618	0.000	97	4526	0.0401	0.0538	
87 n-Decane	57	21.768	21.768	0.000	86	5730	0.0401	0.0487	
88 4-Ethyltoluene	105	21.778	21.779	-0.001	88	8251	0.0401	0.0450	
89 2-Chlorotoluene	91	21.778	21.784	-0.006	88	7430	0.0401	0.0459	
90 1,3,5-Trimethylbenzene	105	21.891	21.896	-0.005	92	6843	0.0401	0.0445	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	84	2603	0.0401	0.0370	
92 tert-Butylbenzene	119	22.410	22.410	0.000	93	6598	0.0401	0.0465	
93 1,2,4-Trimethylbenzene	105	22.511	22.512	-0.001	97	6647	0.0401	0.0430	
94 sec-Butylbenzene	105	22.747	22.752	-0.005	98	10286	0.0401	0.0460	
95 4-Isopropyltoluene	119	22.961	22.966	-0.005	96	7673	0.0401	0.0421	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	96	4857	0.0401	0.0486	
97 1,4-Dichlorobenzene	146	23.137	23.132	0.005	91	4553	0.0401	0.0455	
98 Benzyl chloride	91	23.346	23.346	0.000	98	6051	0.0401	0.0454	
100 n-Butylbenzene	91	23.560	23.560	0.000	97	8236	0.0401	0.0452	
99 Undecane	57	23.581	23.587	-0.006	94	5787	0.0401	0.0469	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	89	3961	0.0401	0.0417	
102 Dodecane	57	25.218	25.224	-0.006	96	4063	0.0401	0.0397	
103 1,2,4-Trichlorobenzene	180	26.267	26.272	-0.005	90	2299	0.0401	0.0310	
104 Hexachlorobutadiene	225	26.454	26.460	-0.006	91	2693	0.0401	0.0413	
105 Naphthalene	128	26.775	26.775	0.000	95	3767	0.0401	0.0223	
106 1,2,3-Trichlorobenzene	180	27.262	27.257	0.005	90	1741	0.0401	0.0256	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00174	Amount Added: 40.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

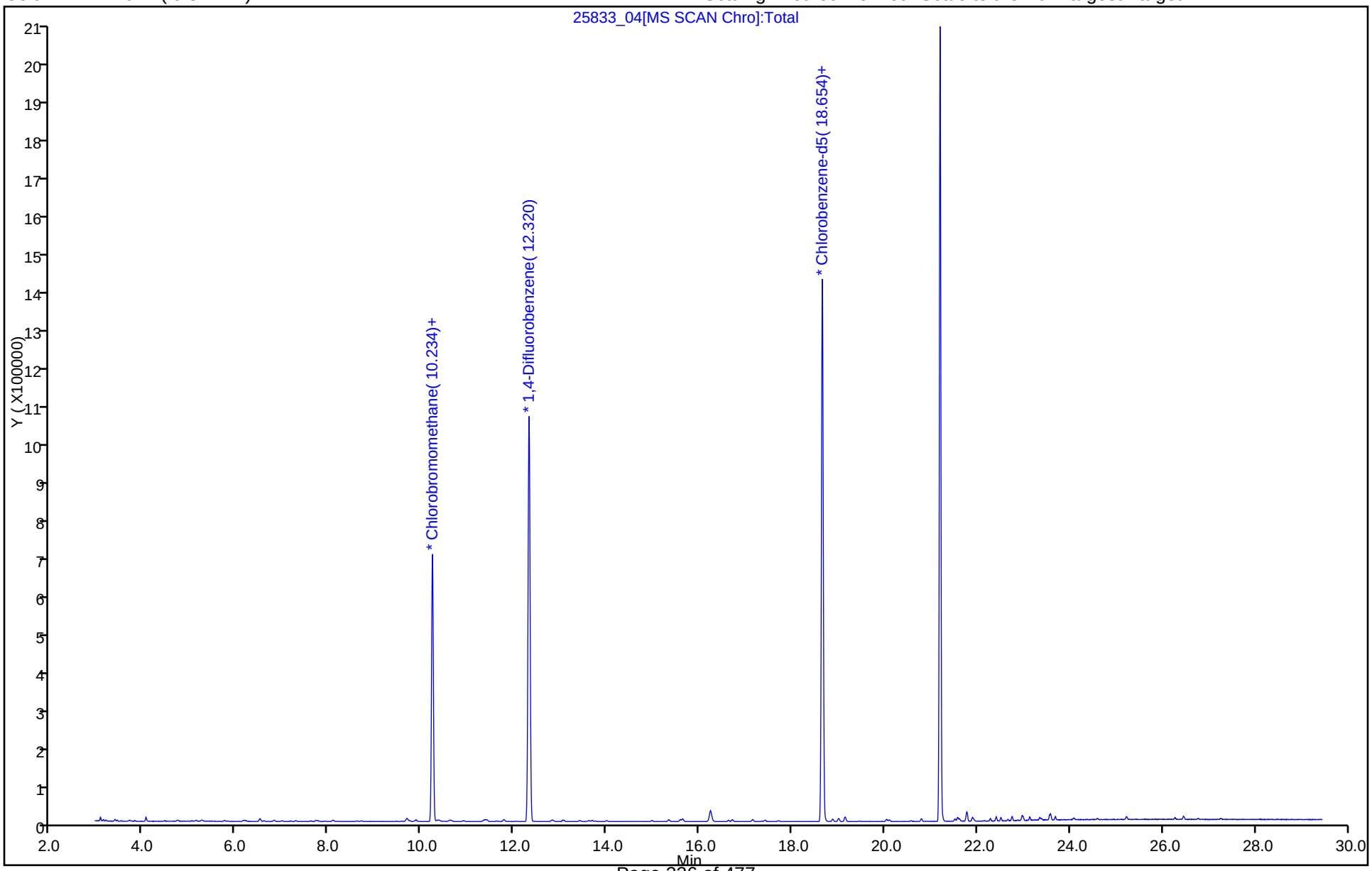
Report Date: 11-Jul-2017 10:09:17 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_04.D

Injection Date:	10-Jul-2017 15:17:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

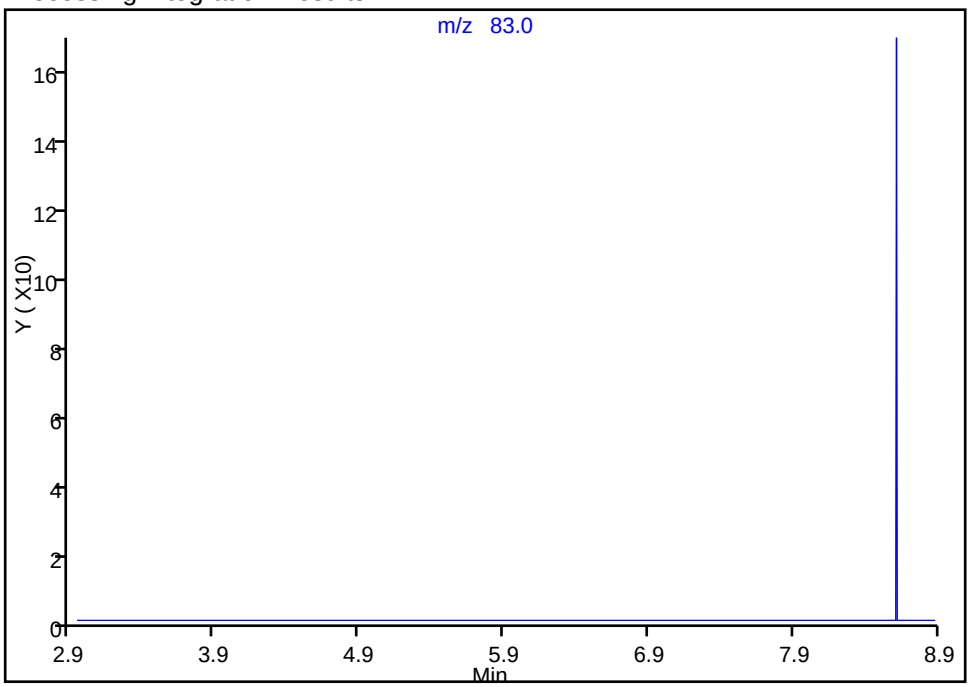
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_04.D
Injection Date: 10-Jul-2017 15:17:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

34 1,1-Dichloroethane, CAS: 75-34-3

Signal: 3

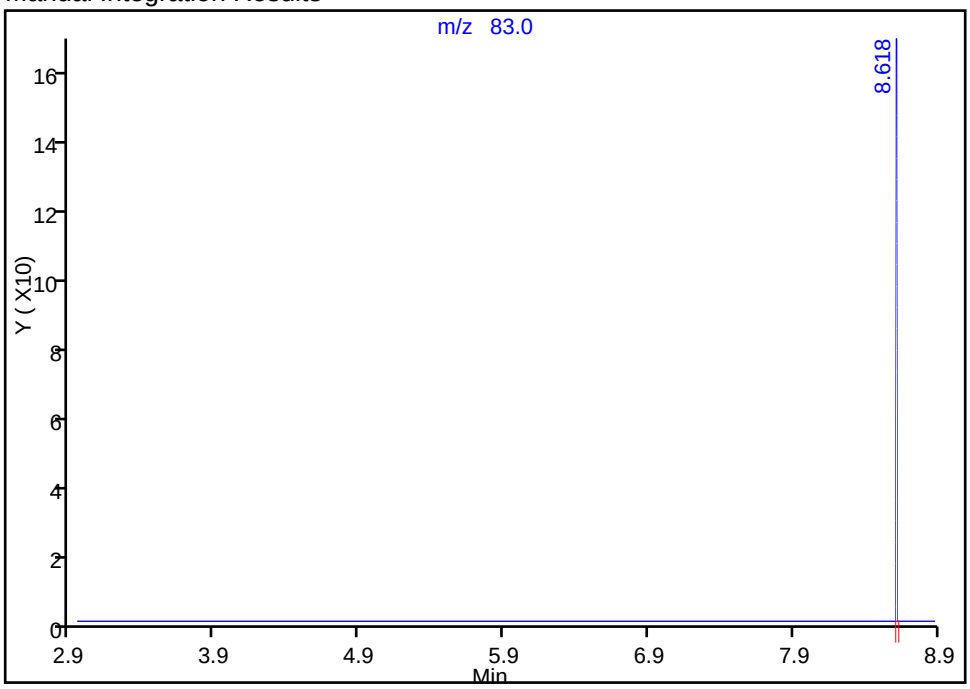
Processing Integration Results

RT: 8.61
Area: 0
Amount: 0.046712
Amount Units: ppb v/v



Manual Integration Results

RT: 8.62
Area: 55
Amount: 0.046712
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 09:49:05
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Burlington

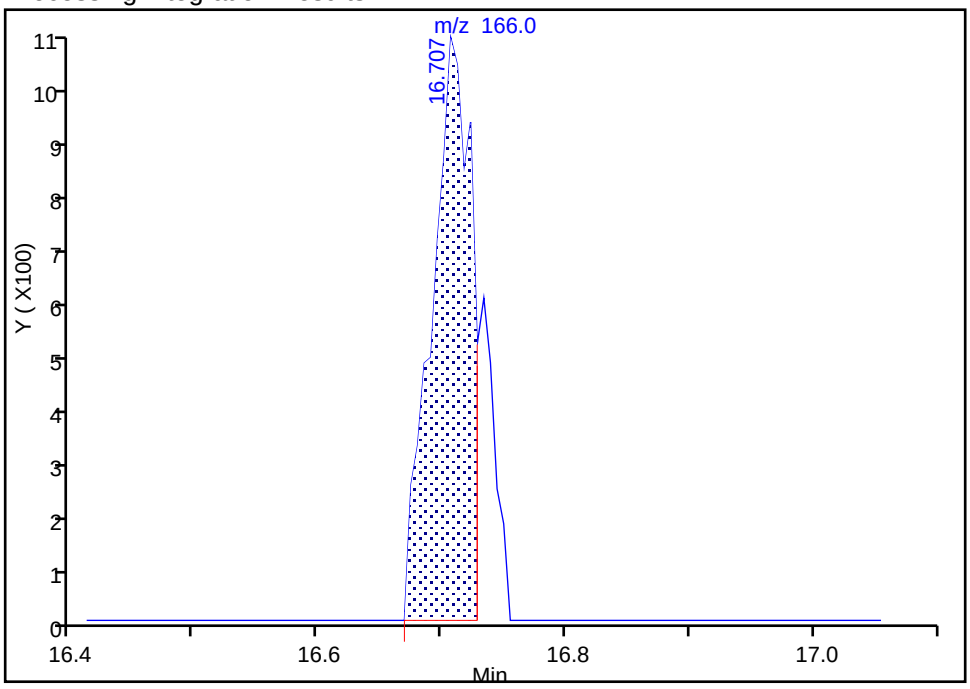
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_04.D
Injection Date: 10-Jul-2017 15:17:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

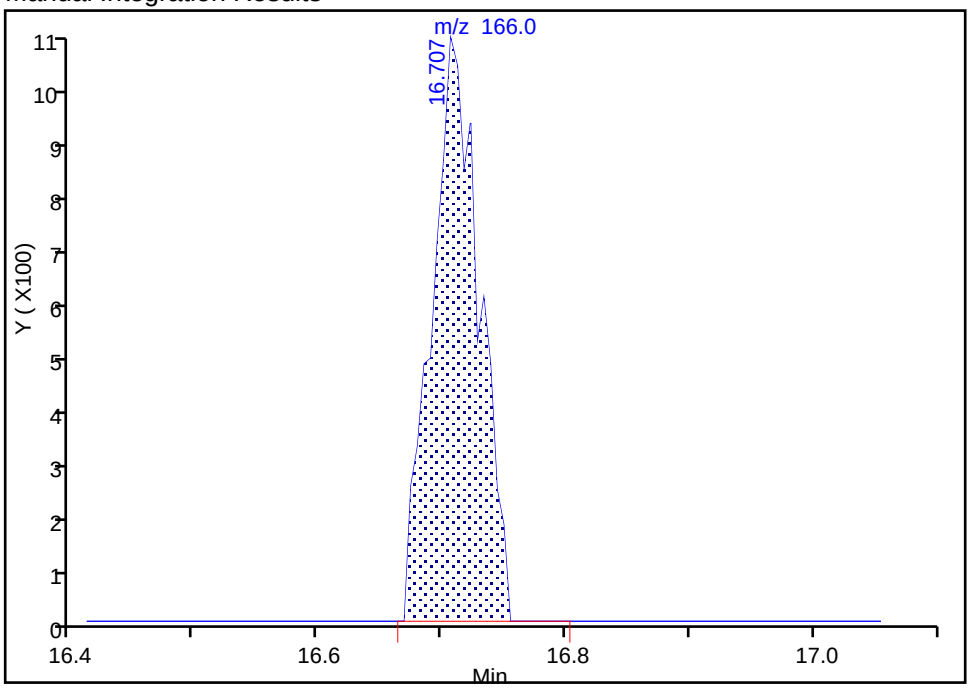
Processing Integration Results

RT: 16.71
Area: 2227
Amount: 0.039801
Amount Units: ppb v/v



Manual Integration Results

RT: 16.71
Area: 2672
Amount: 0.046599
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:43:54
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Burlington

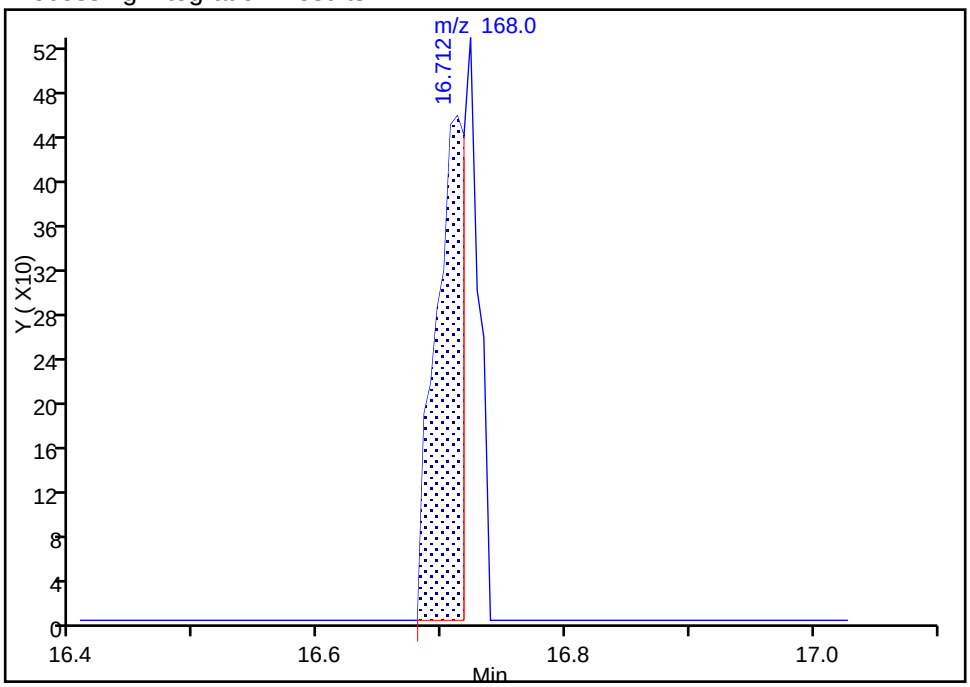
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_04.D				
Injection Date:	10-Jul-2017 15:17:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 2

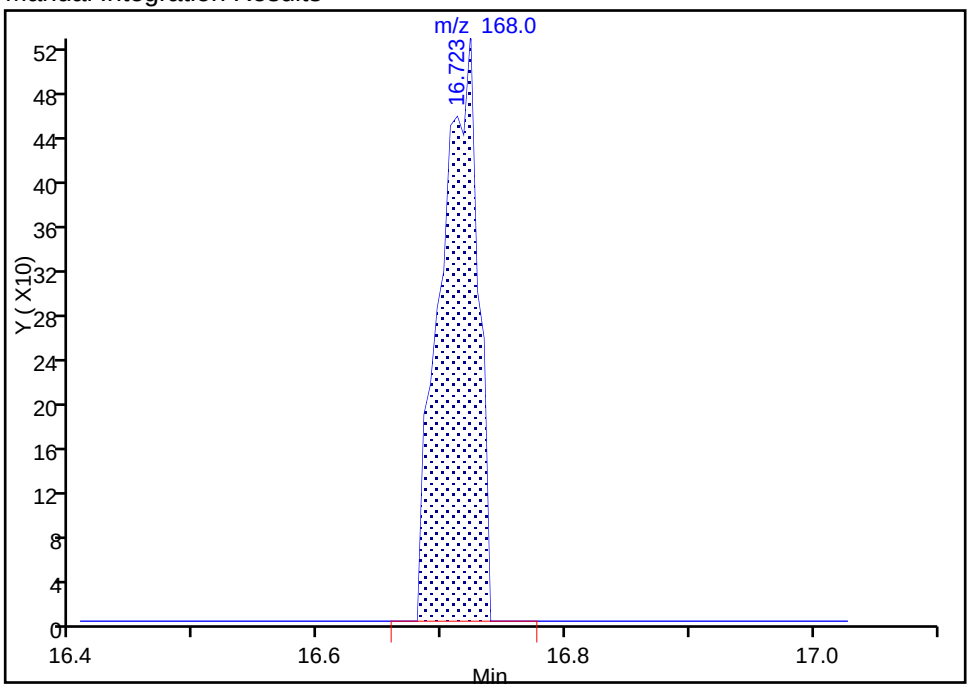
Processing Integration Results

RT: 16.71
Area: 744
Amount: 0.039801
Amount Units: ppb v/v



Manual Integration Results

RT: 16.72
Area: 1087
Amount: 0.046599
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:43:56
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Burlington

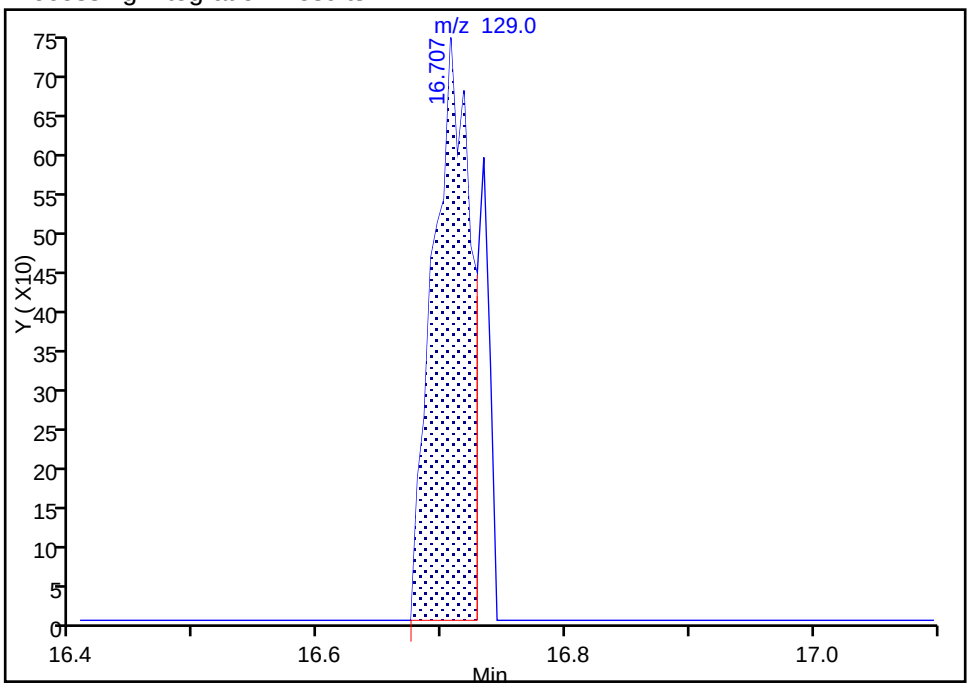
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_04.D
Injection Date: 10-Jul-2017 15:17:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

68 Tetrachloroethene, CAS: 127-18-4

Signal: 3

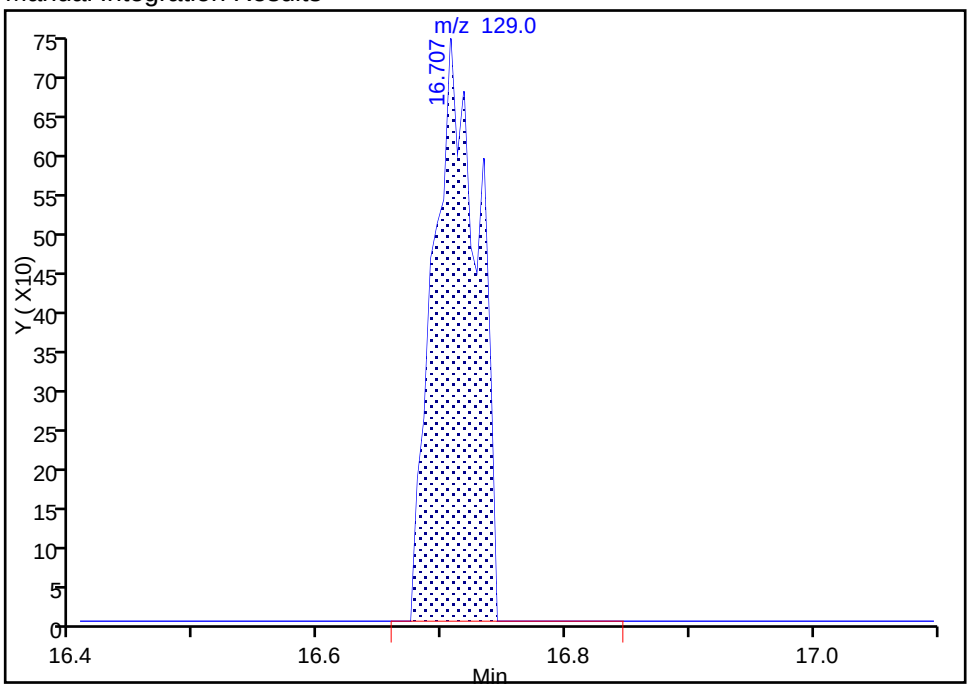
Processing Integration Results

RT: 16.71
Area: 1576
Amount: 0.039801
Amount Units: ppb v/v



Manual Integration Results

RT: 16.71
Area: 1874
Amount: 0.046599
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:43:58
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Jul-2017 16:07:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-005
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:18 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:46:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.071	3.060	0.011	96	6743	0.2004	0.3126	
2 Dichlorodifluoromethane	85	3.130	3.124	0.006	99	14847	0.2004	0.2199	
3 Chlorodifluoromethane	51	3.183	3.172	0.011	98	12586	0.2004	0.2733	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.376	0.005	94	14142	0.2004	0.2132	
5 Chloromethane	50	3.515	3.509	0.006	98	6737	0.2004	0.2490	
6 Butane	43	3.697	3.691	0.006	97	11667	0.2004	0.2566	
7 Vinyl chloride	62	3.739	3.739	0.000	96	6053	0.2004	0.2004	
8 Butadiene	54	3.814	3.809	0.005	97	4863	0.2004	0.2137	
10 Bromomethane	94	4.451	4.451	0.000	97	5000	0.2004	0.2139	
11 Chloroethane	64	4.670	4.670	0.000	98	3046	0.2004	0.2236	
12 2-Methylbutane	43	4.729	4.734	-0.005	92	7917	0.2004	0.2476	
13 Vinyl bromide	106	5.050	5.045	0.005	97	5083	0.2004	0.2141	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	98	14250	0.2004	0.2239	
16 Pentane	43	5.259	5.259	0.000	97	12256	0.2004	0.2640	
17 Ethanol	45	5.746	5.713	0.033	100	10706	0.4009	0.7598	
18 Ethyl ether	59	5.804	5.778	0.026	92	4055	0.2004	0.2134	
20 1,1,2-Trichloro-1,2,2-trif	101	6.163	6.163	0.000	95	10990	0.2004	0.2239	
19 Acrolein	56	6.179	6.168	0.011	91	3298	0.2004	0.4322	
21 1,1-Dichloroethene	96	6.211	6.216	-0.005	96	5078	0.2004	0.2149	
22 Acetone	43	6.505	6.478	0.027	98	48547	0.2004	1.17	
23 Carbon disulfide	76	6.602	6.601	0.001	99	15008	0.2004	0.2117	
24 Isopropyl alcohol	45	6.810	6.773	0.037	100	15453	0.2004	0.3137	
25 3-Chloro-1-propene	41	6.987	6.992	-0.005	94	8507	0.2004	0.2303	
26 Acetonitrile	41	7.169	7.163	0.006	98	7183	0.2004	0.3324	
27 Methylene Chloride	49	7.281	7.286	-0.005	98	8051	0.2004	0.2401	
28 2-Methyl-2-propanol	59	7.602	7.543	0.059	94	13148	0.2004	0.2192	
29 Methyl tert-butyl ether	73	7.746	7.704	0.042	97	16203	0.2004	0.2080	
31 trans-1,2-Dichloroethene	61	7.714	7.720	-0.006	96	9119	0.2004	0.2147	
32 Acrylonitrile	53	7.907	7.907	0.000	94	4910	0.2004	0.2260	
33 Hexane	57	8.089	8.094	-0.005	93	10467	0.2004	0.2285	
34 1,1-Dichloroethane	63	8.608	8.613	-0.005	98	11612	0.2004	0.2075	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.699	8.693	0.006	100	17271	0.2004	0.2240	
S 30 1,2-Dichloroethene, Total	61				0		0.4009	0.4198	
37 cis-1,2-Dichloroethene	96	9.747	9.752	-0.005	97	6062	0.2004	0.2051	
38 2-Butanone (MEK)	72	9.854	9.833	0.021	100	4885	0.2004	0.3102	
39 Ethyl acetate	88	9.886	9.870	0.016	96	193	0.2004	0.0887	
* 40 Chlorobromomethane	128	10.239	10.239	0.000	97	237029	10.0	10.0	
41 Tetrahydrofuran	42	10.309	10.271	0.038	94	9968	0.2004	0.2516	
42 Chloroform	83	10.373	10.378	-0.005	96	13022	0.2004	0.2105	
43 Cyclohexane	84	10.603	10.608	-0.005	93	8769	0.2004	0.2061	M
44 1,1,1-Trichloroethane	97	10.662	10.657	0.005	96	12350	0.2004	0.2024	M
45 Carbon tetrachloride	117	10.903	10.913	-0.010	97	11119	0.2004	0.1871	
46 Isooctane	57	11.363	11.363	0.000	98	39509	0.2004	0.2120	
47 Benzene	78	11.416	11.416	0.000	97	22031	0.2004	0.2092	M
48 1,2-Dichloroethane	62	11.625	11.625	0.000	96	9059	0.2004	0.2067	
49 n-Heptane	43	11.775	11.780	-0.005	97	16790	0.2004	0.2267	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	96	1322941	10.0	10.0	
52 n-Butanol	56	12.839	12.802	0.037	93	7541	0.2004	0.3176	
53 Trichloroethene	95	12.807	12.813	-0.005	94	9007	0.2004	0.2013	
A 51 GRO	1	13.251	(4.724-21.778)		0	8086057	0.2004	0	
54 1,2-Dichloropropane	63	13.422	13.417	0.005	88	8791	0.2004	0.2006	
55 Methyl methacrylate	69	13.620	13.610	0.010	94	7495	0.2004	0.1880	
56 1,4-Dioxane	88	13.722	13.685	0.038	84	6017	0.2004	0.2717	
57 Dibromomethane	174	13.685	13.690	-0.006	95	7326	0.2004	0.1926	
58 Dichlorobromomethane	83	14.000	14.000	0.000	97	13473	0.2004	0.1855	
60 cis-1,3-Dichloropropene	75	14.974	14.979	-0.005	95	11824	0.2004	0.1945	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	9768807	0.2004	0	
61 4-Methyl-2-pentanone (MIBK	43	15.338	15.311	0.027	98	20052	0.2004	0.2138	
65 Toluene	92	15.589	15.589	0.000	93	15920	0.2004	0.2073	
64 n-Octane	43	15.643	15.637	0.005	94	22966	0.2004	0.2172	
66 trans-1,3-Dichloropropene	75	16.231	16.236	-0.005	46	14608	0.2004	0.2258	
67 1,1,2-Trichloroethane	83	16.632	16.632	0.000	96	7828	0.2004	0.1958	
68 Tetrachloroethene	166	16.718	16.712	0.006	95	11314	0.2004	0.1930	
69 2-Hexanone	43	17.151	17.130	0.021	92	21211	0.2004	0.2263	
71 Chlorodibromomethane	129	17.429	17.429	0.000	97	11384	0.2004	0.1671	
72 Ethylene Dibromide	107	17.707	17.713	-0.006	99	12893	0.2004	0.1902	
* 74 Chlorobenzene-d5	117	18.654	18.654	0.000	89	1235542	10.0	10.0	
75 Chlorobenzene	112	18.719	18.719	0.000	95	19660	0.2004	0.1948	
76 Ethylbenzene	91	18.879	18.879	0.000	99	34513	0.2004	0.1975	
77 n-Nonane	57	19.007	19.007	0.000	94	18994	0.2004	0.1976	
78 m-Xylene & p-Xylene	106	19.147	19.152	-0.005	0	25142	0.4009	0.3834	
S 73 Xylenes, Total	106				0		0.6013	0.5741	
79 o-Xylene	106	20.045	20.045	0.000	97	12250	0.2004	0.1907	
80 Styrene	104	20.099	20.104	-0.005	99	16536	0.2004	0.1676	
81 Bromoform	173	20.570	20.570	0.000	94	7901	0.2004	0.1359	
82 Isopropylbenzene	105	20.794	20.794	0.000	97	35180	0.2004	0.1858	
84 1,1,2,2-Tetrachloroethane	83	21.511	21.516	-0.005	97	20054	0.2004	0.1899	
85 N-Propylbenzene	91	21.575	21.575	0.000	99	45899	0.2004	0.1895	
86 1,2,3-Trichloropropane	75	21.613	21.618	-0.005	98	16922	0.2004	0.1966	
87 n-Decane	57	21.763	21.768	-0.005	90	23683	0.2004	0.1967	
88 4-Ethyltoluene	105	21.779	21.779	0.000	96	34915	0.2004	0.1864	
89 2-Chlorotoluene	91	21.784	21.784	0.000	94	32129	0.2004	0.1942	
90 1,3,5-Trimethylbenzene	105	21.891	21.896	-0.005	92	29101	0.2004	0.1850	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.281	22.287	-0.006	87	11616	0.2004	0.1614	
92 tert-Butylbenzene	119	22.405	22.410	-0.005	92	27246	0.2004	0.1877	
93 1,2,4-Trimethylbenzene	105	22.512	22.512	0.000	98	29180	0.2004	0.1846	
94 sec-Butylbenzene	105	22.752	22.752	0.000	98	42980	0.2004	0.1882	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	34713	0.2004	0.1863	
96 1,3-Dichlorobenzene	146	22.988	22.993	-0.005	99	18833	0.2004	0.1842	
97 1,4-Dichlorobenzene	146	23.137	23.132	0.005	91	18644	0.2004	0.1823	
98 Benzyl chloride	91	23.346	23.346	0.000	98	23675	0.2004	0.1738	
100 n-Butylbenzene	91	23.560	23.560	0.000	97	34023	0.2004	0.1824	
99 Undecane	57	23.587	23.587	0.000	97	22798	0.2004	0.1808	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	94	18034	0.2004	0.1855	
102 Dodecane	57	25.224	25.224	0.000	96	15398	0.2004	0.1473	
103 1,2,4-Trichlorobenzene	180	26.267	26.272	-0.005	93	8554	0.2004	0.1127	
104 Hexachlorobutadiene	225	26.460	26.460	0.000	97	11819	0.2004	0.1772	
105 Naphthalene	128	26.765	26.775	-0.010	97	9745	0.2004	0.0565	
106 1,2,3-Trichlorobenzene	180	27.262	27.257	0.005	93	6756	0.2004	0.0970	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL1w_00174	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

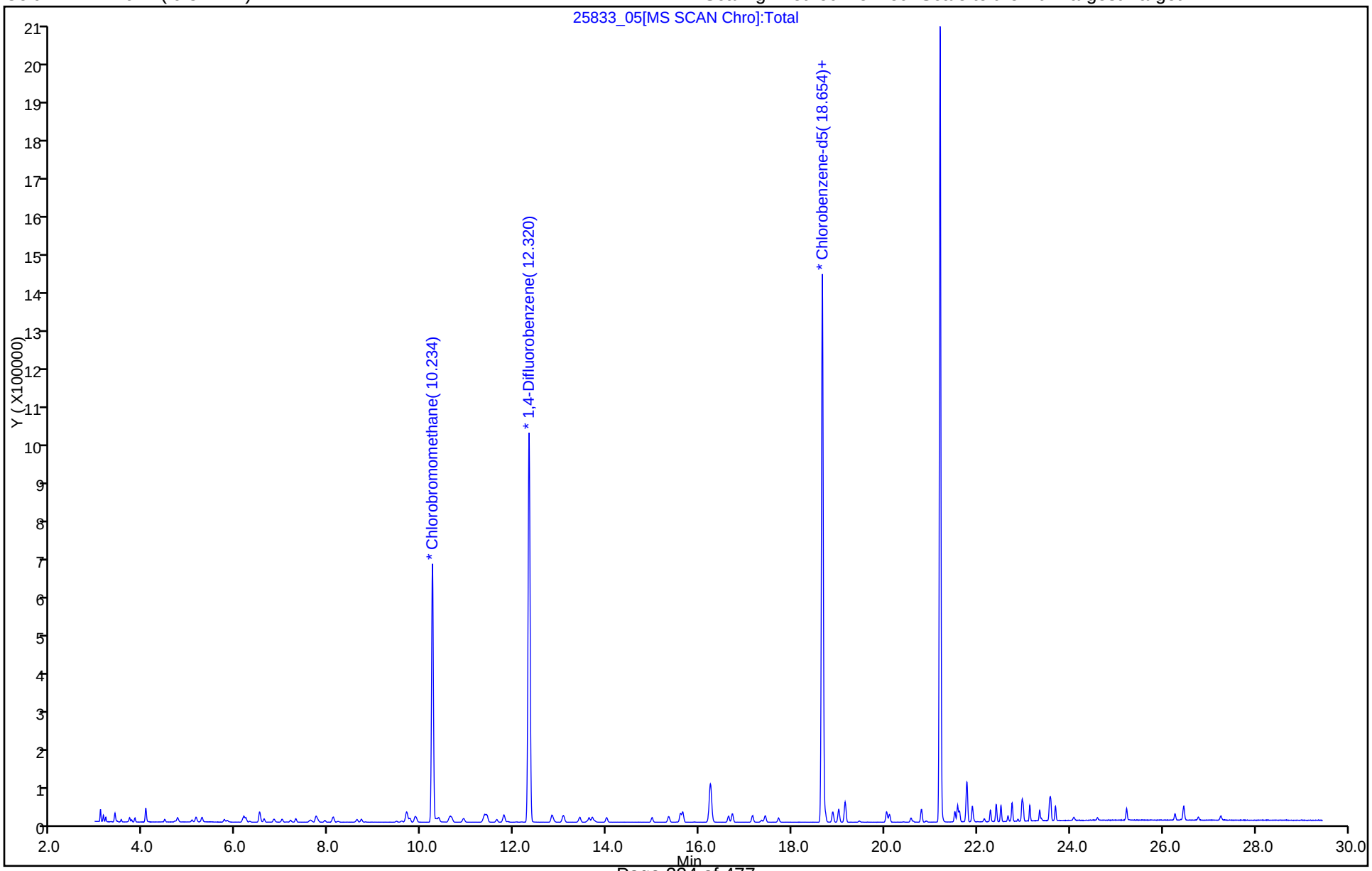
Report Date: 11-Jul-2017 10:09:19 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D

Injection Date:	10-Jul-2017 16:07:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

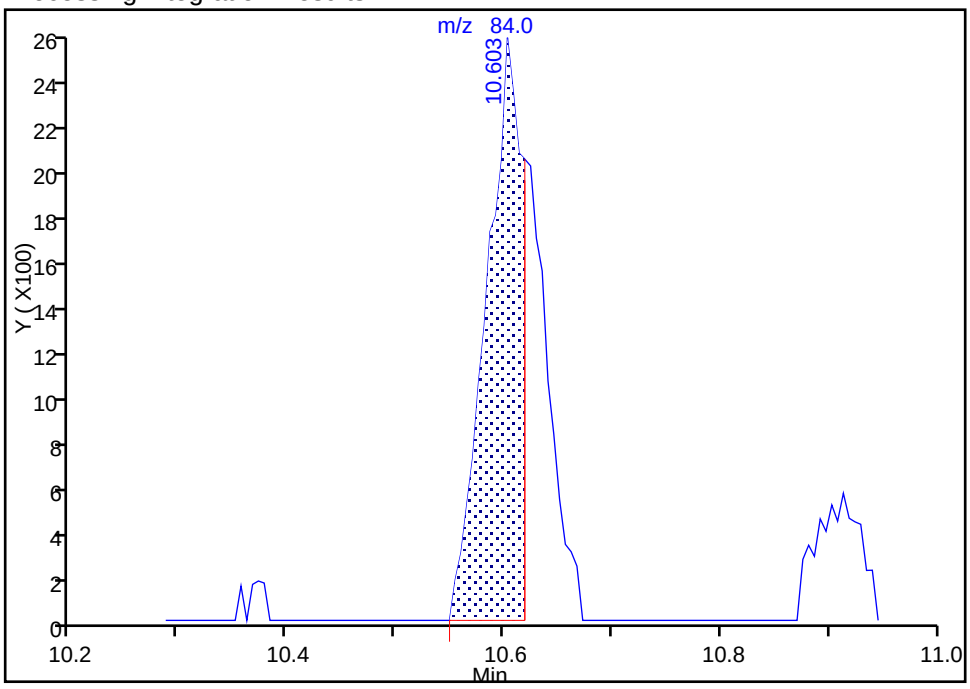
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D				
Injection Date:	10-Jul-2017 16:07:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

43 Cyclohexane, CAS: 110-82-7

Signal: 1

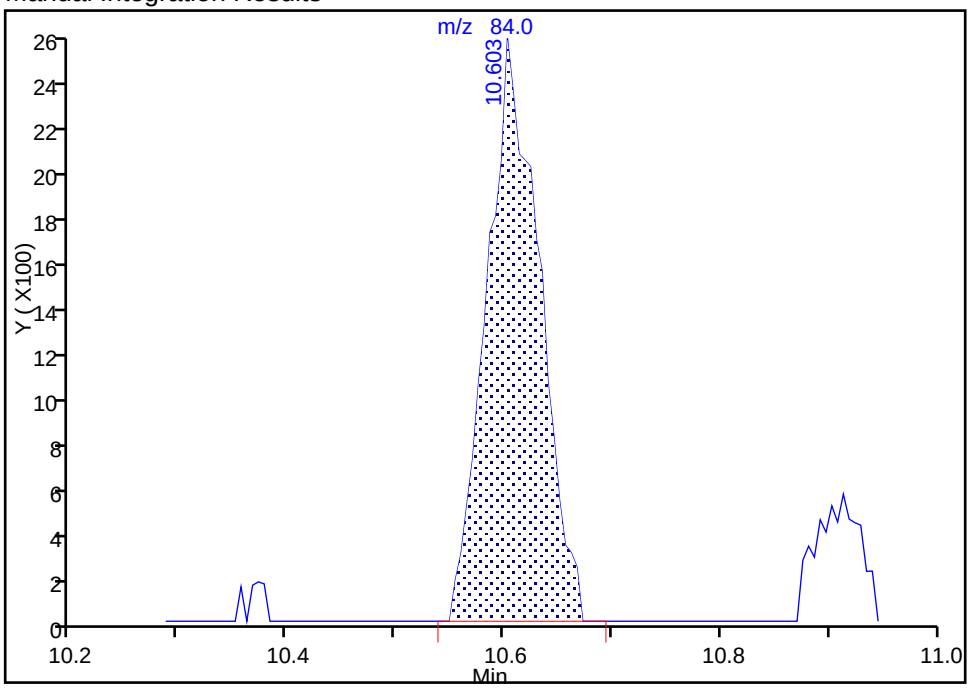
Processing Integration Results

RT: 10.60
Area: 6012
Amount: 0.148176
Amount Units: ppb v/v



Manual Integration Results

RT: 10.60
Area: 8769
Amount: 0.206144
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:44:54

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Burlington

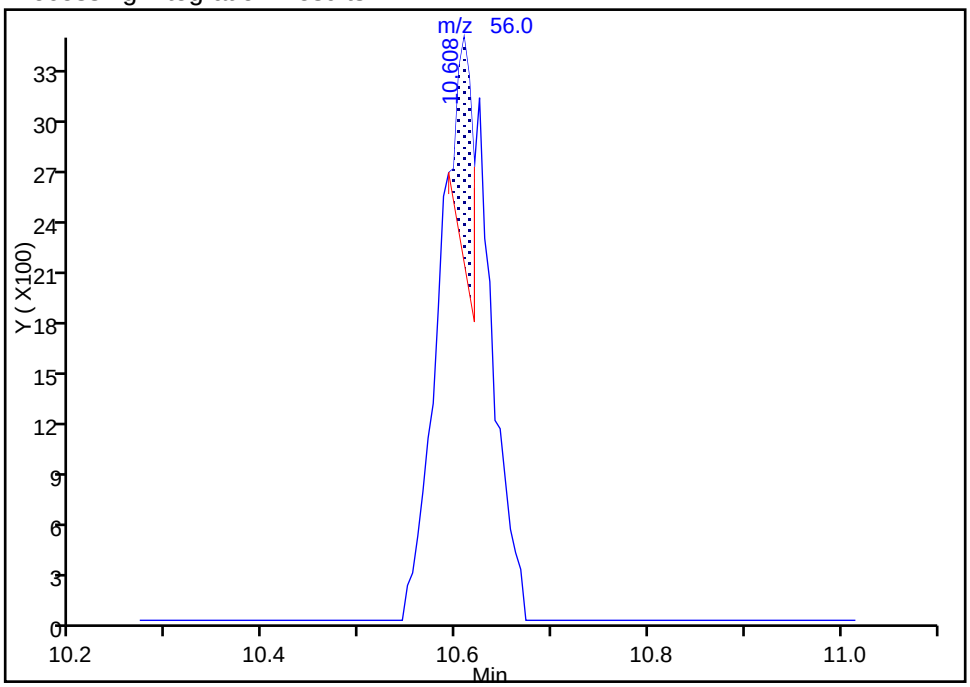
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D
Injection Date: 10-Jul-2017 16:07:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 2

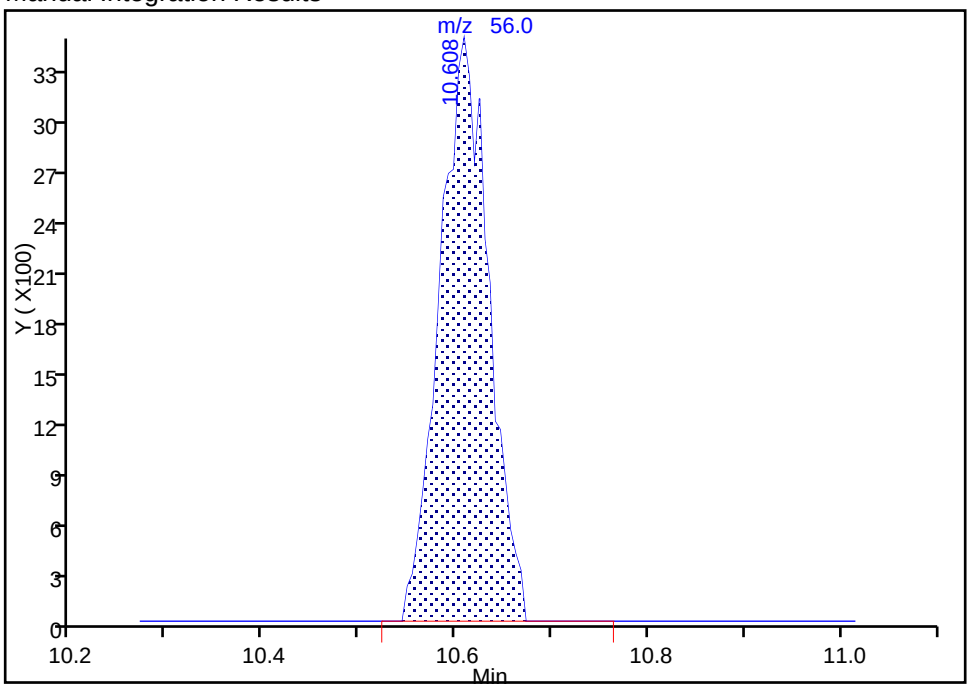
Processing Integration Results

RT: 10.61
Area: 1505
Amount: 0.148176
Amount Units: ppb v/v



Manual Integration Results

RT: 10.61
Area: 12227
Amount: 0.206144
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:44:56
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Burlington

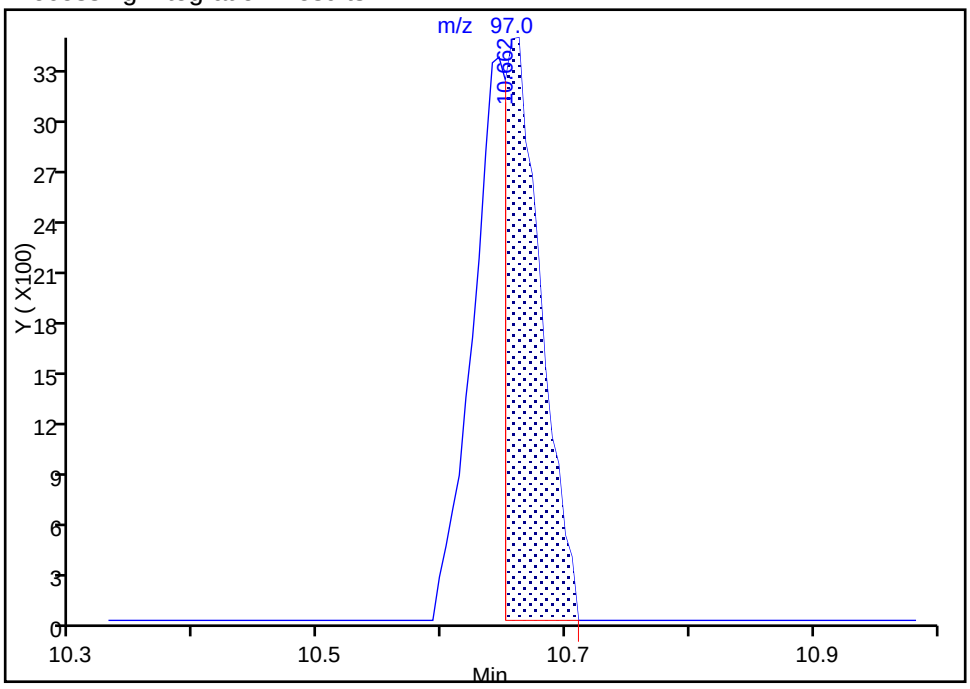
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D
Injection Date: 10-Jul-2017 16:07:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

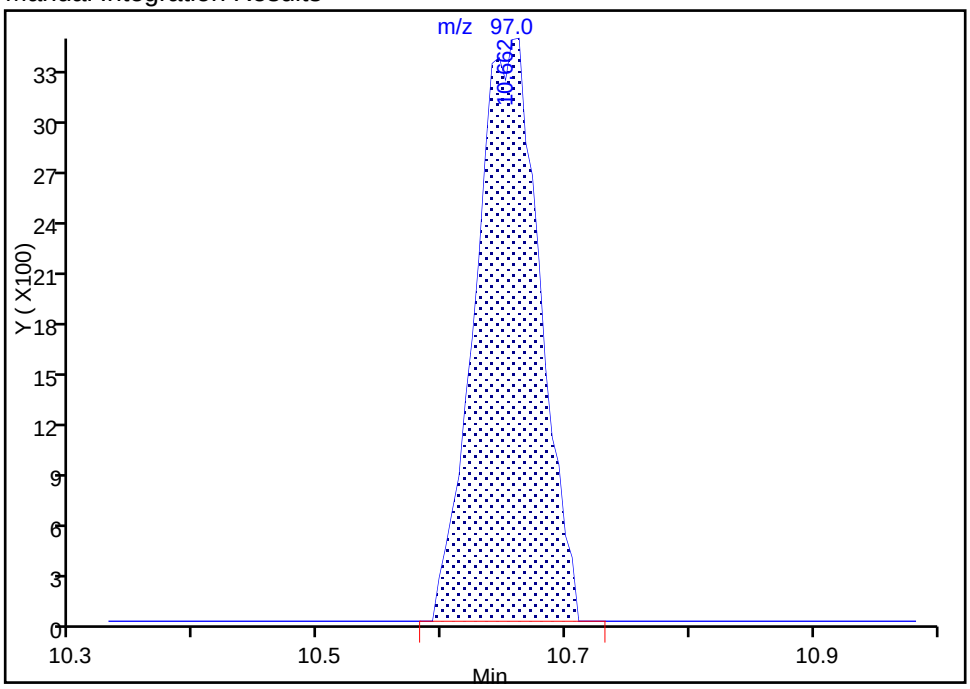
Processing Integration Results

RT: 10.66
Area: 7022
Amount: 0.122738
Amount Units: ppb v/v



Manual Integration Results

RT: 10.66
Area: 12350
Amount: 0.202431
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:45:02
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Burlington

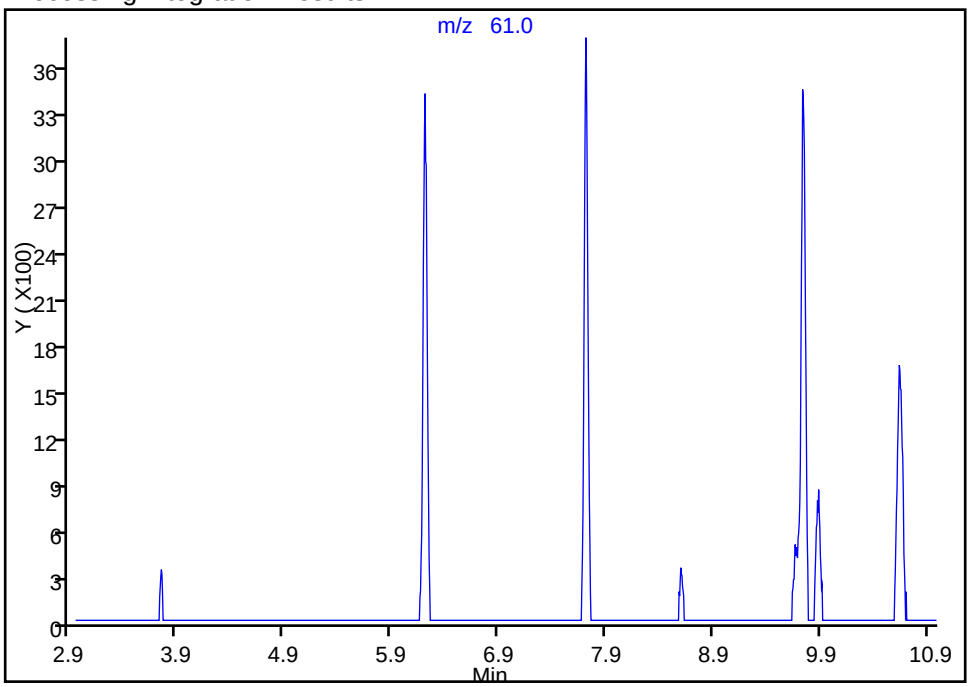
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D
Injection Date: 10-Jul-2017 16:07:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

44 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 3

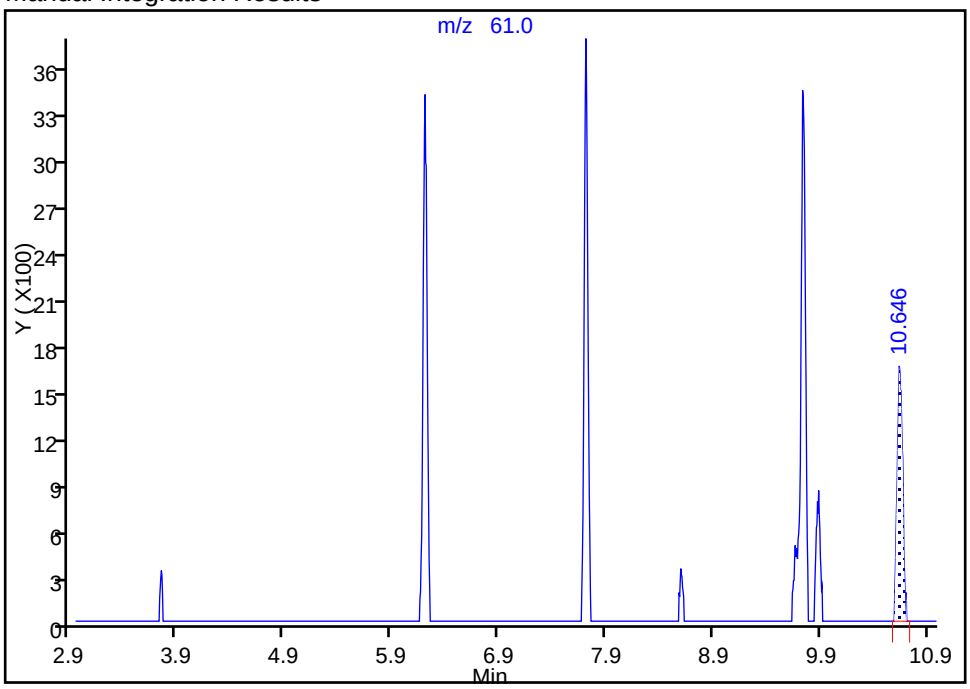
Processing Integration Results

RT: 10.66
Area: 0
Amount: 0.122738
Amount Units: ppb v/v



Manual Integration Results

RT: 10.65
Area: 5844
Amount: 0.202431
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:45:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Burlington

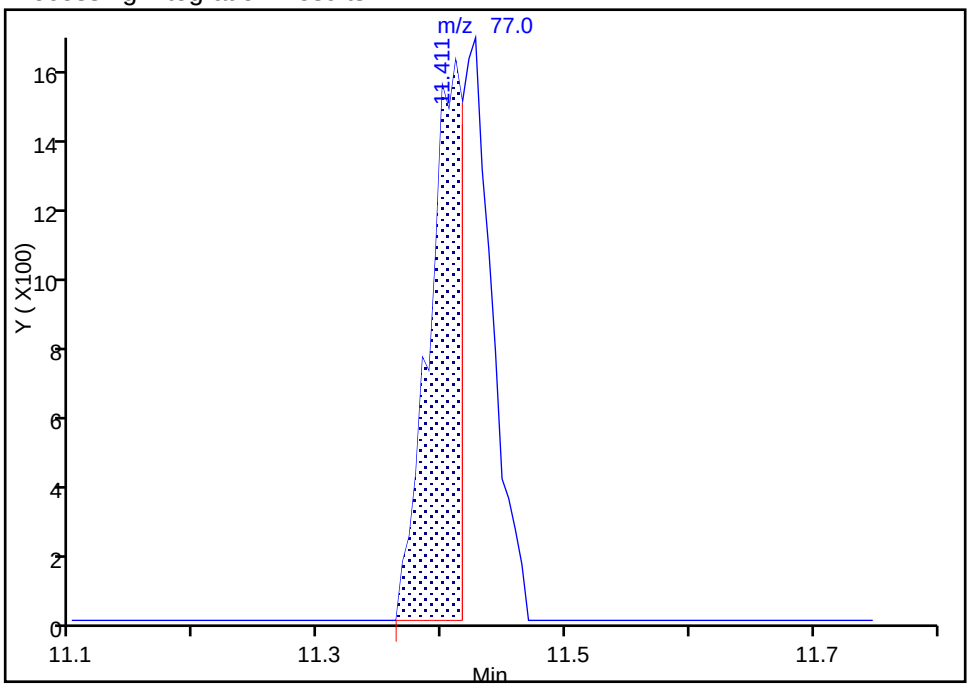
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_05.D				
Injection Date:	10-Jul-2017 16:07:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Signal: 2

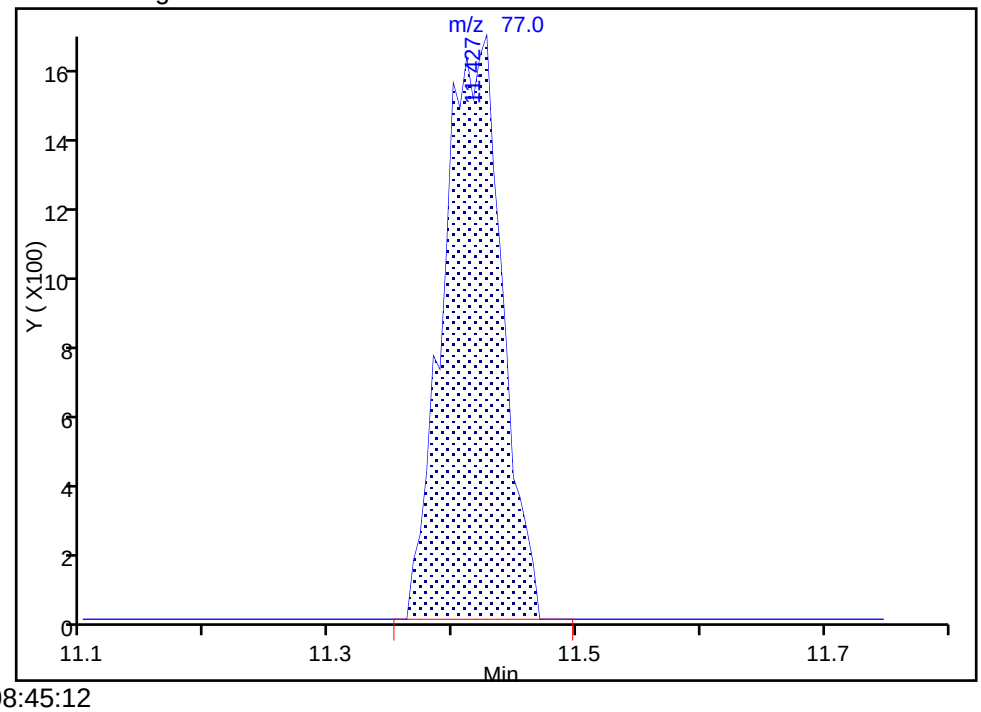
Processing Integration Results

RT: 11.41
Area: 2971
Amount: 0.209236
Amount Units: ppb v/v



Manual Integration Results

RT: 11.43
Area: 5359
Amount: 0.209236
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:45:12

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_06.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Jul-2017 16:58:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-006
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:20 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:47:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.065	3.060	0.005	98	16354	0.5005	0.7726	
2 Dichlorodifluoromethane	85	3.129	3.124	0.005	99	39727	0.5005	0.5997	
3 Chlorodifluoromethane	51	3.183	3.172	0.011	98	28752	0.5005	0.6363	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.376	0.005	94	38153	0.5005	0.5862	
5 Chloromethane	50	3.515	3.509	0.006	99	17185	0.5005	0.6474	
6 Butane	43	3.697	3.691	0.006	99	28819	0.5005	0.6460	
7 Vinyl chloride	62	3.739	3.739	0.000	97	16817	0.5005	0.5674	
8 Butadiene	54	3.809	3.809	0.000	97	12891	0.5005	0.5774	
10 Bromomethane	94	4.456	4.451	0.005	99	13166	0.5005	0.5740	
11 Chloroethane	64	4.670	4.670	0.000	99	7935	0.5005	0.5937	
12 2-Methylbutane	43	4.734	4.734	0.000	92	19738	0.5005	0.6292	
13 Vinyl bromide	106	5.045	5.045	0.000	97	13456	0.5005	0.5776	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	99	35544	0.5005	0.5692	
16 Pentane	43	5.259	5.259	0.000	98	30166	0.5005	0.6621	
17 Ethanol	45	5.724	5.713	0.011	97	94841	5.01	6.86	
18 Ethyl ether	59	5.799	5.778	0.021	97	10954	0.5005	0.5875	
20 1,1,2-Trichloro-1,2,2-trif	101	6.152	6.163	-0.011	95	27600	0.5005	0.5731	
19 Acrolein	56	6.173	6.168	0.005	95	5957	0.5005	0.7956	
21 1,1-Dichloroethene	96	6.216	6.216	0.000	94	13178	0.5005	0.5685	
22 Acetone	43	6.500	6.478	0.022	98	56314	0.5005	1.38	
23 Carbon disulfide	76	6.601	6.601	0.000	99	41542	0.5005	0.5973	
24 Isopropyl alcohol	45	6.799	6.773	0.026	100	35113	0.5005	0.7264	
25 3-Chloro-1-propene	41	6.987	6.992	-0.005	94	21972	0.5005	0.6062	
26 Acetonitrile	41	7.169	7.163	0.005	98	17773	0.5005	0.8382	
27 Methylene Chloride	49	7.292	7.286	0.006	99	21100	0.5005	0.6413	
28 2-Methyl-2-propanol	59	7.591	7.543	0.048	96	34797	0.5005	0.5912	
29 Methyl tert-butyl ether	73	7.725	7.704	0.021	98	43747	0.5005	0.5723	
31 trans-1,2-Dichloroethene	61	7.714	7.720	-0.006	94	24500	0.5005	0.5878	
32 Acrylonitrile	53	7.912	7.907	0.005	95	12891	0.5005	0.6048	
33 Hexane	57	8.094	8.094	0.000	93	27234	0.5005	0.6060	
34 1,1-Dichloroethane	63	8.608	8.613	-0.005	99	31492	0.5005	0.5736	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.699	8.693	0.006	100	46987	0.5005	0.6212	
S 30 1,2-Dichloroethene, Total	61				0		1.00	1.17	
37 cis-1,2-Dichloroethene	96	9.752	9.752	0.000	97	17025	0.5005	0.5872	
38 2-Butanone (MEK)	72	9.854	9.833	0.021	96	10145	0.5005	0.6565	
39 Ethyl acetate	88	9.892	9.870	0.022	95	1073	0.5005	0.5028	
* 40 Chlorobromomethane	128	10.234	10.239	-0.005	97	232578	10.0	10.0	
41 Tetrahydrofuran	42	10.303	10.271	0.032	95	24946	0.5005	0.6492	
42 Chloroform	83	10.368	10.378	-0.010	96	34874	0.5005	0.5744	
43 Cyclohexane	84	10.608	10.608	0.000	95	23066	0.5005	0.5590	
44 1,1,1-Trichloroethane	97	10.651	10.657	-0.006	98	33075	0.5005	0.5589	
45 Carbon tetrachloride	117	10.908	10.913	-0.005	97	29910	0.5005	0.5189	
46 Isooctane	57	11.357	11.363	-0.006	99	103590	0.5005	0.5729	
47 Benzene	78	11.416	11.416	0.000	97	58669	0.5005	0.5744	
48 1,2-Dichloroethane	62	11.625	11.625	0.000	96	24567	0.5005	0.5778	
49 n-Heptane	43	11.775	11.780	-0.005	97	42421	0.5005	0.5904	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	96	1283336	10.0	10.0	
52 n-Butanol	56	12.834	12.802	0.032	91	16792	0.5005	0.7291	
53 Trichloroethene	95	12.812	12.813	0.000	96	23863	0.5005	0.5497	
A 51 GRO	1	13.251	(4.724-21.778)		0	13103692	0.5005	0	
54 1,2-Dichloropropane	63	13.422	13.417	0.005	91	23993	0.5005	0.5645	
55 Methyl methacrylate	69	13.620	13.610	0.010	93	20414	0.5005	0.5279	
56 1,4-Dioxane	88	13.706	13.685	0.022	98	14834	0.5005	0.6906	
57 Dibromomethane	174	13.690	13.690	0.000	97	19943	0.5005	0.5406	
58 Dichlorobromomethane	83	13.995	14.000	-0.005	98	38067	0.5005	0.5404	
60 cis-1,3-Dichloropropene	75	14.974	14.979	-0.005	95	32008	0.5005	0.5428	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	17565959	0.5005	0	
61 4-Methyl-2-pentanone (MIBK	43	15.327	15.311	0.016	98	54022	0.5005	0.5938	
65 Toluene	92	15.589	15.589	0.000	92	40485	0.5005	0.5374	
64 n-Octane	43	15.637	15.637	0.000	95	59784	0.5005	0.5829	
66 trans-1,3-Dichloropropene	75	16.236	16.236	0.000	97	36226	0.5005	0.5773	
67 1,1,2-Trichloroethane	83	16.627	16.632	-0.005	96	21337	0.5005	0.5439	
68 Tetrachloroethene	166	16.712	16.712	0.000	96	30364	0.5005	0.5278	
69 2-Hexanone	43	17.140	17.130	0.010	92	58982	0.5005	0.6413	
71 Chlorodibromomethane	129	17.424	17.429	-0.005	98	33248	0.5005	0.4976	
72 Ethylene Dibromide	107	17.707	17.713	-0.006	98	34704	0.5005	0.5217	
* 74 Chlorobenzene-d5	117	18.654	18.654	0.000	89	1212145	10.0	10.0	
75 Chlorobenzene	112	18.719	18.719	-0.001	92	53241	0.5005	0.5377	
76 Ethylbenzene	91	18.884	18.879	0.005	99	92065	0.5005	0.5370	
77 n-Nonane	57	19.013	19.007	0.006	94	51177	0.5005	0.5428	
78 m-Xylene & p-Xylene	106	19.146	19.152	-0.006	0	68122	1.00	1.06	
S 73 Xylenes, Total	106				0		1.50	1.59	
79 o-Xylene	106	20.045	20.045	0.000	97	33706	0.5005	0.5348	
80 Styrene	104	20.104	20.104	0.000	99	47639	0.5005	0.4921	
81 Bromoform	173	20.564	20.570	-0.006	95	27389	0.5005	0.4801	
82 Isopropylbenzene	105	20.794	20.794	0.000	97	96944	0.5005	0.5219	
84 1,1,2,2-Tetrachloroethane	83	21.516	21.516	0.000	98	55664	0.5005	0.5372	
85 N-Propylbenzene	91	21.575	21.575	0.000	98	127200	0.5005	0.5354	
86 1,2,3-Trichloropropane	75	21.613	21.618	-0.005	99	45805	0.5005	0.5423	
87 n-Decane	57	21.762	21.768	-0.006	89	65422	0.5005	0.5538	
88 4-Ethyltoluene	105	21.779	21.779	0.000	97	100172	0.5005	0.5450	
89 2-Chlorotoluene	91	21.784	21.784	0.000	95	85803	0.5005	0.5286	
90 1,3,5-Trimethylbenzene	105	21.891	21.896	-0.005	92	81573	0.5005	0.5285	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	87	34231	0.5005	0.4847	
92 tert-Butylbenzene	119	22.410	22.410	0.000	92	76242	0.5005	0.5354	
93 1,2,4-Trimethylbenzene	105	22.511	22.512	-0.001	98	81980	0.5005	0.5287	
94 sec-Butylbenzene	105	22.752	22.752	0.000	99	121683	0.5005	0.5430	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	96781	0.5005	0.5294	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	99	53913	0.5005	0.5375	
97 1,4-Dichlorobenzene	146	23.132	23.132	0.000	93	54073	0.5005	0.5389	
98 Benzyl chloride	91	23.346	23.346	0.000	98	65254	0.5005	0.4883	
100 n-Butylbenzene	91	23.560	23.560	0.000	97	98346	0.5005	0.5375	
99 Undecane	57	23.587	23.587	0.000	97	62185	0.5005	0.5025	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	94	51755	0.5005	0.5426	
102 Dodecane	57	25.218	25.224	-0.006	95	37161	0.5005	0.3622	
103 1,2,4-Trichlorobenzene	180	26.267	26.272	-0.005	94	35489	0.5005	0.4768	
104 Hexachlorobutadiene	225	26.454	26.460	-0.006	98	33982	0.5005	0.5193	
105 Naphthalene	128	26.775	26.775	0.000	99	72990	0.5005	0.4316	
106 1,2,3-Trichlorobenzene	180	27.257	27.257	0.000	94	30375	0.5005	0.4445	

Reagents:

ATTO15CAL2w_00239	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

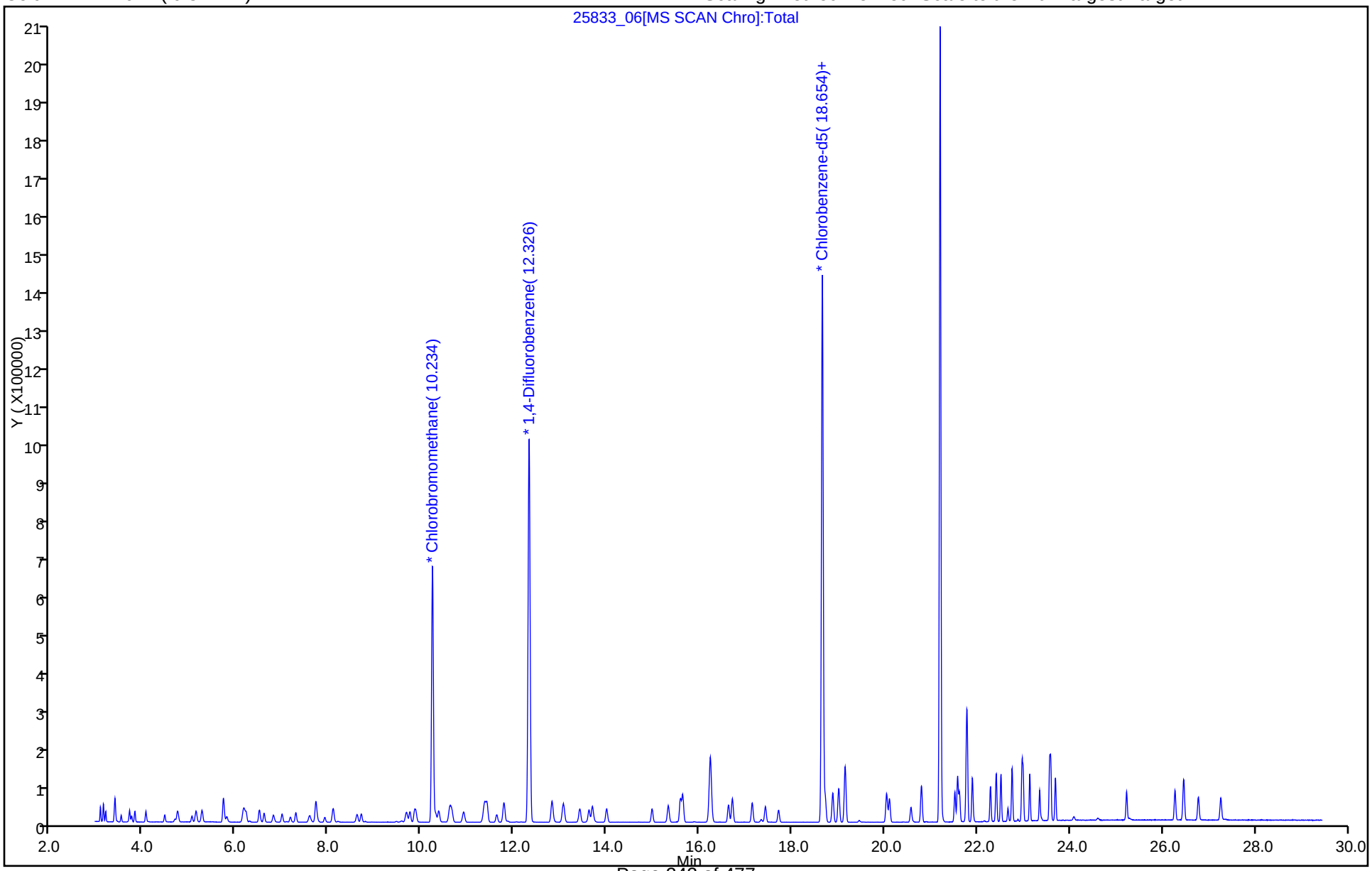
Report Date: 11-Jul-2017 10:09:20 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_06.D

Injection Date:	10-Jul-2017 16:58:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_07.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Jul-2017 17:48:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-007
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:21 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:48:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.060	0.000	99	132075	4.99	5.86	
2 Dichlorodifluoromethane	85	3.124	3.124	0.000	99	360659	4.99	5.11	
3 Chlorodifluoromethane	51	3.172	3.172	0.000	97	254297	4.99	5.29	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.376	3.376	0.000	93	349472	4.99	5.04	
5 Chloromethane	50	3.509	3.509	0.000	99	147772	4.99	5.23	
6 Butane	43	3.691	3.691	0.000	99	255501	4.99	5.38	
7 Vinyl chloride	62	3.734	3.739	-0.005	98	154992	4.99	4.91	
8 Butadiene	54	3.809	3.809	0.000	97	117472	4.99	4.94	
10 Bromomethane	94	4.451	4.451	0.000	98	122548	4.99	5.02	
11 Chloroethane	64	4.676	4.670	0.006	100	73594	4.99	5.17	
12 2-Methylbutane	43	4.734	4.734	0.000	95	173297	4.99	5.19	
13 Vinyl bromide	106	5.045	5.045	0.000	99	121565	4.99	4.90	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	98	326906	4.99	4.92	
16 Pentane	43	5.259	5.259	0.000	98	261940	4.99	5.40	
17 Ethanol	45	5.713	5.713	0.000	97	167884	10.0	11.4	
18 Ethyl ether	59	5.778	5.778	0.000	97	99565	4.99	5.02	
20 1,1,2-Trichloro-1,2,2-trif	101	6.163	6.163	0.000	95	249509	4.99	4.87	
19 Acrolein	56	6.168	6.168	0.000	95	42847	4.99	5.38	
21 1,1-Dichloroethene	96	6.211	6.216	-0.005	92	119872	4.99	4.86	
22 Acetone	43	6.484	6.478	0.006	98	244292	4.99	5.64	
23 Carbon disulfide	76	6.601	6.601	0.000	100	373131	4.99	5.04	
24 Isopropyl alcohol	45	6.767	6.773	-0.006	100	302036	4.99	5.87	
25 3-Chloro-1-propene	41	6.992	6.992	0.000	93	212129	4.99	5.50	
26 Acetonitrile	41	7.158	7.163	-0.005	99	127270	4.99	5.64	
27 Methylene Chloride	49	7.286	7.286	0.000	98	184476	4.99	5.27	
28 2-Methyl-2-propanol	59	7.548	7.543	0.005	95	331817	4.99	5.30	
29 Methyl tert-butyl ether	73	7.709	7.704	0.005	98	403440	4.99	4.96	
31 trans-1,2-Dichloroethene	61	7.719	7.720	-0.001	95	226470	4.99	5.10	
32 Acrylonitrile	53	7.907	7.907	0.000	95	116021	4.99	5.11	
33 Hexane	57	8.094	8.094	0.000	94	240030	4.99	5.02	
34 1,1-Dichloroethane	63	8.608	8.613	-0.005	99	289894	4.99	4.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.693	8.693	0.000	100	444513	4.99	5.52	
S 30 1,2-Dichloroethene, Total	61				0		9.99	9.95	
37 cis-1,2-Dichloroethene	96	9.752	9.752	0.000	98	149503	4.99	4.84	
38 2-Butanone (MEK)	72	9.838	9.833	0.005	99	76927	4.99	4.68	
39 Ethyl acetate	88	9.865	9.870	-0.005	99	11452	4.99	5.04	
* 40 Chlorobromomethane	128	10.239	10.239	0.000	97	247607	10.0	10.0	
41 Tetrahydrofuran	42	10.277	10.271	0.006	96	225463	4.99	5.53	
42 Chloroform	83	10.373	10.378	-0.005	97	312713	4.99	4.84	
43 Cyclohexane	84	10.614	10.608	0.006	96	213635	4.99	4.88	
44 1,1,1-Trichloroethane	97	10.651	10.657	-0.006	97	302372	4.99	4.82	
45 Carbon tetrachloride	117	10.908	10.913	-0.005	98	306946	4.99	5.02	
46 Isooctane	57	11.363	11.363	0.000	99	948713	4.99	4.95	
47 Benzene	78	11.416	11.416	0.000	97	523126	4.99	4.83	
48 1,2-Dichloroethane	62	11.625	11.625	0.000	96	222855	4.99	4.94	
49 n-Heptane	43	11.780	11.780	0.000	96	382283	4.99	5.02	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	96	1360858	10.0	10.0	
52 n-Butanol	56	12.802	12.802	0.000	91	122532	4.99	5.02	
53 Trichloroethene	95	12.812	12.813	0.000	96	216292	4.99	4.70	
A 51 GRO	1	13.251	(4.724-21.778)		0	76623010	4.99	0	
54 1,2-Dichloropropane	63	13.417	13.417	0.000	92	221295	4.99	4.91	
55 Methyl methacrylate	69	13.610	13.610	0.000	93	191806	4.99	4.68	
56 1,4-Dioxane	88	13.684	13.685	0.000	64	114925	4.99	5.05	
57 Dibromomethane	174	13.690	13.690	0.000	96	194655	4.99	4.98	
58 Dichlorobromomethane	83	14.000	14.000	0.000	98	360366	4.99	4.82	
60 cis-1,3-Dichloropropene	75	14.979	14.979	0.000	94	304081	4.99	4.86	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	119690600	4.99	0	
61 4-Methyl-2-pentanone (MIBK	43	15.311	15.311	0.000	98	473436	4.99	4.91	
65 Toluene	92	15.589	15.589	0.000	93	376522	4.99	4.88	
64 n-Octane	43	15.637	15.637	0.000	96	553525	4.99	5.09	
66 trans-1,3-Dichloropropene	75	16.236	16.236	0.000	97	308392	4.99	4.63	
67 1,1,2-Trichloroethane	83	16.627	16.632	-0.005	96	196233	4.99	4.88	
68 Tetrachloroethene	166	16.712	16.712	0.000	96	276511	4.99	4.69	
69 2-Hexanone	43	17.130	17.130	0.000	92	419962	4.99	4.45	
71 Chlorodibromomethane	129	17.424	17.429	-0.005	98	314423	4.99	4.59	
72 Ethylene Dibromide	107	17.713	17.713	0.000	98	331712	4.99	4.86	
* 74 Chlorobenzene-d5	117	18.654	18.654	0.000	89	1242481	10.0	10.0	
75 Chlorobenzene	112	18.718	18.719	-0.001	92	494984	4.99	4.88	
76 Ethylbenzene	91	18.879	18.879	0.000	99	857519	4.99	4.88	
77 n-Nonane	57	19.007	19.007	0.000	95	485505	4.99	5.02	
78 m-Xylene & p-Xylene	106	19.146	19.152	-0.006	0	648081	9.99	9.83	
S 73 Xylenes, Total	106				0		15.0	14.7	
79 o-Xylene	106	20.045	20.045	0.000	98	315658	4.99	4.89	
80 Styrene	104	20.104	20.104	0.000	99	489592	4.99	4.93	
81 Bromoform	173	20.569	20.570	-0.001	96	234149	4.99	4.00	
82 Isopropylbenzene	105	20.794	20.794	0.000	97	977561	4.99	5.13	
84 1,1,2,2-Tetrachloroethane	83	21.516	21.516	0.000	97	539839	4.99	5.08	
85 N-Propylbenzene	91	21.575	21.575	0.000	98	1231713	4.99	5.06	
86 1,2,3-Trichloropropane	75	21.618	21.618	0.000	99	432653	4.99	5.00	
87 n-Decane	57	21.762	21.768	-0.006	89	667561	4.99	5.51	
88 4-Ethyltoluene	105	21.779	21.779	-0.001	99	995829	4.99	5.29	
89 2-Chlorotoluene	91	21.784	21.784	0.000	96	866602	4.99	5.21	
90 1,3,5-Trimethylbenzene	105	21.896	21.896	0.000	92	809215	4.99	5.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	87	354585	4.99	4.90	
92 tert-Butylbenzene	119	22.410	22.410	0.000	92	756262	4.99	5.18	
93 1,2,4-Trimethylbenzene	105	22.511	22.512	-0.001	98	827042	4.99	5.20	
94 sec-Butylbenzene	105	22.752	22.752	0.000	99	1205655	4.99	5.25	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	998602	4.99	5.33	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	99	536849	4.99	5.22	
97 1,4-Dichlorobenzene	146	23.132	23.132	0.000	93	535187	4.99	5.20	
98 Benzyl chloride	91	23.346	23.346	0.000	98	741736	4.99	5.42	
100 n-Butylbenzene	91	23.560	23.560	0.000	98	1014430	4.99	5.41	
99 Undecane	57	23.587	23.587	0.000	97	669786	4.99	5.28	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	97	512402	4.99	5.24	
102 Dodecane	57	25.224	25.224	0.000	96	579531	4.99	5.51	
103 1,2,4-Trichlorobenzene	180	26.272	26.272	0.000	94	352066	4.99	4.61	
104 Hexachlorobutadiene	225	26.460	26.460	0.000	98	330280	4.99	4.92	
105 Naphthalene	128	26.775	26.775	0.000	99	866011	4.99	5.00	M
106 1,2,3-Trichlorobenzene	180	27.257	27.257	0.000	95	360740	4.99	5.15	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL3w_00184	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

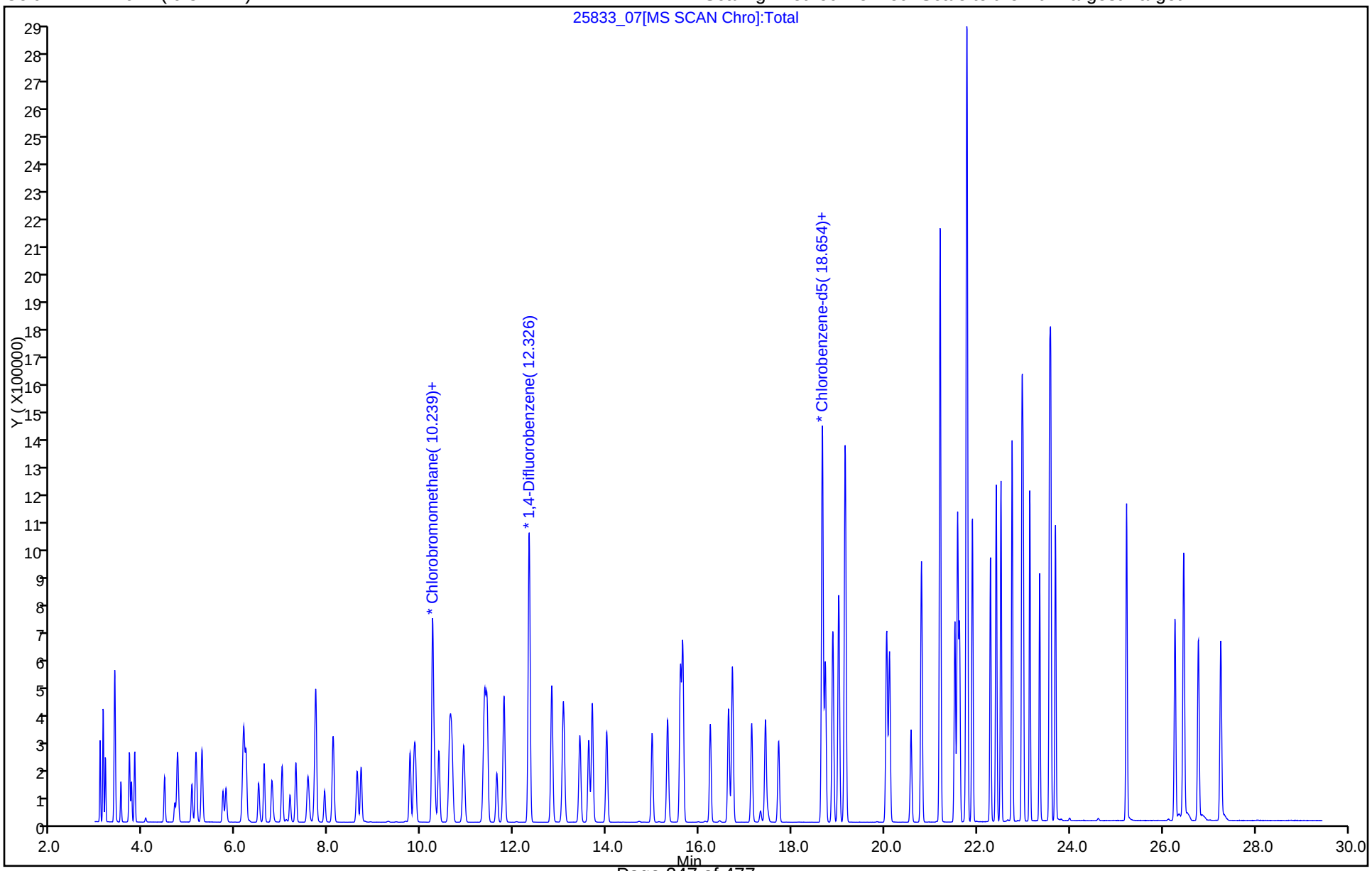
Report Date: 11-Jul-2017 10:09:22 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_07.D

Injection Date:	10-Jul-2017 17:48:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

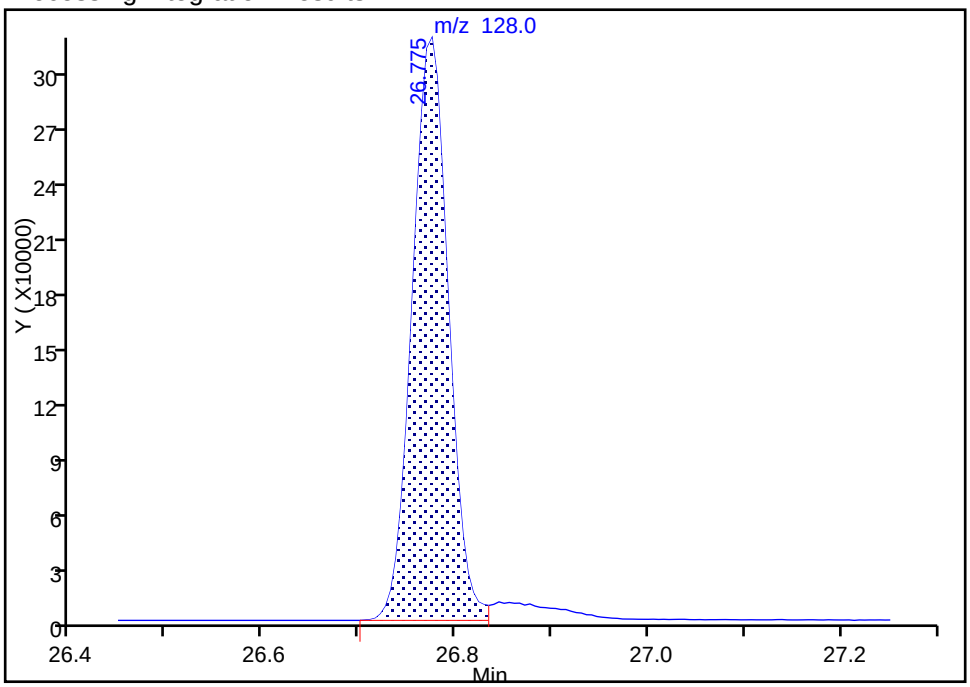
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_07.D				
Injection Date:	10-Jul-2017 17:48:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

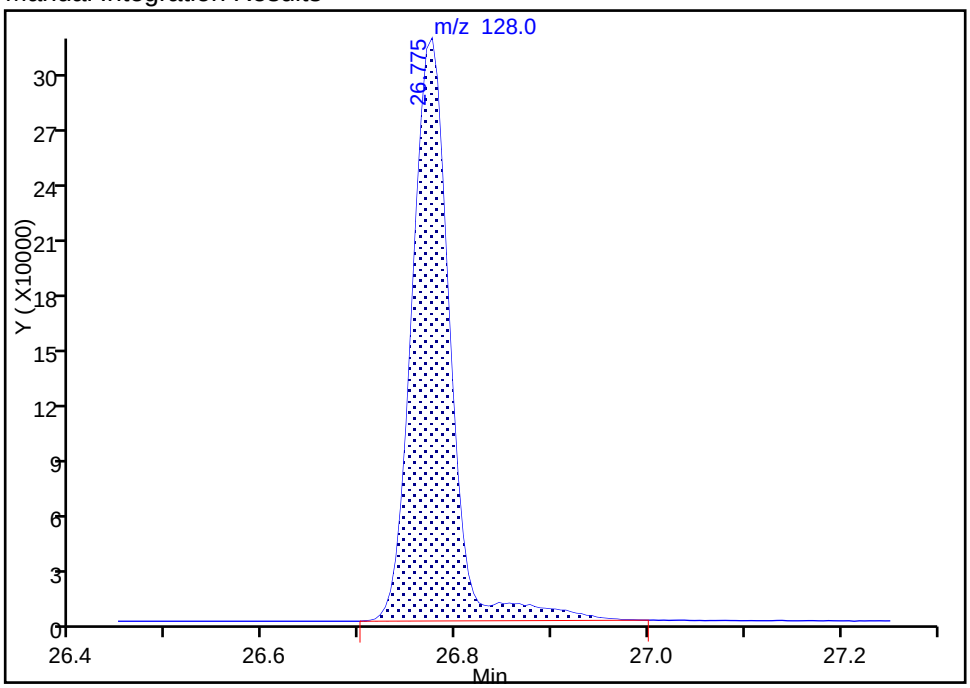
Processing Integration Results

RT: 26.78
Area: 822980
Amount: 4.786866
Amount Units: ppb v/v



Manual Integration Results

RT: 26.78
Area: 866011
Amount: 4.995417
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 09:53:00

Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_08.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 10-Jul-2017 18:38:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-008
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:23 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:38:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.060	0.000	98	230010	10.0	9.58	
2 Dichlorodifluoromethane	85	3.124	3.124	0.000	100	662792	10.0	8.82	
3 Chlorodifluoromethane	51	3.172	3.172	0.000	97	456457	10.0	8.91	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.376	3.376	0.000	97	652830	10.0	8.85	
5 Chloromethane	50	3.509	3.509	0.000	99	267636	10.0	8.89	
6 Butane	43	3.691	3.691	0.000	99	454867	10.0	8.99	
7 Vinyl chloride	62	3.739	3.739	0.000	98	289557	10.0	8.61	
8 Butadiene	54	3.809	3.809	0.000	98	218501	10.0	8.63	
10 Bromomethane	94	4.451	4.451	0.000	99	227687	10.0	8.75	
11 Chloroethane	64	4.670	4.670	0.000	100	134131	10.0	8.85	
12 2-Methylbutane	43	4.734	4.734	0.000	94	306378	10.0	8.61	
13 Vinyl bromide	106	5.045	5.045	0.000	99	228882	10.0	8.66	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	98	613154	10.0	8.66	
16 Pentane	43	5.259	5.259	0.000	98	458670	10.0	8.88	
17 Ethanol	45	5.713	5.713	0.000	97	226240	15.0	14.4	
18 Ethyl ether	59	5.778	5.778	0.000	98	183672	10.0	8.69	
20 1,1,2-Trichloro-1,2,2-trif	101	6.163	6.163	0.000	95	463068	10.0	8.48	
19 Acrolein	56	6.168	6.168	0.000	94	86466	10.0	10.2	
21 1,1-Dichloroethene	96	6.216	6.216	0.000	93	225190	10.0	8.57	
22 Acetone	43	6.478	6.478	0.000	98	438279	10.0	9.50	
23 Carbon disulfide	76	6.601	6.601	0.000	99	684486	10.0	8.68	
24 Isopropyl alcohol	45	6.773	6.773	0.000	100	517433	10.0	9.44	
25 3-Chloro-1-propene	41	6.992	6.992	0.000	93	368638	10.0	8.97	
26 Acetonitrile	41	7.163	7.163	0.000	99	230906	10.0	9.60	
27 Methylene Chloride	49	7.286	7.286	0.000	99	328742	10.0	8.81	
28 2-Methyl-2-propanol	59	7.543	7.543	0.000	94	615060	10.0	9.21	
29 Methyl tert-butyl ether	73	7.704	7.704	0.000	98	757127	10.0	8.73	
31 trans-1,2-Dichloroethene	61	7.720	7.720	0.000	96	414437	10.0	8.77	
32 Acrylonitrile	53	7.907	7.907	0.000	94	214109	10.0	8.86	
33 Hexane	57	8.094	8.094	0.000	94	439022	10.0	8.61	
34 1,1-Dichloroethane	63	8.613	8.613	0.000	99	528520	10.0	8.49	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.693	8.693	0.000	100	806853	10.0	9.41	
S 30 1,2-Dichloroethene, Total	61				0		20.0	17.3	
37 cis-1,2-Dichloroethene	96	9.752	9.752	0.000	97	280353	10.0	8.53	
38 2-Butanone (MEK)	72	9.833	9.833	0.000	99	147242	10.0	8.40	
39 Ethyl acetate	88	9.870	9.870	0.000	99	21199	10.0	8.76	
* 40 Chlorobromomethane	128	10.239	10.239	0.000	98	263752	10.0	10.0	
41 Tetrahydrofuran	42	10.271	10.271	0.000	96	407906	10.0	9.33	
42 Chloroform	83	10.378	10.378	0.000	96	586330	10.0	8.52	
43 Cyclohexane	84	10.608	10.608	0.000	96	399017	10.0	8.50	
44 1,1,1-Trichloroethane	97	10.657	10.657	0.000	96	571077	10.0	8.48	
45 Carbon tetrachloride	117	10.913	10.913	0.000	98	566382	10.0	8.64	
46 Isooctane	57	11.363	11.363	0.000	99	1762033	10.0	8.56	
47 Benzene	78	11.416	11.416	0.000	97	979111	10.0	8.42	
48 1,2-Dichloroethane	62	11.625	11.625	0.000	96	414260	10.0	8.56	
49 n-Heptane	43	11.780	11.780	0.000	96	699906	10.0	8.56	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	96	1460225	10.0	10.0	
52 n-Butanol	56	12.802	12.802	0.000	90	235893	10.0	9.00	
53 Trichloroethene	95	12.813	12.813	0.000	96	409801	10.0	8.30	
A 51 GRO	1	13.251	(4.724-21.778)		0	124507075	10.0	0	
54 1,2-Dichloropropane	63	13.417	13.417	0.000	92	414266	10.0	8.57	
55 Methyl methacrylate	69	13.610	13.610	0.000	94	380407	10.0	8.65	
56 1,4-Dioxane	88	13.685	13.685	0.000	96	220870	10.0	9.04	
57 Dibromomethane	174	13.690	13.690	0.000	97	351467	10.0	8.37	
58 Dichlorobromomethane	83	14.000	14.000	0.000	98	696002	10.0	8.68	
60 cis-1,3-Dichloropropene	75	14.979	14.979	0.000	94	576973	10.0	8.60	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	211334938	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.311	15.311	0.000	97	911696	10.0	8.81	
65 Toluene	92	15.589	15.589	0.000	93	703666	10.0	8.27	
64 n-Octane	43	15.637	15.637	0.000	95	1016929	10.0	8.71	
66 trans-1,3-Dichloropropene	75	16.236	16.236	0.000	97	583846	10.0	8.18	
67 1,1,2-Trichloroethane	83	16.632	16.632	0.000	96	369275	10.0	8.33	
68 Tetrachloroethene	166	16.712	16.712	0.000	96	525025	10.0	8.08	
69 2-Hexanone	43	17.130	17.130	0.000	92	891794	10.0	8.58	
71 Chlorodibromomethane	129	17.429	17.429	0.000	98	665893	10.0	8.82	
72 Ethylene Dibromide	107	17.713	17.713	0.000	98	632536	10.0	8.42	
* 74 Chlorobenzene-d5	117	18.654	18.654	0.000	88	1369325	10.0	10.0	
75 Chlorobenzene	112	18.719	18.719	0.000	92	936316	10.0	8.37	
76 Ethylbenzene	91	18.879	18.879	0.000	99	1623125	10.0	8.38	
77 n-Nonane	57	19.007	19.007	0.000	95	914199	10.0	8.58	
78 m-Xylene & p-Xylene	106	19.152	19.152	0.000	0	1240293	20.0	17.1	
S 73 Xylenes, Total	106				0		30.0	25.5	
79 o-Xylene	106	20.045	20.045	0.000	98	600849	10.0	8.44	
80 Styrene	104	20.104	20.104	0.000	99	952142	10.0	8.71	
81 Bromoform	173	20.570	20.570	0.000	96	627800	10.0	9.74	
82 Isopropylbenzene	105	20.794	20.794	0.000	97	1790406	10.0	8.53	
84 1,1,2,2-Tetrachloroethane	83	21.516	21.516	0.000	97	1012699	10.0	8.65	
85 N-Propylbenzene	91	21.575	21.575	0.000	98	2333117	10.0	8.69	
86 1,2,3-Trichloropropane	75	21.618	21.618	0.000	99	812466	10.0	8.51	
87 n-Decane	57	21.768	21.768	0.000	89	1263692	10.0	9.47	
88 4-Ethyltoluene	105	21.779	21.779	0.000	98	1909235	10.0	9.20	
89 2-Chlorotoluene	91	21.784	21.784	0.000	96	1665670	10.0	9.08	
90 1,3,5-Trimethylbenzene	105	21.896	21.896	0.000	92	1542986	10.0	8.85	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	87	742913	10.0	9.31	
92 tert-Butylbenzene	119	22.410	22.410	0.000	93	1437614	10.0	8.94	
93 1,2,4-Trimethylbenzene	105	22.512	22.512	0.000	98	1576352	10.0	9.00	
94 sec-Butylbenzene	105	22.752	22.752	0.000	99	2289995	10.0	9.05	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	1912352	10.0	9.26	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	99	1025661	10.0	9.05	
97 1,4-Dichlorobenzene	146	23.132	23.132	0.000	94	1010115	10.0	8.91	
98 Benzyl chloride	91	23.346	23.346	0.000	98	1356520	10.0	8.99	
100 n-Butylbenzene	91	23.560	23.560	0.000	98	1892414	10.0	9.16	
99 Undecane	57	23.587	23.587	0.000	97	1214541	10.0	8.69	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	96	966260	10.0	8.97	
102 Dodecane	57	25.224	25.224	0.000	97	1117714	10.0	9.64	
103 1,2,4-Trichlorobenzene	180	26.272	26.272	0.000	94	698419	10.0	8.31	
104 Hexachlorobutadiene	225	26.460	26.460	0.000	98	650915	10.0	8.81	
105 Naphthalene	128	26.775	26.775	0.000	99	1625697	10.0	8.51	
106 1,2,3-Trichlorobenzene	180	27.257	27.257	0.000	95	684291	10.0	8.86	

Reagents:

ATTO15CAL4w_00620	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

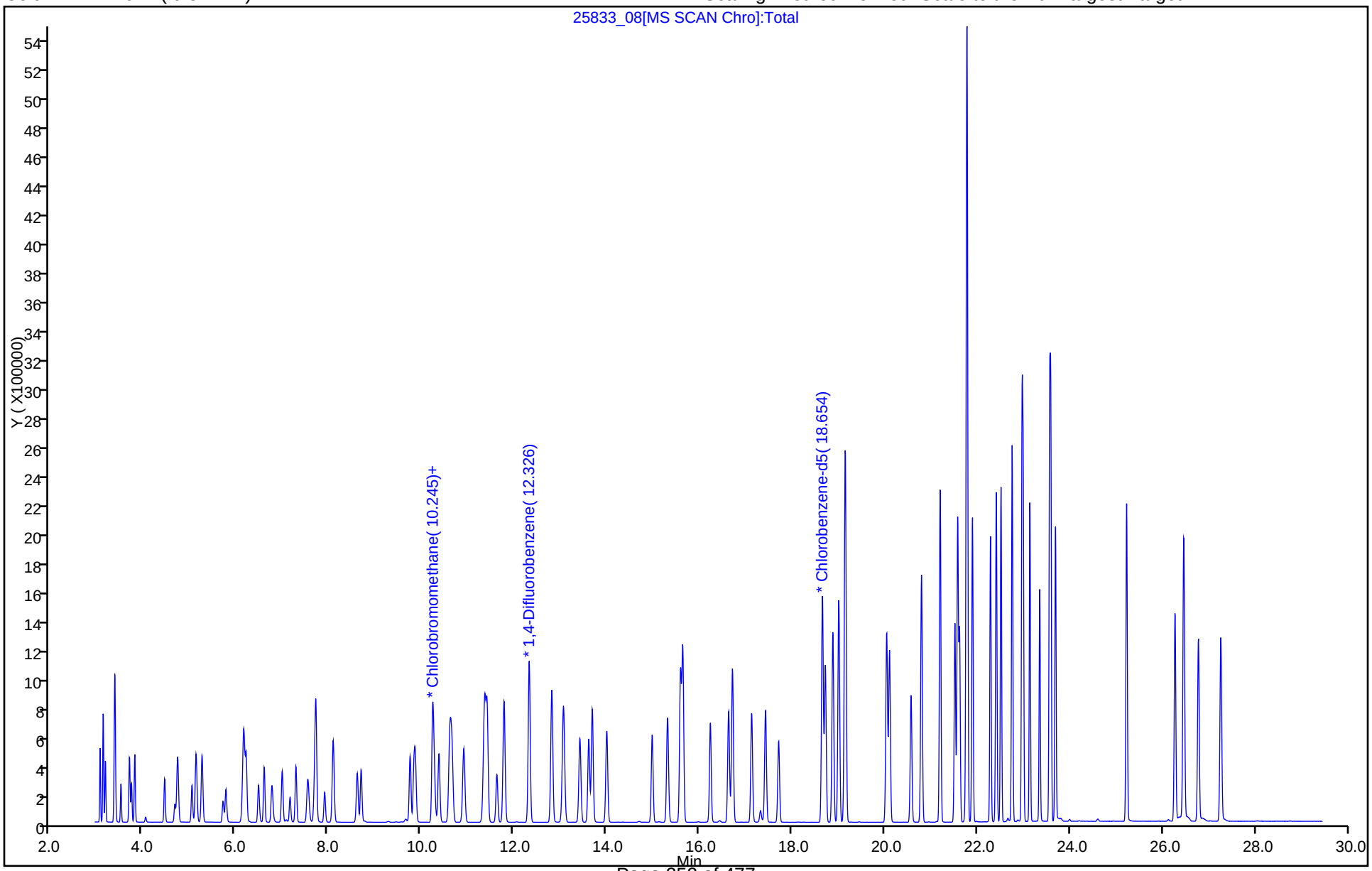
Report Date: 11-Jul-2017 10:09:23 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_08.D

Injection Date:	10-Jul-2017 18:38:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	icis			Worklist Smp#:	8
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_09.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Jul-2017 19:28:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-009
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:24 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:49:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.060	0.000	98	409436	15.0	15.6	
2 Dichlorodifluoromethane	85	3.129	3.124	0.005	99	1247965	15.0	15.2	
3 Chlorodifluoromethane	51	3.178	3.172	0.006	98	828600	15.0	14.8	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.376	0.005	94	1225051	15.0	15.2	
5 Chloromethane	50	3.515	3.509	0.006	99	490165	15.0	14.9	
6 Butane	43	3.697	3.691	0.006	99	823311	15.0	14.9	
7 Vinyl chloride	62	3.739	3.739	0.000	98	540983	15.0	14.7	
8 Butadiene	54	3.809	3.809	0.000	97	402198	15.0	14.5	
10 Bromomethane	94	4.456	4.451	0.005	99	429756	15.0	15.1	
11 Chloroethane	64	4.676	4.670	0.006	100	251644	15.0	15.2	
12 2-Methylbutane	43	4.740	4.734	0.006	94	547060	15.0	14.1	
13 Vinyl bromide	106	5.045	5.045	0.000	99	441543	15.0	15.3	
14 Trichlorofluoromethane	101	5.136	5.130	0.006	99	1165426	15.0	15.0	
16 Pentane	43	5.264	5.259	0.005	98	834915	15.0	14.8	
17 Ethanol	45	5.719	5.713	0.006	98	351650	20.0	20.5	
18 Ethyl ether	59	5.778	5.778	0.000	97	350760	15.0	15.2	
20 1,1,2-Trichloro-1,2,2-trif	101	6.163	6.163	0.000	96	898964	15.0	15.0	
19 Acrolein	56	6.168	6.168	0.000	93	130906	15.0	14.1	
21 1,1-Dichloroethene	96	6.216	6.216	0.000	94	437073	15.0	15.2	
22 Acetone	43	6.478	6.478	0.000	98	795427	15.0	15.8	
23 Carbon disulfide	76	6.607	6.601	0.006	99	1312618	15.0	15.2	
24 Isopropyl alcohol	45	6.773	6.773	0.000	99	937424	15.0	15.6	
25 3-Chloro-1-propene	41	6.997	6.992	0.005	94	659243	15.0	14.7	
26 Acetonitrile	41	7.163	7.163	0.000	99	414370	15.0	15.8	
27 Methylene Chloride	49	7.292	7.286	0.006	98	604903	15.0	14.8	
28 2-Methyl-2-propanol	59	7.548	7.543	0.005	94	1163529	15.0	15.9	
29 Methyl tert-butyl ether	73	7.703	7.704	-0.001	97	1459522	15.0	15.4	
31 trans-1,2-Dichloroethene	61	7.725	7.720	0.005	95	780702	15.0	15.1	
32 Acrylonitrile	53	7.912	7.907	0.005	95	401643	15.0	15.2	
33 Hexane	57	8.094	8.094	0.000	94	818079	15.0	14.7	
34 1,1-Dichloroethane	63	8.613	8.613	0.000	99	1001115	15.0	14.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.699	8.693	0.006	100	1484365	15.0	15.8	
S 30 1,2-Dichloroethene, Total	61				0		30.0	30.2	
37 cis-1,2-Dichloroethene	96	9.752	9.752	0.000	97	544402	15.0	15.1	
38 2-Butanone (MEK)	72	9.838	9.833	0.005	100	288077	15.0	15.0	
39 Ethyl acetate	88	9.870	9.870	0.000	99	41717	15.0	15.8	
* 40 Chlorobromomethane	128	10.245	10.239	0.006	99	288515	10.0	10.0	
41 Tetrahydrofuran	42	10.271	10.271	0.000	96	750204	15.0	15.8	
42 Chloroform	83	10.378	10.378	0.000	96	1143737	15.0	15.2	
43 Cyclohexane	84	10.614	10.608	0.006	96	782089	15.0	15.3	M
44 1,1,1-Trichloroethane	97	10.657	10.657	0.000	96	1129514	15.0	15.4	
45 Carbon tetrachloride	117	10.913	10.913	0.000	99	1142667	15.0	16.0	
46 Isooctane	57	11.368	11.363	0.005	99	3400263	15.0	15.2	
47 Benzene	78	11.422	11.416	0.006	96	1918424	15.0	15.2	
48 1,2-Dichloroethane	62	11.630	11.625	0.005	97	795592	15.0	15.1	
49 n-Heptane	43	11.785	11.780	0.005	95	1318380	15.0	14.8	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	95	1590482	10.0	10.0	
52 n-Butanol	56	12.802	12.802	0.000	89	454259	15.0	15.9	
53 Trichloroethene	95	12.818	12.813	0.006	97	814302	15.0	15.1	
A 51 GRO	1	13.251	(4.724-21.778)		0	240657536	15.0	0	
54 1,2-Dichloropropane	63	13.422	13.417	0.005	95	807893	15.0	15.3	
55 Methyl methacrylate	69	13.615	13.610	0.005	95	752768	15.0	15.7	
56 1,4-Dioxane	88	13.684	13.685	0.000	96	423767	15.0	15.9	
57 Dibromomethane	174	13.690	13.690	0.000	97	698454	15.0	15.3	
58 Dichlorobromomethane	83	14.000	14.000	0.000	98	1384127	15.0	15.9	
60 cis-1,3-Dichloropropene	75	14.984	14.979	0.005	93	1134061	15.0	15.5	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	417345229	15.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.311	15.311	0.000	97	1733183	15.0	15.4	
65 Toluene	92	15.594	15.589	0.005	93	1389802	15.0	15.0	
64 n-Octane	43	15.642	15.637	0.005	94	1913507	15.0	15.1	
66 trans-1,3-Dichloropropene	75	16.236	16.236	0.000	97	1157609	15.0	14.9	
67 1,1,2-Trichloroethane	83	16.632	16.632	0.000	96	730126	15.0	15.2	
68 Tetrachloroethene	166	16.718	16.712	0.006	96	1041099	15.0	14.7	
69 2-Hexanone	43	17.130	17.130	0.000	93	1693782	15.0	15.0	
71 Chlorodibromomethane	129	17.429	17.429	0.000	98	1348608	15.0	16.4	
72 Ethylene Dibromide	107	17.713	17.713	0.000	98	1261758	15.0	15.5	
* 74 Chlorobenzene-d5	117	18.660	18.654	0.006	88	1487925	10.0	10.0	
75 Chlorobenzene	112	18.724	18.719	0.005	93	1848362	15.0	15.2	
76 Ethylbenzene	91	18.884	18.879	0.005	99	3217601	15.0	15.3	
77 n-Nonane	57	19.013	19.007	0.006	93	1767598	15.0	15.3	
78 m-Xylene & p-Xylene	106	19.152	19.152	0.000	0	2465555	30.0	31.2	
S 73 Xylenes, Total	106				0		45.0	46.6	
79 o-Xylene	106	20.045	20.045	0.000	98	1190352	15.0	15.4	
80 Styrene	104	20.109	20.104	0.005	100	1910862	15.0	16.1	
81 Bromoform	173	20.570	20.570	0.000	96	1281762	15.0	18.3	
82 Isopropylbenzene	105	20.800	20.794	0.006	96	3545298	15.0	15.5	
84 1,1,2,2-Tetrachloroethane	83	21.516	21.516	0.000	97	1991311	15.0	15.7	
85 N-Propylbenzene	91	21.581	21.575	0.006	98	4581825	15.0	15.7	
86 1,2,3-Trichloropropane	75	21.618	21.618	0.000	100	1596513	15.0	15.4	
87 n-Decane	57	21.768	21.768	0.000	90	2244221	15.0	15.5	
88 4-Ethyltoluene	105	21.784	21.779	0.005	98	3705002	15.0	16.4	
89 2-Chlorotoluene	91	21.784	21.784	0.000	96	3242371	15.0	16.3	
90 1,3,5-Trimethylbenzene	105	21.896	21.896	0.000	92	2952552	15.0	15.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	87	1428633	15.0	16.5	
92 tert-Butylbenzene	119	22.410	22.410	0.000	93	2686697	15.0	15.4	
93 1,2,4-Trimethylbenzene	105	22.511	22.512	-0.001	98	2901936	15.0	15.2	
94 sec-Butylbenzene	105	22.752	22.752	0.000	99	4156724	15.0	15.1	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	3340357	15.0	14.9	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	99	1898049	15.0	15.4	
97 1,4-Dichlorobenzene	146	23.137	23.132	0.005	94	1850331	15.0	15.0	
98 Benzyl chloride	91	23.351	23.346	0.005	98	2431926	15.0	14.8	
100 n-Butylbenzene	91	23.560	23.560	0.000	98	3310867	15.0	14.7	
99 Undecane	57	23.587	23.587	0.000	96	2373158	15.0	15.6	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	95	1702205	15.0	14.5	
102 Dodecane	57	25.224	25.224	0.000	97	1921741	15.0	15.3	
103 1,2,4-Trichlorobenzene	180	26.272	26.272	0.000	94	1401522	15.0	15.3	
104 Hexachlorobutadiene	225	26.460	26.460	0.000	98	1318241	15.0	16.4	
105 Naphthalene	128	26.775	26.775	0.000	99	3033846	15.0	14.6	
106 1,2,3-Trichlorobenzene	180	27.257	27.257	0.000	95	1282192	15.0	15.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL5w_00067	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

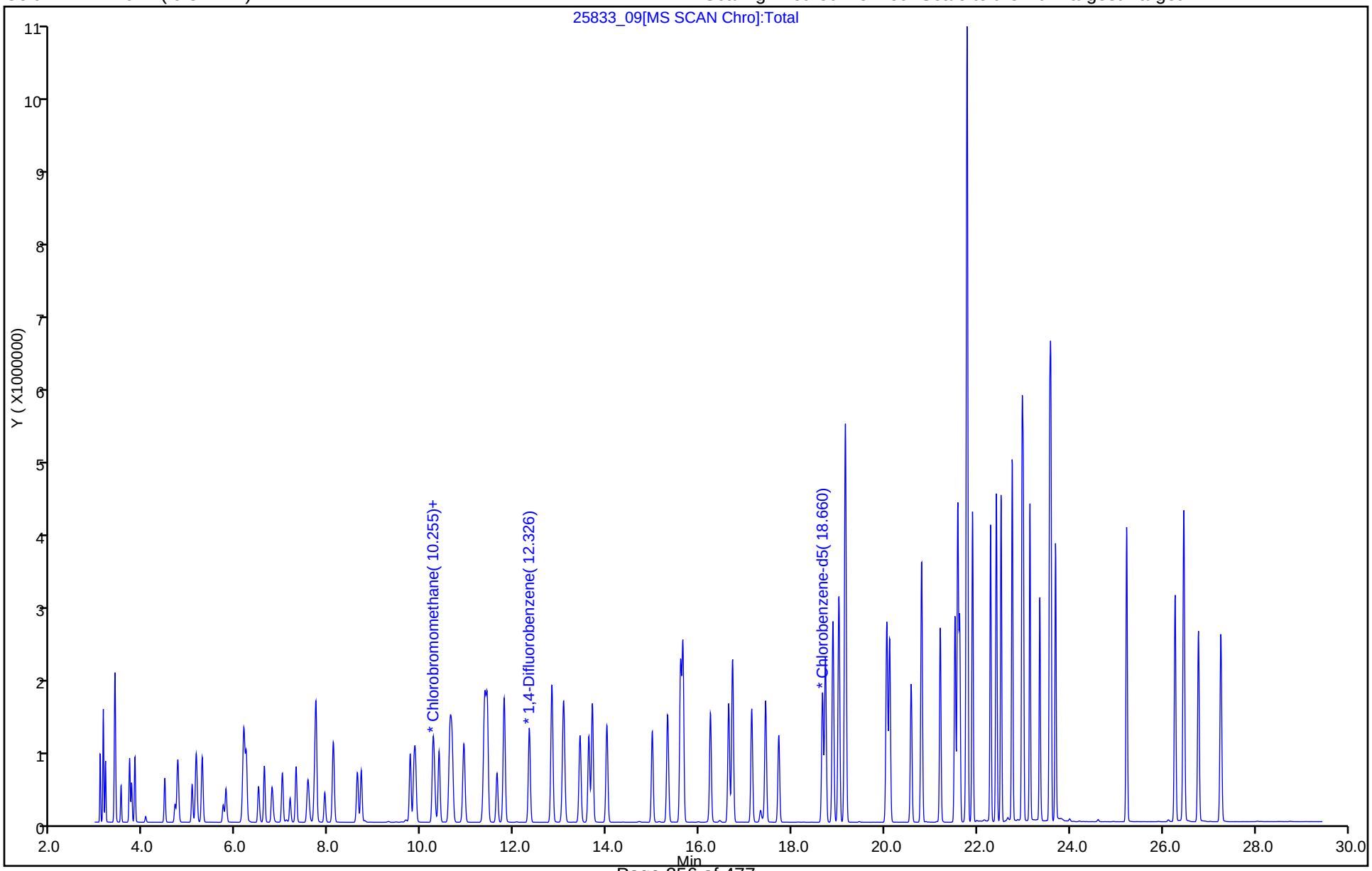
Report Date: 11-Jul-2017 10:09:24 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_09.D

Injection Date:	10-Jul-2017 19:28:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

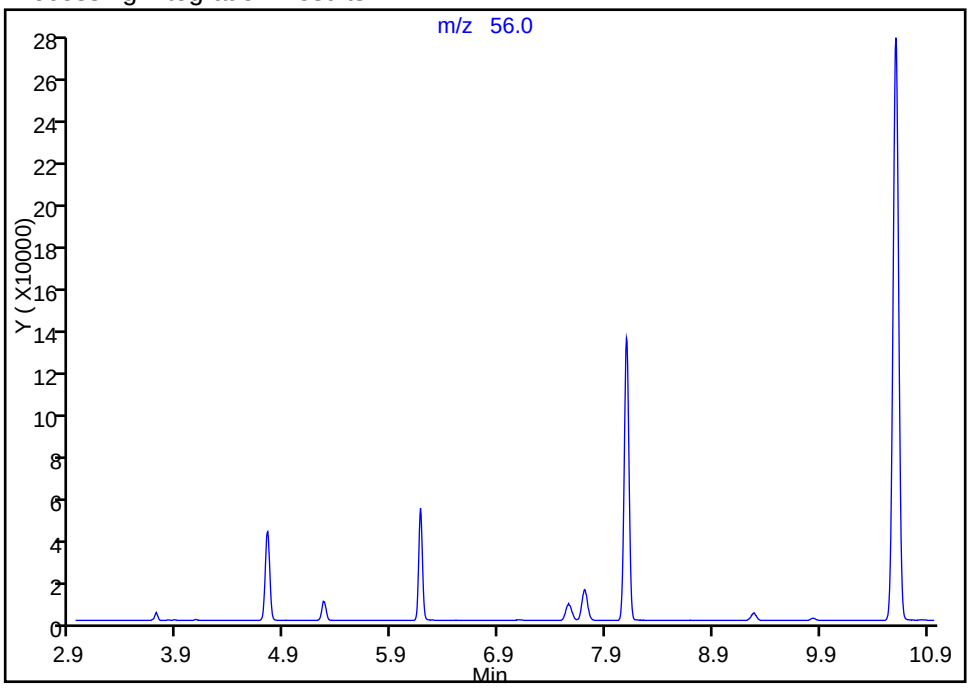
Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_09.D
Injection Date: 10-Jul-2017 19:28:30 Instrument ID: CHX.i
Lims ID: ic
Client ID:
Operator ID: pad ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

43 Cyclohexane, CAS: 110-82-7

Signal: 2

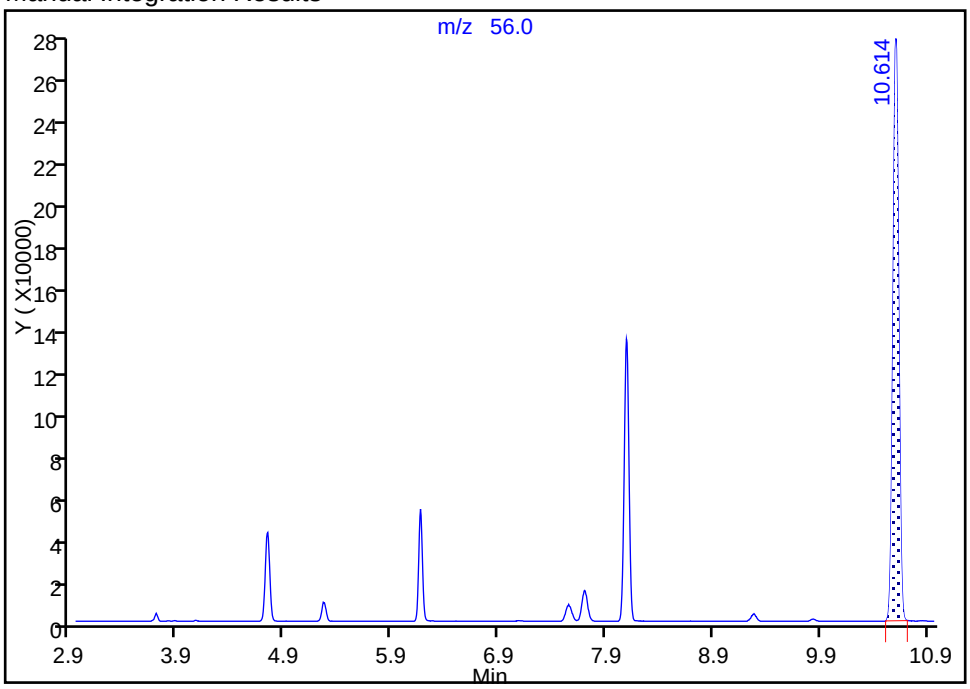
Processing Integration Results

RT: 10.61
Area: 0
Amount: 15.292854
Amount Units: ppb v/v



Manual Integration Results

RT: 10.61
Area: 1030152
Amount: 15.292854
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:48:46
Audit Action: Manually Integrated Audit Reason: Missed Peak

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_10.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Jul-2017 20:19:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-010
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:25 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:49:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.060	0.000	99	528341	20.0	18.8	
2 Dichlorodifluoromethane	85	3.130	3.124	0.006	99	1680004	20.0	19.1	
3 Chlorodifluoromethane	51	3.178	3.172	0.006	98	1098125	20.0	18.3	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.376	0.005	95	1639083	20.0	19.0	
5 Chloromethane	50	3.515	3.509	0.006	99	637878	20.0	18.1	
6 Butane	43	3.697	3.691	0.006	99	1063760	20.0	18.0	
7 Vinyl chloride	62	3.739	3.739	0.000	98	715977	20.0	18.2	
8 Butadiene	54	3.814	3.809	0.005	97	533150	20.0	18.0	
10 Bromomethane	94	4.456	4.451	0.005	99	580136	20.0	19.1	
11 Chloroethane	64	4.676	4.670	0.006	100	335832	20.0	19.0	
12 2-Methylbutane	43	4.734	4.734	0.000	93	711074	20.0	17.1	
13 Vinyl bromide	106	5.045	5.045	0.000	99	597956	20.0	19.4	
14 Trichlorofluoromethane	101	5.136	5.130	0.006	98	1586133	20.0	19.2	
16 Pentane	43	5.264	5.259	0.005	98	1080617	20.0	17.9	
17 Ethanol	45	5.719	5.713	0.006	98	636523	40.0	34.7	
18 Ethyl ether	59	5.778	5.778	0.000	96	472009	20.0	19.1	
20 1,1,2-Trichloro-1,2,2-trif	101	6.163	6.163	0.000	96	1230888	20.0	19.3	
19 Acrolein	56	6.168	6.168	0.000	95	205220	20.0	20.7	
21 1,1-Dichloroethene	96	6.216	6.216	0.000	94	601269	20.0	19.6	
22 Acetone	43	6.478	6.478	0.000	97	1037630	20.0	19.3	
23 Carbon disulfide	76	6.607	6.601	0.006	99	1784428	20.0	19.4	
24 Isopropyl alcohol	45	6.773	6.773	0.000	100	1211718	20.0	18.9	
25 3-Chloro-1-propene	41	6.997	6.992	0.005	94	853805	20.0	17.8	
26 Acetonitrile	41	7.163	7.163	0.000	99	535433	20.0	19.1	
27 Methylene Chloride	49	7.292	7.286	0.006	97	800321	20.0	18.4	
28 2-Methyl-2-propanol	59	7.548	7.543	0.005	94	1548244	20.0	19.9	
29 Methyl tert-butyl ether	73	7.704	7.704	0.000	97	1976383	20.0	19.5	
31 trans-1,2-Dichloroethene	61	7.725	7.720	0.005	96	1046713	20.0	19.0	
32 Acrylonitrile	53	7.912	7.907	0.005	95	536375	20.0	19.0	
33 Hexane	57	8.094	8.094	0.000	94	1100784	20.0	18.5	
34 1,1-Dichloroethane	63	8.618	8.613	0.005	99	1350820	20.0	18.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.699	8.693	0.006	100	1955593	20.0	19.5	
S 30 1,2-Dichloroethene, Total	61				0		40.0	38.7	
37 cis-1,2-Dichloroethene	96	9.758	9.752	0.006	97	757477	20.0	19.7	
38 2-Butanone (MEK)	72	9.838	9.833	0.005	100	391282	20.0	19.1	
39 Ethyl acetate	88	9.870	9.870	0.000	99	57834	20.0	20.5	
* 40 Chlorobromomethane	128	10.245	10.239	0.006	99	308147	10.0	10.0	
41 Tetrahydrofuran	42	10.271	10.271	0.000	95	984940	20.0	19.1	
42 Chloroform	83	10.378	10.378	0.000	96	1580829	20.0	19.7	
43 Cyclohexane	84	10.614	10.608	0.006	98	1085661	20.0	19.6	
44 1,1,1-Trichloroethane	97	10.662	10.657	0.005	96	1569965	20.0	19.8	
45 Carbon tetrachloride	117	10.913	10.913	0.000	98	1595715	20.0	20.6	
46 Isooctane	57	11.368	11.363	0.005	99	4636879	20.0	19.1	
47 Benzene	78	11.422	11.416	0.006	96	2662904	20.0	19.4	
48 1,2-Dichloroethane	62	11.630	11.625	0.005	97	1092547	20.0	19.1	
49 n-Heptane	43	11.785	11.780	0.005	94	1762244	20.0	18.3	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	95	1723739	10.0	10.0	
52 n-Butanol	56	12.802	12.802	0.000	88	619693	20.0	20.0	
53 Trichloroethene	95	12.818	12.813	0.006	97	1149521	20.0	19.7	
A 51 GRO	1	13.251	(4.724-21.778)		0	323024377	20.0	0	
54 1,2-Dichloropropane	63	13.422	13.417	0.005	93	1115218	20.0	19.5	
55 Methyl methacrylate	69	13.615	13.610	0.005	96	1047665	20.0	20.2	
56 1,4-Dioxane	88	13.684	13.685	0.000	95	574898	20.0	19.9	
57 Dibromomethane	174	13.690	13.690	0.000	97	989065	20.0	20.0	
58 Dichlorobromomethane	83	14.000	14.000	0.000	98	1931199	20.0	20.4	
60 cis-1,3-Dichloropropene	75	14.984	14.979	0.005	92	1585309	20.0	20.0	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	568592525	20.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.311	15.311	0.000	97	2316136	20.0	19.0	
65 Toluene	92	15.594	15.589	0.005	93	1934393	20.0	20.3	
64 n-Octane	43	15.642	15.637	0.005	93	2551704	20.0	18.5	
66 trans-1,3-Dichloropropene	75	16.242	16.236	0.006	96	1616519	20.0	19.2	
67 1,1,2-Trichloroethane	83	16.632	16.632	0.000	95	1018474	20.0	20.5	
68 Tetrachloroethene	166	16.718	16.712	0.006	96	1463151	20.0	20.1	
69 2-Hexanone	43	17.130	17.130	0.000	94	2269972	20.0	19.5	
71 Chlorodibromomethane	129	17.429	17.429	0.000	98	1878316	20.0	22.2	
72 Ethylene Dibromide	107	17.713	17.713	0.000	98	1763744	20.0	20.9	
* 74 Chlorobenzene-d5	117	18.660	18.654	0.006	87	1535912	10.0	10.0	
75 Chlorobenzene	112	18.724	18.719	0.005	93	2583186	20.0	20.6	
76 Ethylbenzene	91	18.884	18.879	0.005	99	4445888	20.0	20.5	
77 n-Nonane	57	19.013	19.007	0.006	91	2412605	20.0	20.2	
78 m-Xylene & p-Xylene	106	19.152	19.152	0.000	0	3410064	40.0	41.8	
S 73 Xylenes, Total	106				0		60.0	62.6	
79 o-Xylene	106	20.045	20.045	0.000	98	1655938	20.0	20.7	
80 Styrene	104	20.109	20.104	0.005	99	2671205	20.0	21.8	
81 Bromoform	173	20.575	20.570	0.005	97	1752784	20.0	24.2	
82 Isopropylbenzene	105	20.800	20.794	0.006	96	4916112	20.0	20.9	
84 1,1,2,2-Tetrachloroethane	83	21.522	21.516	0.006	97	2719823	20.0	20.7	
85 N-Propylbenzene	91	21.581	21.575	0.006	98	6234105	20.0	20.7	
86 1,2,3-Trichloropropane	75	21.618	21.618	0.000	100	2185790	20.0	20.4	
87 n-Decane	57	21.768	21.768	0.000	91	2916548	20.0	19.5	
88 4-Ethyltoluene	105	21.784	21.779	0.005	98	4854676	20.0	20.8	
89 2-Chlorotoluene	91	21.789	21.784	0.005	96	4315821	20.0	21.0	
90 1,3,5-Trimethylbenzene	105	21.896	21.896	0.000	92	3977660	20.0	20.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	87	1923499	20.0	21.5	
92 tert-Butylbenzene	119	22.415	22.410	0.005	93	3613084	20.0	20.0	
93 1,2,4-Trimethylbenzene	105	22.517	22.512	0.005	98	3926526	20.0	20.0	
94 sec-Butylbenzene	105	22.758	22.752	0.006	99	5616978	20.0	19.8	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	4649212	20.0	20.1	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	99	2553083	20.0	20.1	
97 1,4-Dichlorobenzene	146	23.137	23.132	0.005	94	2528381	20.0	19.9	
98 Benzyl chloride	91	23.351	23.346	0.005	98	3439799	20.0	20.3	
100 n-Butylbenzene	91	23.565	23.560	0.005	98	4715831	20.0	20.3	
99 Undecane	57	23.587	23.587	0.000	96	3279464	20.0	20.9	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	95	2375928	20.0	19.7	
102 Dodecane	57	25.224	25.224	0.000	97	2700240	20.0	20.8	
103 1,2,4-Trichlorobenzene	180	26.272	26.272	0.000	94	2098646	20.0	22.3	
104 Hexachlorobutadiene	225	26.460	26.460	0.000	99	1825774	20.0	22.0	
105 Naphthalene	128	26.775	26.775	0.000	99	4718376	20.0	22.0	
106 1,2,3-Trichlorobenzene	180	27.262	27.257	0.005	96	1919042	20.0	22.2	

Reagents:

ATTO15CAL6w_00142	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

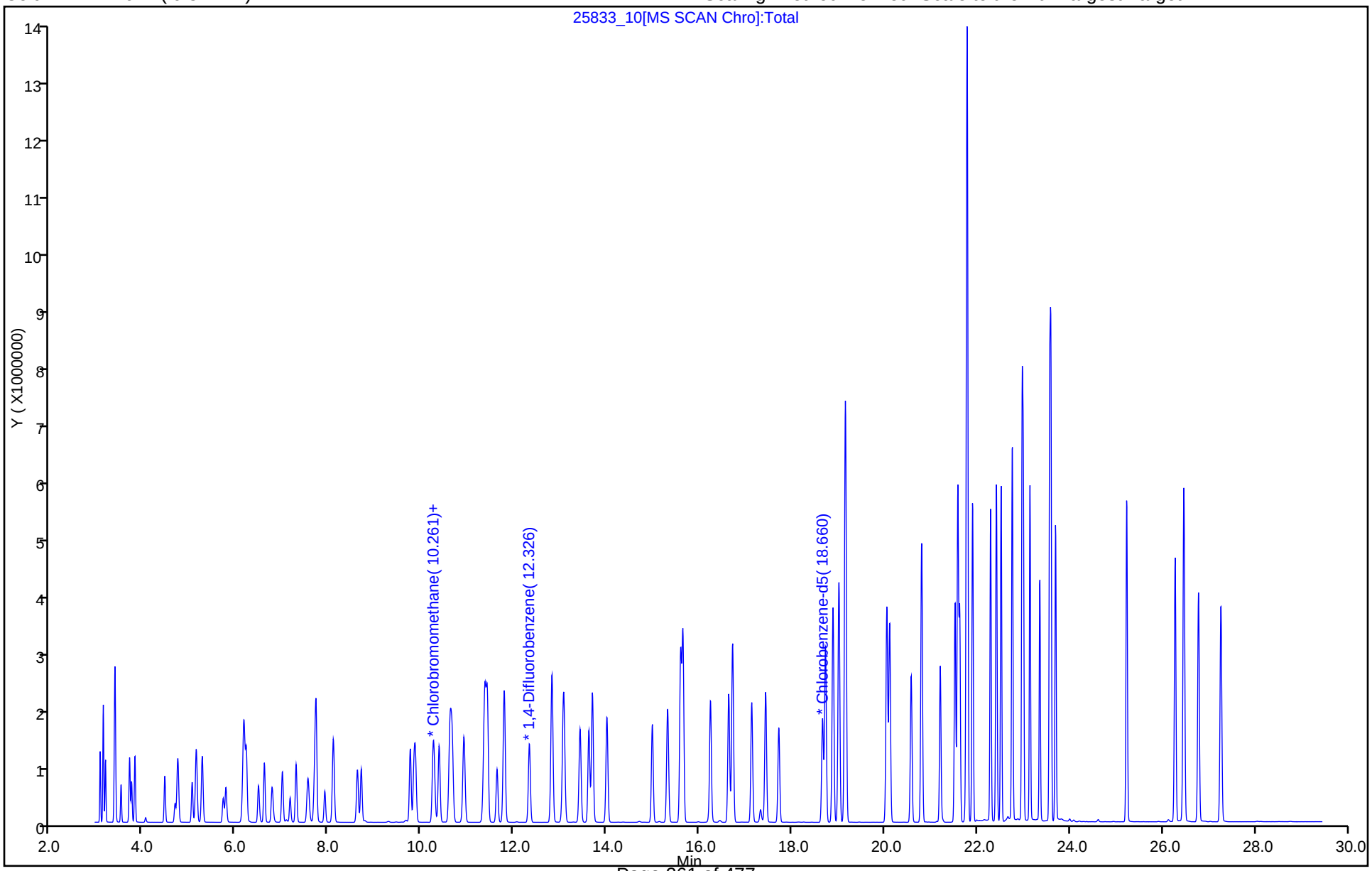
Report Date: 11-Jul-2017 10:09:26 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_10.D

Injection Date:	10-Jul-2017 20:19:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 10-Jul-2017 21:09:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-011
Operator ID: pad Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:27 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:50:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.060	0.000	98	1084524	40.0	35.4	
2 Dichlorodifluoromethane	85	3.129	3.124	0.005	99	3545740	40.0	37.0	
3 Chlorodifluoromethane	51	3.178	3.172	0.006	97	2289249	40.0	35.0	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.376	0.005	94	3415858	40.0	36.3	
5 Chloromethane	50	3.515	3.509	0.006	99	1335882	40.0	34.8	
6 Butane	43	3.697	3.691	0.006	99	2167002	40.0	33.6	
7 Vinyl chloride	62	3.745	3.739	0.006	98	1503519	40.0	35.1	
8 Butadiene	54	3.814	3.809	0.005	97	1102552	40.0	34.2	
10 Bromomethane	94	4.462	4.451	0.011	99	1250765	40.0	37.7	
11 Chloroethane	64	4.681	4.670	0.011	100	720765	40.0	37.3	
12 2-Methylbutane	43	4.740	4.734	0.006	93	1476063	40.0	32.6	
13 Vinyl bromide	106	5.050	5.045	0.005	99	1268342	40.0	37.7	
14 Trichlorofluoromethane	101	5.141	5.130	0.011	99	3368894	40.0	37.3	
16 Pentane	43	5.269	5.259	0.010	98	2179461	40.0	33.1	
17 Ethanol	45	5.729	5.713	0.016	99	1271008	100.0	63.6	M
18 Ethyl ether	59	5.778	5.778	0.000	93	993203	40.0	36.9	M
20 1,1,2-Trichloro-1,2,2-trif	101	6.168	6.163	0.005	98	2636070	40.0	37.9	
19 Acrolein	56	6.168	6.168	0.000	42	402954	40.0	37.2	
21 1,1-Dichloroethene	96	6.222	6.216	0.006	95	1300155	40.0	38.8	
22 Acetone	43	6.484	6.478	0.006	97	2132136	40.0	36.3	
23 Carbon disulfide	76	6.612	6.601	0.011	99	3807623	40.0	37.9	
24 Isopropyl alcohol	45	6.789	6.773	0.016	99	2493271	40.0	35.7	
25 3-Chloro-1-propene	41	6.997	6.992	0.005	95	1623891	40.0	31.0	
26 Acetonitrile	41	7.168	7.163	0.005	99	1112045	40.0	36.3	
27 Methylene Chloride	49	7.297	7.286	0.011	96	1667968	40.0	35.1	
28 2-Methyl-2-propanol	59	7.559	7.543	0.016	94	3276217	40.0	38.5	
29 Methyl tert-butyl ether	73	7.703	7.704	-0.001	97	4197409	40.0	38.0	
31 trans-1,2-Dichloroethene	61	7.730	7.720	0.010	96	2170267	40.0	36.0	
32 Acrylonitrile	53	7.917	7.907	0.010	95	1132458	40.0	36.8	
33 Hexane	57	8.099	8.094	0.005	93	2285870	40.0	35.2	
34 1,1-Dichloroethane	63	8.618	8.613	0.005	99	2863767	40.0	36.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.704	8.693	0.011	100	4037213	40.0	36.9	
S 30 1,2-Dichloroethene, Total	61				0		80.0	75.4	
37 cis-1,2-Dichloroethene	96	9.758	9.752	0.006	96	1651832	40.0	39.4	
38 2-Butanone (MEK)	72	9.843	9.833	0.010	99	852362	40.0	38.2	
39 Ethyl acetate	88	9.875	9.870	0.005	98	128414	40.0	41.6	
* 40 Chlorobromomethane	128	10.245	10.239	0.006	97	336184	10.0	10.0	
41 Tetrahydrofuran	42	10.271	10.271	0.000	94	2057466	40.0	38.2	
42 Chloroform	83	10.384	10.378	0.006	96	3461613	40.0	39.4	
43 Cyclohexane	84	10.619	10.608	0.011	98	2379636	40.0	41.1	
44 1,1,1-Trichloroethane	97	10.662	10.657	0.005	96	3473058	40.0	41.8	
45 Carbon tetrachloride	117	10.919	10.913	0.006	98	3562491	40.0	44.1	
46 Isooctane	57	11.373	11.363	0.010	99	9979903	40.0	39.3	
47 Benzene	78	11.427	11.416	0.011	97	5831102	40.0	40.7	
48 1,2-Dichloroethane	62	11.635	11.625	0.010	97	2397889	40.0	40.2	
49 n-Heptane	43	11.791	11.780	0.011	93	3740223	40.0	37.1	
* 50 1,4-Difluorobenzene	114	12.331	12.326	0.005	95	1800406	10.0	10.0	
52 n-Butanol	56	12.807	12.802	0.005	87	1333844	40.0	41.3	
53 Trichloroethene	95	12.823	12.813	0.011	97	2610094	40.0	42.9	
A 51 GRO	1	13.251	(4.724-21.778)		0	696799735	40.0	0	
54 1,2-Dichloropropane	63	13.428	13.417	0.011	94	2460869	40.0	41.3	
55 Methyl methacrylate	69	13.620	13.610	0.010	97	2359709	40.0	43.5	
56 1,4-Dioxane	88	13.690	13.685	0.006	94	1238608	40.0	41.1	
57 Dibromomethane	174	13.695	13.690	0.005	98	2293204	40.0	44.3	
58 Dichlorobromomethane	83	14.005	14.000	0.005	98	4276973	40.0	43.3	
60 cis-1,3-Dichloropropene	75	14.984	14.979	0.005	92	3558960	40.0	43.0	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	1201247298	40.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.316	15.311	0.005	96	4986911	40.0	39.1	
65 Toluene	92	15.600	15.589	0.011	93	4308270	40.0	42.9	
64 n-Octane	43	15.648	15.637	0.011	92	5358468	40.0	37.2	
66 trans-1,3-Dichloropropene	75	16.242	16.236	0.006	96	3598250	40.0	40.9	
67 1,1,2-Trichloroethane	83	16.637	16.632	0.005	95	2280571	40.0	43.6	
68 Tetrachloroethene	166	16.723	16.712	0.011	96	3330350	40.0	43.4	
69 2-Hexanone	43	17.135	17.130	0.005	94	4869982	40.0	39.7	
71 Chlorodibromomethane	129	17.435	17.429	0.006	98	4148288	40.0	46.6	
72 Ethylene Dibromide	107	17.718	17.713	0.005	98	3957297	40.0	44.6	
* 74 Chlorobenzene-d5	117	18.660	18.654	0.006	88	1615507	10.0	10.0	
75 Chlorobenzene	112	18.724	18.719	0.005	93	5787010	40.0	43.9	
76 Ethylbenzene	91	18.890	18.879	0.011	98	9896464	40.0	43.3	
77 n-Nonane	57	19.018	19.007	0.011	90	5208658	40.0	41.5	
78 m-Xylene & p-Xylene	106	19.157	19.152	0.005	0	7280780	80.0	84.9	
S 73 Xylenes, Total	106				0		120.0	128.7	
79 o-Xylene	106	20.051	20.045	0.006	98	3676525	40.0	43.8	
80 Styrene	104	20.115	20.104	0.011	99	5990955	40.0	46.4	
81 Bromoform	173	20.580	20.570	0.010	97	3506866	40.0	46.1	
82 Isopropylbenzene	105	20.805	20.794	0.011	96	10574982	40.0	42.7	
84 1,1,2,2-Tetrachloroethane	83	21.522	21.516	0.006	97	5615285	40.0	40.7	
85 N-Propylbenzene	91	21.586	21.575	0.011	99	12902837	40.0	40.8	
86 1,2,3-Trichloropropane	75	21.623	21.618	0.005	99	4574330	40.0	40.6	
87 n-Decane	57	21.768	21.768	0.000	92	5264975	40.0	33.4	
88 4-Ethyltoluene	105	21.789	21.779	0.010	98	8480222	40.0	34.6	
89 2-Chlorotoluene	91	21.795	21.784	0.011	95	7694565	40.0	35.6	
90 1,3,5-Trimethylbenzene	105	21.902	21.896	0.006	92	8687812	40.0	42.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.292	22.287	0.005	87	4291539	40.0	45.6	
92 tert-Butylbenzene	119	22.415	22.410	0.005	92	7865464	40.0	41.4	
93 1,2,4-Trimethylbenzene	105	22.517	22.512	0.005	98	8796547	40.0	42.6	
94 sec-Butylbenzene	105	22.758	22.752	0.006	98	12232648	40.0	41.0	
95 4-Isopropyltoluene	119	22.972	22.966	0.006	97	9977397	40.0	40.9	
96 1,3-Dichlorobenzene	146	22.998	22.993	0.005	99	5476084	40.0	41.0	
97 1,4-Dichlorobenzene	146	23.143	23.132	0.011	94	5801528	40.0	43.4	
98 Benzyl chloride	91	23.351	23.346	0.005	99	8327257	40.0	46.8	
100 n-Butylbenzene	91	23.565	23.560	0.005	98	9918939	40.0	40.7	
99 Undecane	57	23.592	23.587	0.005	95	6502755	40.0	39.4	
101 1,2-Dichlorobenzene	146	23.694	23.688	0.006	95	5548990	40.0	43.7	
102 Dodecane	57	25.229	25.224	0.005	97	4787636	40.0	35.0	
103 1,2,4-Trichlorobenzene	180	26.278	26.272	0.006	94	4590416	40.0	46.3	
104 Hexachlorobutadiene	225	26.465	26.460	0.005	99	3544768	40.0	40.6	
105 Naphthalene	128	26.780	26.775	0.005	99	10916262	40.0	48.4	
106 1,2,3-Trichlorobenzene	180	27.262	27.257	0.005	97	3886463	40.0	42.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15CAL7w_00069	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

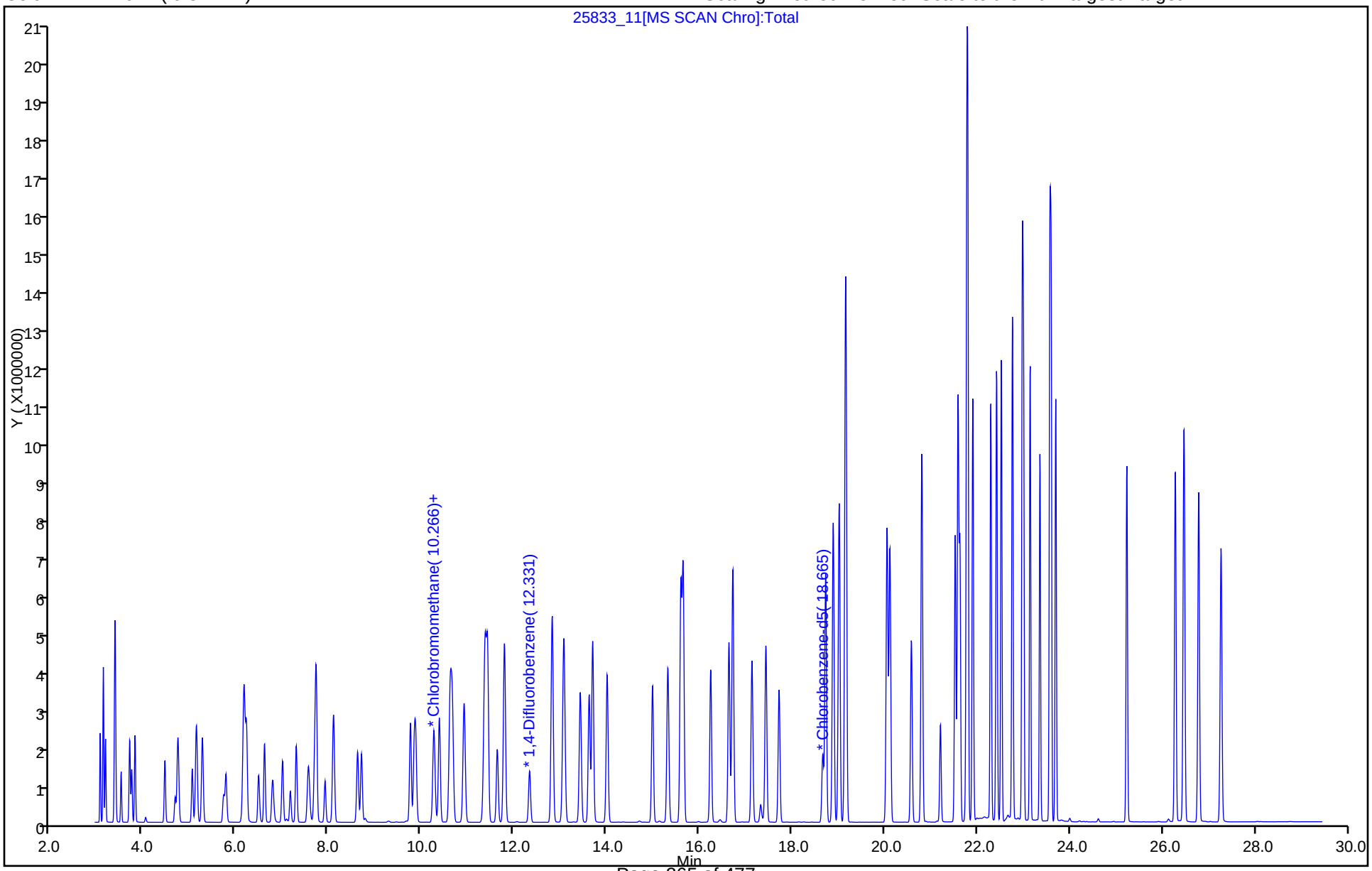
Report Date: 11-Jul-2017 10:09:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Injection Date:	10-Jul-2017 21:09:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

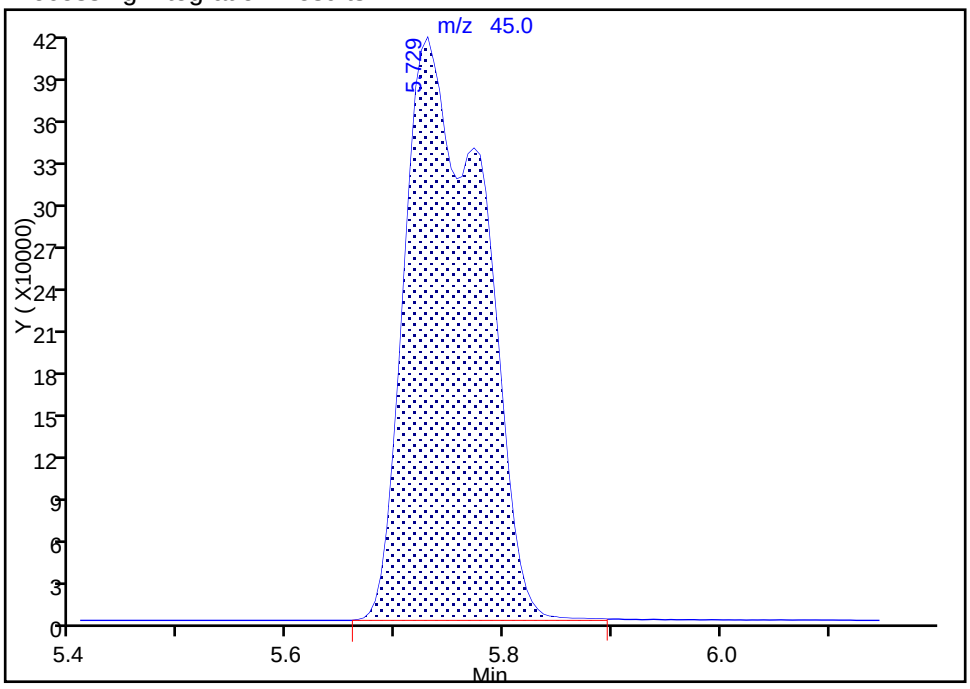
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D				
Injection Date:	10-Jul-2017 21:09:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 1

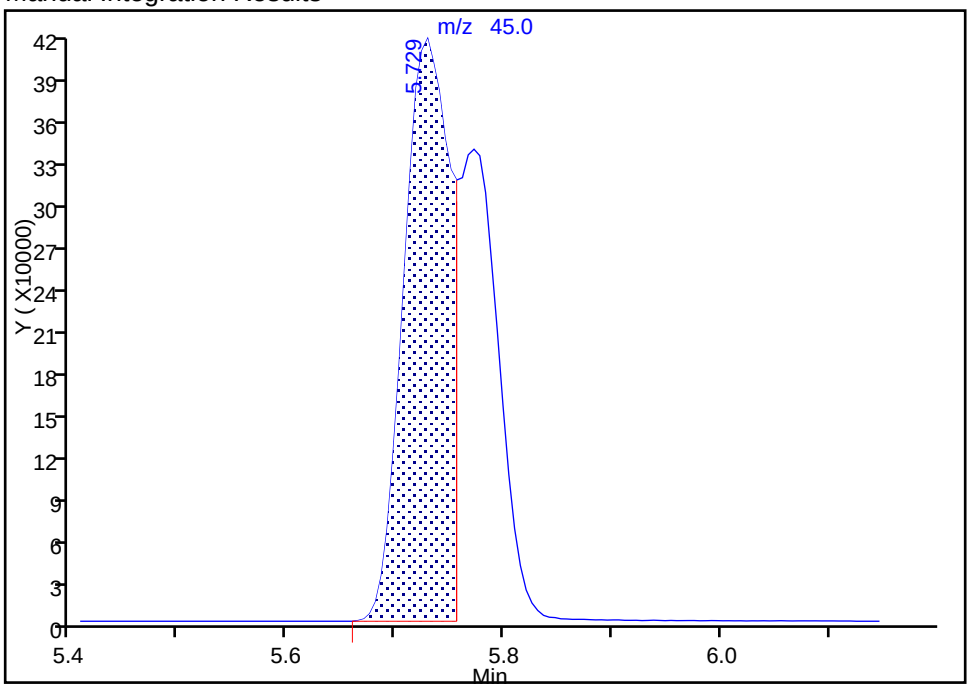
Processing Integration Results

RT: 5.73
Area: 2081268
Amount: 97.551814
Amount Units: ppb v/v



Manual Integration Results

RT: 5.73
Area: 1271008
Amount: 63.600310
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:50:14

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

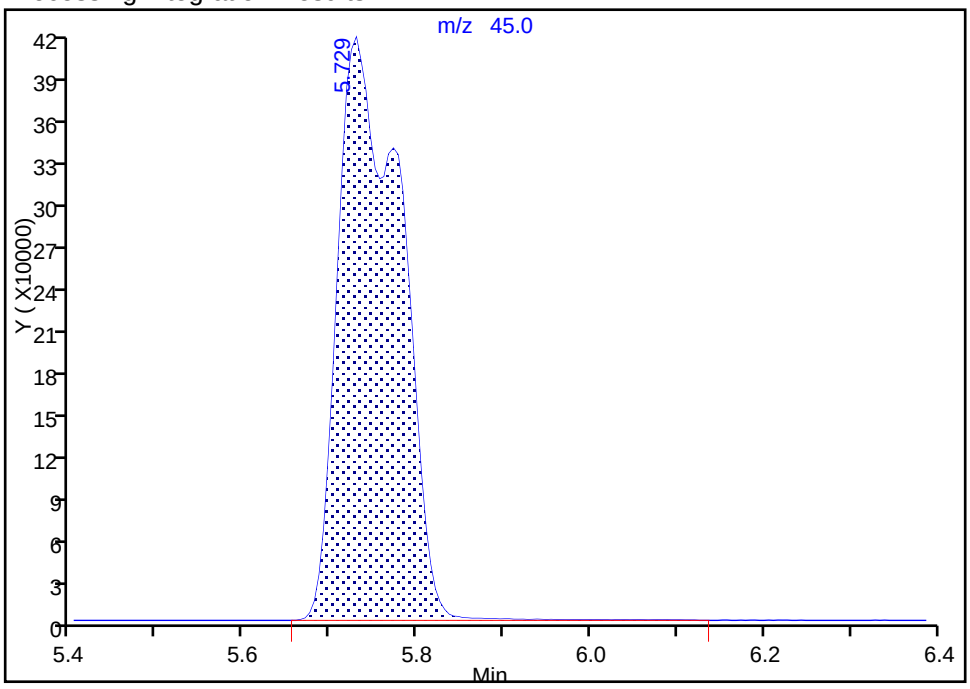
Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D				
Injection Date:	10-Jul-2017 21:09:30	Instrument ID:	CHX.i		
Lims ID:	ic				
Client ID:					
Operator ID:	pad	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

18 Ethyl ether, CAS: 60-29-7

Signal: 2

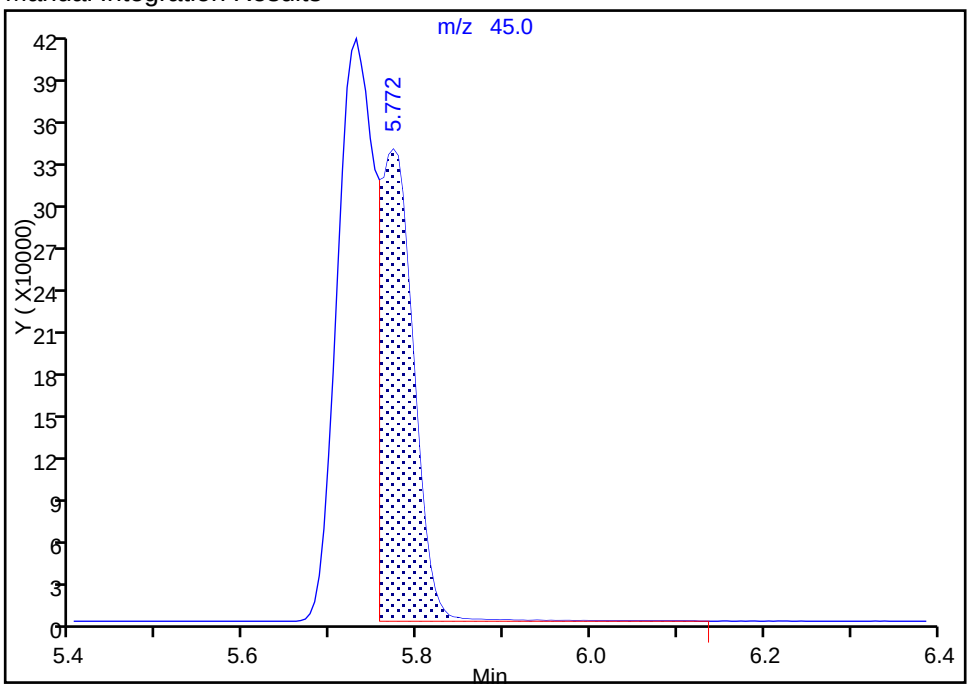
Processing Integration Results

RT: 5.73
Area: 2086773
Amount: 36.852875
Amount Units: ppb v/v



Manual Integration Results

RT: 5.77
Area: 917059
Amount: 36.852875
Amount Units: ppb v/v



Reviewer: daiglep, 11-Jul-2017 08:50:24

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab Sample ID: ICV 200-118373/15 Calibration Date: 07/11/2017 00:30

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 25833_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9101	0.9288		10.2	10.0	2.0	30.0
Dichlorodifluoromethane	Ave	2.848	2.810		9.86	10.0	-1.4	30.0
Freon 22	Ave	1.943	1.903		9.79	10.0	-2.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.798	3.083		11.0	10.0	10.2	30.0
Chloromethane	Ave	1.141	1.100		9.64	10.0	-3.6	30.0
n-Butane	Ave	1.918	1.896		9.88	10.0	-1.1	30.0
Vinyl chloride	Ave	1.274	1.198		9.39	10.0	-6.0	30.0
1,3-Butadiene	Ave	0.9599	0.8961		9.33	10.0	-6.7	30.0
Bromomethane	Ave	0.9861	0.9742		9.88	10.0	-1.2	30.0
Chloroethane	Ave	0.5747	0.5737		9.98	10.0	-0.2	30.0
Isopentane	Ave	1.349	1.439		10.7	10.0	6.7	30.0
Bromoethene(Vinyl Bromide)	Ave	1.002	0.9820		9.80	10.0	-2.0	30.0
Trichlorofluoromethane	Ave	2.685	2.622		9.76	10.0	-2.3	30.0
n-Pentane	Ave	1.959	2.175		11.1	10.0	11.0	30.0
Ethanol	Ave	0.5944	0.6044		15.3	15.0	1.7	30.0
Ethyl ether	Ave	0.8017	0.8839		11.0	10.0	10.3	30.0
Freon TF	Ave	2.071	2.038		9.84	10.0	-1.6	30.0
Acrolein	Ave	0.3219	0.4468		13.9	10.0	38.8*	30.0
1,1-Dichloroethene	Ave	0.997	0.9761		9.79	10.0	-2.1	30.0
Acetone	Ave	1.749	1.852		10.6	10.0	5.9	30.0
Carbon disulfide	Ave	2.991	3.431		11.5	10.0	14.7	30.0
Isopropyl alcohol	Ave	2.078	2.018		9.71	10.0	-2.9	30.0
3-Chloropropene	Ave	1.558	1.559		10.0	10.0	0.0	30.0
Acetonitrile	Ave	0.9117	1.051		11.5	10.0	15.3	30.0
Methylene Chloride	Ave	1.415	1.413		9.99	10.0	-0.1	30.0
tert-Butyl alcohol	Ave	2.531	2.476		9.78	10.0	-2.2	30.0
Methyl tert-butyl ether	Ave	3.286	3.299		10.0	10.0	0.4	30.0
trans-1,2-Dichloroethene	Ave	1.792	1.908		10.6	10.0	6.4	30.0
Acrylonitrile	Ave	0.9164	0.9704		10.6	10.0	5.9	30.0
n-Hexane	Ave	1.932	2.079		10.8	10.0	7.6	30.0
1,1-Dichloroethane	Ave	2.361	2.332		9.88	10.0	-1.2	30.0
Vinyl acetate	Ave	3.252	3.609		11.1	10.0	11.0	30.0
cis-1,2-Dichloroethene	Ave	1.247	1.207		9.68	10.0	-3.2	30.0
Methyl Ethyl Ketone	Ave	0.6645	0.6432		9.68	10.0	-3.2	30.0
Ethyl acetate	Ave	0.0918	0.1022		11.1	10.0	11.4	30.0
Tetrahydrofuran	Ave	0.2994	0.3155		10.5	10.0	5.4	30.0
Chloroform	Ave	2.610	2.614		10.0	10.0	0.1	30.0
Cyclohexane	Ave	0.3215	0.3219		10.0	10.0	0.1	30.0
1,1,1-Trichloroethane	Ave	0.4612	0.4595		9.96	10.0	-0.4	30.0
Carbon tetrachloride	Ave	0.4491	0.4629		10.3	10.0	3.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab Sample ID: ICV 200-118373/15 Calibration Date: 07/11/2017 00:30

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 25833_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.409	1.399		9.92	10.0	-0.7	30.0
Benzene	Ave	0.7959	0.7823		9.83	10.0	-1.7	30.0
1,2-Dichloroethane	Ave	0.3313	0.3262		9.84	10.0	-1.5	30.0
n-Heptane	Ave	0.5599	0.5458		9.75	10.0	-2.5	30.0
n-Butanol	Ave	0.1795	0.1884		10.5	10.0	5.0	30.0
Trichloroethene	Ave	0.3383	0.3281		9.70	10.0	-3.0	30.0
1,2-Dichloropropane	Ave	0.3312	0.3221		9.72	10.0	-2.7	30.0
Methyl methacrylate	Ave	0.3013	0.3035		10.1	10.0	0.7	30.0
1,4-Dioxane	Ave	0.1674	0.1580		9.44	10.0	-5.6	30.0
Dibromomethane	Ave	0.2875	0.2726		9.48	10.0	-5.2	30.0
Bromodichloromethane	Ave	0.5489	0.5463		9.95	10.0	-0.5	30.0
cis-1,3-Dichloropropene	Ave	0.4595	0.4537		9.87	10.0	-1.3	30.0
Methyl isobutyl ketone	Ave	0.7089	0.6795		9.58	10.0	-4.1	30.0
Toluene	Ave	0.6215	0.6255		10.1	10.0	0.6	30.0
n-Octane	Ave	0.7992	0.7879		9.86	10.0	-1.4	30.0
trans-1,3-Dichloropropene	Ave	0.4889	0.4545		9.29	10.0	-7.0	30.0
1,1,2-Trichloroethane	Ave	0.3237	0.3312		10.2	10.0	2.3	30.0
Tetrachloroethene	Ave	0.4746	0.4596		9.68	10.0	-3.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7587	0.7078		9.33	10.0	-6.7	30.0
Dibromochloromethane	Ave	0.5513	0.5703		10.3	10.0	3.5	30.0
1,2-Dibromoethane	Ave	0.5488	0.5501		10.0	10.0	0.2	30.0
Chlorobenzene	Ave	0.8169	0.8110		9.93	10.0	-0.7	30.0
Ethylbenzene	Ave	1.414	1.417		10.0	10.0	0.2	30.0
n-Nonane	Ave	0.7778	0.7949		10.2	10.0	2.2	30.0
m,p-Xylene	Ave	0.5308	0.5356		20.2	20.0	0.9	30.0
Xylene, o-	Ave	0.5199	0.5130		9.87	10.0	-1.3	30.0
Styrene	Ave	0.7987	0.8002		10.0	10.0	0.2	30.0
Bromoform	Ave	0.4706	0.5525		11.7	10.0	17.4	30.0
Cumene	Ave	1.533	1.548		10.1	10.0	1.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8549	0.8938		10.5	10.0	4.5	30.0
n-Propylbenzene	Ave	1.960	1.982		10.1	10.0	1.1	30.0
1,2,3-Trichloropropane	Ave	0.6968	0.6934		9.95	10.0	-0.5	30.0
n-Decane	Ave	0.9746	1.068		11.0	10.0	9.6	30.0
4-Ethyltoluene	Ave	1.516	1.657		10.9	10.0	9.3	30.0
2-Chlorotoluene	Ave	1.339	1.415		10.6	10.0	5.7	30.0
1,3,5-Trimethylbenzene	Ave	1.273	1.319		10.4	10.0	3.5	30.0
Alpha Methyl Styrene	Ave	0.5826	0.6039		10.4	10.0	3.7	30.0
tert-Butylbenzene	Ave	1.175	1.218		10.4	10.0	3.7	30.0
1,2,4-Trimethylbenzene	Ave	1.279	1.332		10.4	10.0	4.1	30.0
sec-Butylbenzene	Ave	1.849	1.932		10.4	10.0	4.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab Sample ID: ICV 200-118373/15 Calibration Date: 07/11/2017 00:30

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 25833_15.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.508	1.596		10.6	10.0	5.8	30.0
1,3-Dichlorobenzene	Ave	0.8276	0.8372		10.1	10.0	1.2	30.0
1,4-Dichlorobenzene	Ave	0.8278	0.8012		9.68	10.0	-3.2	30.0
Benzyl chloride	Ave	1.102	1.122		10.2	10.0	1.8	30.0
n-Butylbenzene	Ave	1.509	1.528		10.1	10.0	1.2	30.0
n-Undecane	Ave	1.021	1.011		9.91	10.0	-0.9	30.0
1,2-Dichlorobenzene	Ave	0.7869	0.8030		10.2	10.0	2.1	30.0
n-Dodecane	Ave	0.8463	0.9078		10.7	10.0	7.3	30.0
1,2,4-Trichlorobenzene	Ave	0.6141	0.5011		8.16	10.0	-18.4	30.0
Hexachlorobutadiene	Ave	0.5398	0.5316		9.84	10.0	-1.5	30.0
Naphthalene	Ave	1.395	1.019		7.30	10.0	-26.9	30.0
1,2,3-Trichlorobenzene	Ave	0.5638	0.4816		8.54	10.0	-14.6	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_15.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 11-Jul-2017 00:30:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-015
Operator ID: pad Instrument ID: CHX.i
Sublist:

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:27 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 08:52:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.060	0.000	98	258266	10.0	10.2	
2 Dichlorodifluoromethane	85	3.129	3.124	0.005	99	781355	10.0	9.86	
3 Chlorodifluoromethane	51	3.172	3.172	0.000	97	529125	10.0	9.79	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.376	3.376	0.000	97	857173	10.0	11.0	
5 Chloromethane	50	3.509	3.509	0.000	99	305856	10.0	9.64	
6 Butane	43	3.697	3.691	0.006	99	527251	10.0	9.88	
7 Vinyl chloride	62	3.739	3.739	0.000	98	333008	10.0	9.39	
8 Butadiene	54	3.809	3.809	0.000	98	249171	10.0	9.33	
10 Bromomethane	94	4.456	4.451	0.005	99	270892	10.0	9.88	
11 Chloroethane	64	4.676	4.670	0.006	100	159530	10.0	9.98	
12 2-Methylbutane	43	4.740	4.734	0.006	95	400183	10.0	10.7	
13 Vinyl bromide	106	5.045	5.045	0.000	99	273068	10.0	9.80	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	98	729139	10.0	9.76	
16 Pentane	43	5.264	5.259	0.005	98	604769	10.0	11.1	
17 Ethanol	45	5.713	5.713	0.000	98	252216	15.0	15.3	
18 Ethyl ether	59	5.778	5.778	0.000	98	245783	10.0	11.0	
9 BFB									
20 1,1,2-Trichloro-1,2,2-trif	101	6.157	6.163	-0.006	96	566829	10.0	9.84	
19 Acrolein	56	6.168	6.168	0.000	95	124242	10.0	13.9	
21 1,1-Dichloroethene	96	6.216	6.216	0.000	93	271429	10.0	9.79	
22 Acetone	43	6.478	6.478	0.000	98	514872	10.0	10.6	
23 Carbon disulfide	76	6.607	6.601	0.006	99	954003	10.0	11.5	
24 Isopropyl alcohol	45	6.773	6.773	0.000	100	561204	10.0	9.71	
25 3-Chloro-1-propene	41	6.992	6.992	0.000	93	433600	10.0	10.0	
26 Acetonitrile	41	7.163	7.163	0.000	99	292389	10.0	11.5	
27 Methylene Chloride	49	7.292	7.286	0.006	99	393026	10.0	9.99	
28 2-Methyl-2-propanol	59	7.548	7.543	0.005	95	688611	10.0	9.78	
29 Methyl tert-butyl ether	73	7.703	7.704	-0.001	98	917338	10.0	10.0	
31 trans-1,2-Dichloroethene	61	7.719	7.720	-0.001	95	530452	10.0	10.6	
32 Acrylonitrile	53	7.912	7.907	0.005	94	269836	10.0	10.6	
33 Hexane	57	8.094	8.094	0.000	94	578230	10.0	10.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	8.613	8.613	0.000	99	648473	10.0	9.88	
35 Vinyl acetate	43	8.693	8.693	0.000	100	1003505	10.0	11.1	
S 30 1,2-Dichloroethene, Total	61				0		20.0	20.3	
37 cis-1,2-Dichloroethene	96	9.752	9.752	0.000	97	335498	10.0	9.68	
38 2-Butanone (MEK)	72	9.838	9.833	0.005	99	178853	10.0	9.68	
39 Ethyl acetate	88	9.870	9.870	0.000	99	28424	10.0	11.1	
* 40 Chlorobromomethane	128	10.239	10.239	0.000	98	278127	10.0	10.0	
41 Tetrahydrofuran	42	10.271	10.271	0.000	96	489510	10.0	10.5	
42 Chloroform	83	10.378	10.378	0.000	96	726857	10.0	10.0	
43 Cyclohexane	84	10.614	10.608	0.006	96	499423	10.0	10.0	
44 1,1,1-Trichloroethane	97	10.656	10.657	-0.001	96	712893	10.0	9.96	
45 Carbon tetrachloride	117	10.913	10.913	0.000	98	718174	10.0	10.3	
46 Isooctane	57	11.363	11.363	0.000	99	2170006	10.0	9.92	
47 Benzene	78	11.421	11.416	0.005	97	1213855	10.0	9.83	
48 1,2-Dichloroethane	62	11.625	11.625	0.000	96	506173	10.0	9.84	
49 n-Heptane	43	11.780	11.780	0.000	95	846829	10.0	9.75	
* 50 1,4-Difluorobenzene	114	12.326	12.326	0.000	96	1551870	10.0	10.0	
52 n-Butanol	56	12.802	12.802	0.000	90	292283	10.0	10.5	
53 Trichloroethene	95	12.818	12.813	0.006	97	509030	10.0	9.70	
A 51 GRO	1	13.251	(4.724-21.778)		0	146016045	10.0	0	
54 1,2-Dichloropropane	63	13.422	13.417	0.005	93	499811	10.0	9.72	
55 Methyl methacrylate	69	13.610	13.610	0.000	94	470896	10.0	10.1	
56 1,4-Dioxane	88	13.684	13.685	0.000	96	245095	10.0	9.44	
57 Dibromomethane	174	13.690	13.690	0.000	97	422884	10.0	9.48	
58 Dichlorobromomethane	83	14.000	14.000	0.000	98	847622	10.0	9.95	
60 cis-1,3-Dichloropropene	75	14.984	14.979	0.005	94	703920	10.0	9.87	
A 59 TVOC as Toluene	92	15.158	(3.050-27.267)		0	256380578	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.311	15.311	0.000	97	1054315	10.0	9.58	
65 Toluene	92	15.589	15.589	0.000	96	871390	10.0	10.1	
64 n-Octane	43	15.642	15.637	0.005	95	1222494	10.0	9.86	
66 trans-1,3-Dichloropropene	75	16.236	16.236	0.000	97	705229	10.0	9.29	
67 1,1,2-Trichloroethane	83	16.627	16.632	-0.005	96	461330	10.0	10.2	
68 Tetrachloroethene	166	16.718	16.712	0.006	96	640238	10.0	9.68	
69 2-Hexanone	43	17.130	17.130	0.000	92	986071	10.0	9.33	
71 Chlorodibromomethane	129	17.429	17.429	0.000	98	794471	10.0	10.3	
72 Ethylene Dibromide	107	17.713	17.713	0.000	98	766338	10.0	10.0	
* 74 Chlorobenzene-d5	117	18.660	18.654	0.006	88	1393390	10.0	10.0	
75 Chlorobenzene	112	18.718	18.719	-0.001	92	1129880	10.0	9.93	
76 Ethylbenzene	91	18.879	18.879	0.000	99	1973806	10.0	10.0	
77 n-Nonane	57	19.013	19.007	0.006	94	1107344	10.0	10.2	
78 m-Xylene & p-Xylene	106	19.152	19.152	0.000	0	1492215	20.0	20.2	
S 73 Xylenes, Total	106				0		30.0	30.0	
79 o-Xylene	106	20.045	20.045	0.000	98	714701	10.0	9.87	
80 Styrene	104	20.104	20.104	0.000	99	1114794	10.0	10.0	
81 Bromoform	173	20.569	20.570	-0.001	96	769626	10.0	11.7	
82 Isopropylbenzene	105	20.794	20.794	0.000	96	2156014	10.0	10.1	
84 1,1,2,2-Tetrachloroethane	83	21.516	21.516	0.000	97	1245114	10.0	10.5	
85 N-Propylbenzene	91	21.575	21.575	0.000	98	2760887	10.0	10.1	
86 1,2,3-Trichloropropane	75	21.618	21.618	0.000	100	965957	10.0	9.95	
87 n-Decane	57	21.768	21.768	0.000	90	1487702	10.0	11.0	
88 4-Ethyltoluene	105	21.779	21.779	0.000	98	2307835	10.0	10.9	
89 2-Chlorotoluene	91	21.784	21.784	0.000	96	1971879	10.0	10.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	21.896	21.896	0.000	92	1836899	10.0	10.4	
91 Alpha Methyl Styrene	118	22.287	22.287	0.000	86	841325	10.0	10.4	
92 tert-Butylbenzene	119	22.410	22.410	0.000	92	1696543	10.0	10.4	
93 1,2,4-Trimethylbenzene	105	22.511	22.512	-0.001	98	1855722	10.0	10.4	
94 sec-Butylbenzene	105	22.752	22.752	0.000	99	2691785	10.0	10.4	
95 4-Isopropyltoluene	119	22.966	22.966	0.000	97	2222750	10.0	10.6	
96 1,3-Dichlorobenzene	146	22.993	22.993	0.000	99	1166288	10.0	10.1	
97 1,4-Dichlorobenzene	146	23.137	23.132	0.005	93	1116162	10.0	9.68	
98 Benzyl chloride	91	23.346	23.346	0.000	98	1562941	10.0	10.2	
100 n-Butylbenzene	91	23.560	23.560	0.000	98	2128021	10.0	10.1	
99 Undecane	57	23.587	23.587	0.000	97	1408986	10.0	9.91	
101 1,2-Dichlorobenzene	146	23.688	23.688	0.000	94	1118696	10.0	10.2	
102 Dodecane	57	25.224	25.224	0.000	96	1264688	10.0	10.7	
103 1,2,4-Trichlorobenzene	180	26.272	26.272	0.000	94	698064	10.0	8.16	
104 Hexachlorobutadiene	225	26.460	26.460	0.000	98	740550	10.0	9.84	
105 Naphthalene	128	26.775	26.775	0.000	99	1420142	10.0	7.30	
106 1,2,3-Trichlorobenzene	180	27.257	27.257	0.000	95	670882	10.0	8.54	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00699	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

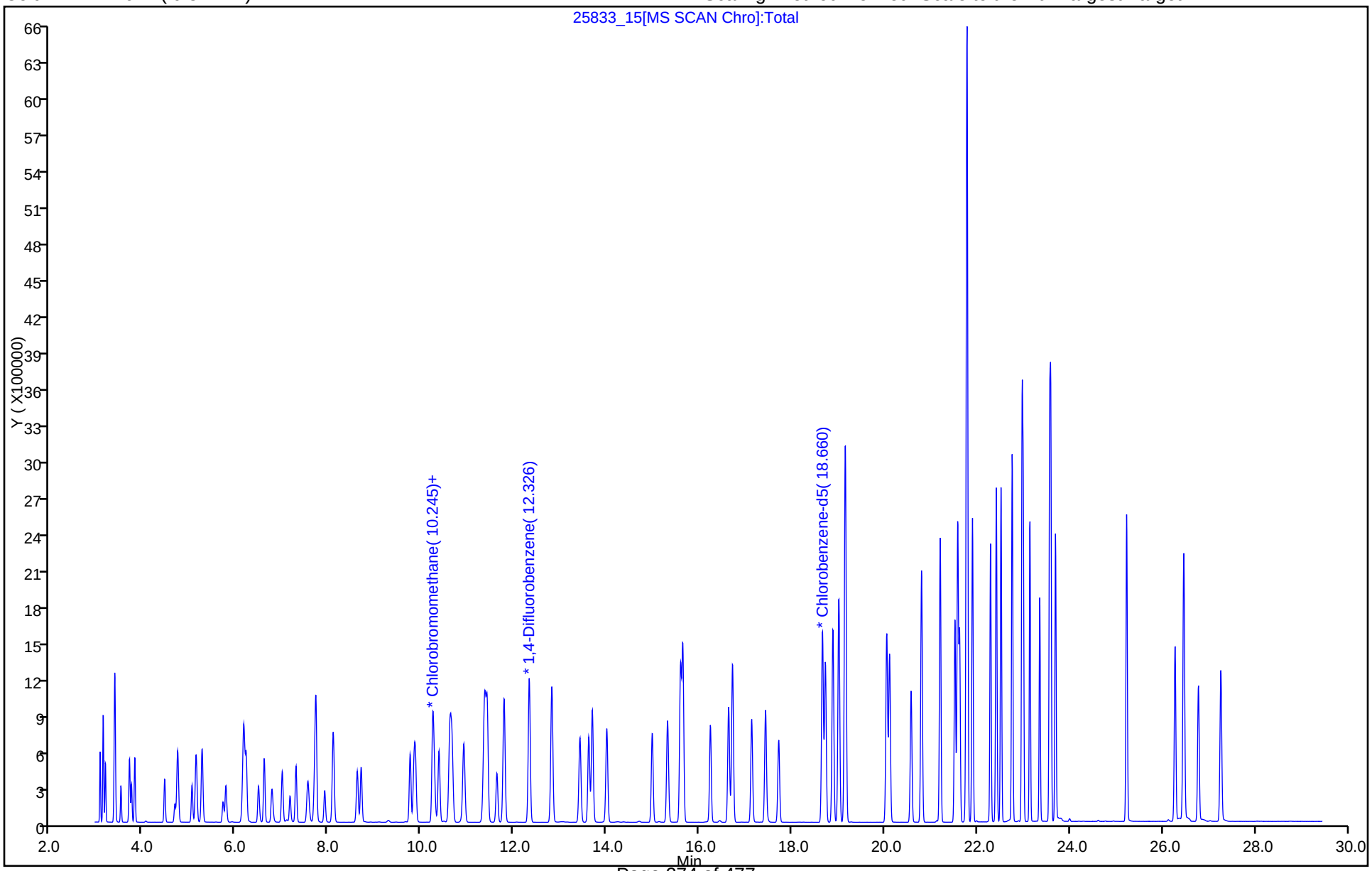
Report Date: 11-Jul-2017 10:09:33 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_15.D

Injection Date:	11-Jul-2017 00:30:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	icv			Worklist Smp#:	15
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab Sample ID: CCVIS 200-119430/5 Calibration Date: 08/07/2017 16:19

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26252-05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9101	0.9759		10.7	10.0	7.2	30.0
Dichlorodifluoromethane	Ave	2.848	2.689		9.44	10.0	-5.6	30.0
Freon 22	Ave	1.943	1.877		9.66	10.0	-3.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.798	2.517		8.99	10.0	-10.0	30.0
Chloromethane	Ave	1.141	1.068		9.35	10.0	-6.4	30.0
n-Butane	Ave	1.918	1.834		9.56	10.0	-4.4	30.0
Vinyl chloride	Ave	1.274	1.119		8.78	10.0	-12.2	30.0
1,3-Butadiene	Ave	0.9599	0.8589		8.95	10.0	-10.5	30.0
Bromomethane	Ave	0.9861	0.8524		8.64	10.0	-13.6	30.0
Chloroethane	Ave	0.5747	0.5046		8.78	10.0	-12.2	30.0
Isopentane	Ave	1.349	1.188		8.80	10.0	-11.9	30.0
Bromoethene(Vinyl Bromide)	Ave	1.002	0.8281		8.27	10.0	-17.3	30.0
Trichlorofluoromethane	Ave	2.685	2.400		8.94	10.0	-10.6	30.0
n-Pentane	Ave	1.959	1.765		9.01	10.0	-9.9	30.0
Ethanol	Ave	0.5944	0.5917		14.9	15.0	-0.5	30.0
Ethyl ether	Ave	0.8017	0.6836		8.52	10.0	-14.7	30.0
Freon TF	Ave	2.071	1.695		8.19	10.0	-18.1	30.0
Acrolein	Ave	0.3219	0.3473		10.8	10.0	7.9	30.0
1,1-Dichloroethene	Ave	0.997	0.8231		8.26	10.0	-17.4	30.0
Acetone	Ave	1.749	1.667		9.53	10.0	-4.7	30.0
Carbon disulfide	Ave	2.991	2.509		8.39	10.0	-16.1	30.0
Isopropyl alcohol	Ave	2.078	1.877		9.03	10.0	-9.7	30.0
3-Chloropropene	Ave	1.558	1.482		9.51	10.0	-4.9	30.0
Acetonitrile	Ave	0.9117	0.8672		9.51	10.0	-4.9	30.0
Methylene Chloride	Ave	1.415	1.249		8.83	10.0	-11.7	30.0
tert-Butyl alcohol	Ave	2.531	2.279		9.00	10.0	-10.0	30.0
Methyl tert-butyl ether	Ave	3.286	2.869		8.73	10.0	-12.7	30.0
trans-1,2-Dichloroethene	Ave	1.792	1.558		8.69	10.0	-13.0	30.0
Acrylonitrile	Ave	0.9164	0.8000		8.73	10.0	-12.7	30.0
n-Hexane	Ave	1.932	1.612		8.34	10.0	-16.6	30.0
1,1-Dichloroethane	Ave	2.361	2.010		8.51	10.0	-14.8	30.0
Vinyl acetate	Ave	3.252	3.124		9.61	10.0	-3.9	30.0
cis-1,2-Dichloroethene	Ave	1.247	1.037		8.31	10.0	-16.8	30.0
Methyl Ethyl Ketone	Ave	0.6645	0.5512		8.29	10.0	-17.0	30.0
Ethyl acetate	Ave	0.0918	0.0789		8.60	10.0	-14.0	30.0
Tetrahydrofuran	Ave	0.2994	0.2907		9.71	10.0	-2.9	30.0
Chloroform	Ave	2.610	2.272		8.70	10.0	-12.9	30.0
Cyclohexane	Ave	0.3215	0.2612		8.12	10.0	-18.8	30.0
1,1,1-Trichloroethane	Ave	0.4612	0.3947		8.56	10.0	-14.4	30.0
Carbon tetrachloride	Ave	0.4491	0.3911		8.71	10.0	-12.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab Sample ID: CCVIS 200-119430/5 Calibration Date: 08/07/2017 16:19

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26252-05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.409	1.234		8.76	10.0	-12.4	30.0
Benzene	Ave	0.7959	0.6624		8.32	10.0	-16.8	30.0
1,2-Dichloroethane	Ave	0.3313	0.2965		8.95	10.0	-10.5	30.0
n-Heptane	Ave	0.5599	0.5250		9.38	10.0	-6.2	30.0
n-Butanol	Ave	0.1795	0.1581		8.81	10.0	-11.9	30.0
Trichloroethene	Ave	0.3383	0.2804		8.29	10.0	-17.1	30.0
1,2-Dichloropropane	Ave	0.3312	0.2979		8.99	10.0	-10.1	30.0
Methyl methacrylate	Ave	0.3013	0.2643		8.77	10.0	-12.3	30.0
1,4-Dioxane	Ave	0.1674	0.1335		7.98	10.0	-20.2	30.0
Dibromomethane	Ave	0.2875	0.2229		7.75	10.0	-22.5	30.0
Bromodichloromethane	Ave	0.5489	0.4866		8.86	10.0	-11.4	30.0
cis-1,3-Dichloropropene	Ave	0.4595	0.4028		8.76	10.0	-12.3	30.0
Methyl isobutyl ketone	Ave	0.7089	0.7224		10.2	10.0	1.9	30.0
Toluene	Ave	0.6215	0.5183		8.34	10.0	-16.6	30.0
n-Octane	Ave	0.7992	0.8040		10.1	10.0	0.6	30.0
trans-1,3-Dichloropropene	Ave	0.4889	0.4147		8.48	10.0	-15.2	30.0
1,1,2-Trichloroethane	Ave	0.3237	0.2772		8.56	10.0	-14.4	30.0
Tetrachloroethene	Ave	0.4746	0.3628		7.64	10.0	-23.5	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.7587	0.7634		10.1	10.0	0.6	30.0
Dibromochloromethane	Ave	0.5513	0.4707		8.54	10.0	-14.6	30.0
1,2-Dibromoethane	Ave	0.5488	0.4518		8.23	10.0	-17.7	30.0
Chlorobenzene	Ave	0.8169	0.6690		8.19	10.0	-18.1	30.0
Ethylbenzene	Ave	1.414	1.210		8.55	10.0	-14.5	30.0
n-Nonane	Ave	0.7778	0.7261		9.33	10.0	-6.7	30.0
m,p-Xylene	Ave	0.5308	0.4446		16.8	20.0	-16.2	30.0
Xylene, o-	Ave	0.5199	0.4337		8.34	10.0	-16.6	30.0
Styrene	Ave	0.7987	0.6902		8.64	10.0	-13.6	30.0
Bromoform	Ave	0.4706	0.4484		9.53	10.0	-4.7	30.0
Cumene	Ave	1.533	1.295		8.45	10.0	-15.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8549	0.7408		8.66	10.0	-13.3	30.0
n-Propylbenzene	Ave	1.960	1.728		8.81	10.0	-11.9	30.0
1,2,3-Trichloropropane	Ave	0.6968	0.6136		8.80	10.0	-11.9	30.0
n-Decane	Ave	0.9746	1.002		10.3	10.0	2.8	30.0
4-Ethyltoluene	Ave	1.516	1.368		9.02	10.0	-9.8	30.0
2-Chlorotoluene	Ave	1.339	1.216		9.08	10.0	-9.2	30.0
1,3,5-Trimethylbenzene	Ave	1.273	1.110		8.72	10.0	-12.8	30.0
Alpha Methyl Styrene	Ave	0.5826	0.5272		9.05	10.0	-9.5	30.0
tert-Butylbenzene	Ave	1.175	1.012		8.62	10.0	-13.8	30.0
1,2,4-Trimethylbenzene	Ave	1.279	1.145		8.95	10.0	-10.5	30.0
sec-Butylbenzene	Ave	1.849	1.654		8.95	10.0	-10.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Lab Sample ID: CCVIS 200-119430/5 Calibration Date: 08/07/2017 16:19

Instrument ID: CHX.i Calib Start Date: 07/10/2017 15:17

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 07/10/2017 21:09

Lab File ID: 26252-05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.508	1.341		8.89	10.0	-11.1	30.0
1,3-Dichlorobenzene	Ave	0.8276	0.7202		8.70	10.0	-13.0	30.0
1,4-Dichlorobenzene	Ave	0.8278	0.7165		8.65	10.0	-13.5	30.0
Benzyl chloride	Ave	1.102	1.098		9.96	10.0	-0.4	30.0
n-Butylbenzene	Ave	1.509	1.418		9.40	10.0	-6.0	30.0
n-Undecane	Ave	1.021	0.9721		9.52	10.0	-4.8	30.0
1,2-Dichlorobenzene	Ave	0.7869	0.6786		8.62	10.0	-13.8	30.0
n-Dodecane	Ave	0.8463	0.8385		9.90	10.0	-0.9	30.0
1,2,4-Trichlorobenzene	Ave	0.6141	0.4731		7.70	10.0	-22.9	30.0
Hexachlorobutadiene	Ave	0.5398	0.4269		7.91	10.0	-20.9	30.0
Naphthalene	Ave	1.395	1.183		8.55	10.0	-15.2	30.0
1,2,3-Trichlorobenzene	Ave	0.5638	0.4579		8.77	10.0	-18.8	30.0

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-05.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Aug-2017 16:19:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-005
Operator ID: ert Instrument ID: CHX.i
Sublist: chrom-TO15_MasterMethod_X.m*sub1

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:13:58 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:13:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.065	3.065	0.000	98	195151	10.0	10.7	
2 Dichlorodifluoromethane	85	3.130	3.130	0.000	99	537639	10.0	9.44	
3 Chlorodifluoromethane	51	3.178	3.178	0.000	98	375360	10.0	9.66	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.381	3.381	0.000	94	503382	10.0	8.99	
5 Chloromethane	50	3.515	3.515	0.000	99	213535	10.0	9.35	
6 Butane	43	3.697	3.697	0.000	98	366666	10.0	9.56	
7 Vinyl chloride	62	3.739	3.739	0.000	98	223832	10.0	8.78	
8 Butadiene	54	3.809	3.809	0.000	96	171744	10.0	8.95	
9 BFB									
10 Bromomethane	94	4.456	4.456	0.000	99	170453	10.0	8.64	
11 Chloroethane	64	4.676	4.676	0.000	99	100896	10.0	8.78	
12 2-Methylbutane	43	4.734	4.734	0.000	94	237501	10.0	8.80	
13 Vinyl bromide	106	5.045	5.045	0.000	98	165594	10.0	8.27	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	99	479877	10.0	8.94	
16 Pentane	43	5.264	5.264	0.000	97	352978	10.0	9.01	
17 Ethanol	45	5.708	5.708	0.000	97	177550	15.0	14.9	
18 Ethyl ether	59	5.778	5.778	0.000	95	136684	10.0	8.52	
20 1,1,2-Trichloro-1,2,2-trif	101	6.157	6.157	0.000	94	338992	10.0	8.19	
19 Acrolein	56	6.163	6.163	0.000	95	69450	10.0	10.8	
21 1,1-Dichloroethene	96	6.216	6.216	0.000	92	164593	10.0	8.26	
22 Acetone	43	6.478	6.478	0.000	99	333241	10.0	9.53	
23 Carbon disulfide	76	6.601	6.601	0.000	100	501676	10.0	8.39	
24 Isopropyl alcohol	45	6.762	6.762	0.000	100	375323	10.0	9.03	
25 3-Chloro-1-propene	41	6.992	6.992	0.000	94	296327	10.0	9.51	
26 Acetonitrile	41	7.158	7.158	0.000	99	173399	10.0	9.51	
27 Methylene Chloride	49	7.286	7.286	0.000	98	249809	10.0	8.83	
28 2-Methyl-2-propanol	59	7.538	7.538	0.000	95	455696	10.0	9.00	
29 Methyl tert-butyl ether	73	7.698	7.698	0.000	98	573711	10.0	8.73	
31 trans-1,2-Dichloroethene	61	7.720	7.720	0.000	94	311591	10.0	8.69	
32 Acrylonitrile	53	7.901	7.901	0.000	95	159972	10.0	8.73	
33 Hexane	57	8.089	8.089	0.000	94	322244	10.0	8.34	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 1,1-Dichloroethane	63	8.608	8.608	0.000	99	401950	10.0	8.51	
35 Vinyl acetate	43	8.688	8.688	0.000	100	624770	10.0	9.61	
S 30 1,2-Dichloroethene, Total	61				0		20.0	17.0	
37 cis-1,2-Dichloroethene	96	9.752	9.752	0.000	98	207311	10.0	8.31	
38 2-Butanone (MEK)	72	9.827	9.827	0.000	99	110219	10.0	8.29	
39 Ethyl acetate	88	9.859	9.859	0.000	98	15777	10.0	8.60	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	96	200002	10.0	10.0	
41 Tetrahydrofuran	42	10.261	10.261	0.000	95	329058	10.0	9.71	
42 Chloroform	83	10.373	10.373	0.000	97	454408	10.0	8.70	
43 Cyclohexane	84	10.608	10.608	0.000	94	295661	10.0	8.12	
44 1,1,1-Trichloroethane	97	10.651	10.651	0.000	96	446703	10.0	8.56	
45 Carbon tetrachloride	117	10.908	10.908	0.000	98	442708	10.0	8.71	
46 Isooctane	57	11.363	11.363	0.000	99	1397095	10.0	8.76	
47 Benzene	78	11.411	11.411	0.000	97	749728	10.0	8.32	
48 1,2-Dichloroethane	62	11.620	11.620	0.000	96	335544	10.0	8.95	
49 n-Heptane	43	11.780	11.780	0.000	98	594234	10.0	9.38	
* 50 1,4-Difluorobenzene	114	12.320	12.320	0.000	97	1132066	10.0	10.0	
52 n-Butanol	56	12.791	12.791	0.000	93	178925	10.0	8.81	
53 Trichloroethene	95	12.807	12.807	0.000	94	317378	10.0	8.29	
A 51 GRO	1	13.248	(4.724-21.773)		0	100259639	10.0	0	
54 1,2-Dichloropropane	63	13.412	13.412	0.000	91	337197	10.0	8.99	
55 Methyl methacrylate	69	13.604	13.604	0.000	90	299149	10.0	8.77	
56 1,4-Dioxane	88	13.674	13.674	0.000	96	151139	10.0	7.98	
57 Dibromomethane	174	13.684	13.684	0.000	97	252284	10.0	7.75	
58 Dichlorobromomethane	83	13.995	13.995	0.000	98	550705	10.0	8.86	
60 cis-1,3-Dichloropropene	75	14.974	14.974	0.000	96	455878	10.0	8.76	
A 59 TVOC as Toluene	92	15.158	(3.055-27.261)		0	175835263	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.300	15.300	0.000	97	817614	10.0	10.2	
65 Toluene	92	15.584	15.584	0.000	93	545264	10.0	8.34	
64 n-Octane	43	15.637	15.637	0.000	97	909980	10.0	10.1	
66 trans-1,3-Dichloropropene	75	16.231	16.231	0.000	98	469421	10.0	8.48	
67 1,1,2-Trichloroethane	83	16.621	16.621	0.000	97	291604	10.0	8.56	
68 Tetrachloroethene	166	16.707	16.707	0.000	94	381674	10.0	7.64	
69 2-Hexanone	43	17.119	17.119	0.000	91	803105	10.0	10.1	
71 Chlorodibromomethane	129	17.424	17.424	0.000	97	495105	10.0	8.54	
72 Ethylene Dibromide	107	17.707	17.707	0.000	98	475246	10.0	8.23	
* 74 Chlorobenzene-d5	117	18.649	18.649	0.000	90	1052156	10.0	10.0	
75 Chlorobenzene	112	18.713	18.713	0.000	90	703707	10.0	8.19	
76 Ethylbenzene	91	18.874	18.874	0.000	99	1272558	10.0	8.55	
77 n-Nonane	57	19.002	19.002	0.000	97	763767	10.0	9.33	
78 m-Xylene & p-Xylene	106	19.141	19.141	0.000	0	935422	20.0	16.8	
S 73 Xylenes, Total	106				0		30.0	25.1	
79 o-Xylene	106	20.035	20.035	0.000	98	456265	10.0	8.34	
80 Styrene	104	20.099	20.099	0.000	99	726100	10.0	8.64	
81 Bromoform	173	20.564	20.564	0.000	95	471708	10.0	9.53	
82 Isopropylbenzene	105	20.789	20.789	0.000	97	1362515	10.0	8.45	
84 1,1,2,2-Tetrachloroethane	83	21.511	21.511	0.000	97	779324	10.0	8.66	
85 N-Propylbenzene	91	21.570	21.570	0.000	98	1817261	10.0	8.81	
86 1,2,3-Trichloropropane	75	21.613	21.613	0.000	98	645420	10.0	8.80	
87 n-Decane	57	21.763	21.763	0.000	88	1054300	10.0	10.3	
88 4-Ethyltoluene	105	21.773	21.773	0.000	98	1439119	10.0	9.02	
89 2-Chlorotoluene	91	21.779	21.779	0.000	94	1279504	10.0	9.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105	21.891	21.891	0.000	91	1168121	10.0	8.72	
91 Alpha Methyl Styrene	118	22.281	22.281	0.000	85	554545	10.0	9.05	
92 tert-Butylbenzene	119	22.405	22.405	0.000	92	1064956	10.0	8.62	
93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	98	1204289	10.0	8.95	
94 sec-Butylbenzene	105	22.747	22.747	0.000	98	1740424	10.0	8.95	
95 4-Isopropyltoluene	119	22.961	22.961	0.000	97	1411068	10.0	8.89	
96 1,3-Dichlorobenzene	146	22.988	22.988	0.000	98	757584	10.0	8.70	
97 1,4-Dichlorobenzene	146	23.132	23.132	0.000	92	753706	10.0	8.65	
98 Benzyl chloride	91	23.341	23.341	0.000	97	1154800	10.0	9.96	
100 n-Butylbenzene	91	23.555	23.555	0.000	97	1492161	10.0	9.40	
99 Undecane	57	23.581	23.581	0.000	97	1022621	10.0	9.52	
101 1,2-Dichlorobenzene	146	23.683	23.683	0.000	93	713862	10.0	8.62	
102 Dodecane	57	25.218	25.218	0.000	94	882017	10.0	9.90	
103 1,2,4-Trichlorobenzene	180	26.267	26.267	0.000	94	497715	10.0	7.70	
104 Hexachlorobutadiene	225	26.454	26.454	0.000	97	449107	10.0	7.91	
105 Naphthalene	128	26.765	26.765	0.000	98	1244192	10.0	8.55	
106 1,2,3-Trichlorobenzene	180	27.251	27.251	0.000	95	481651	10.0	8.77	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15CAL4w_00620	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

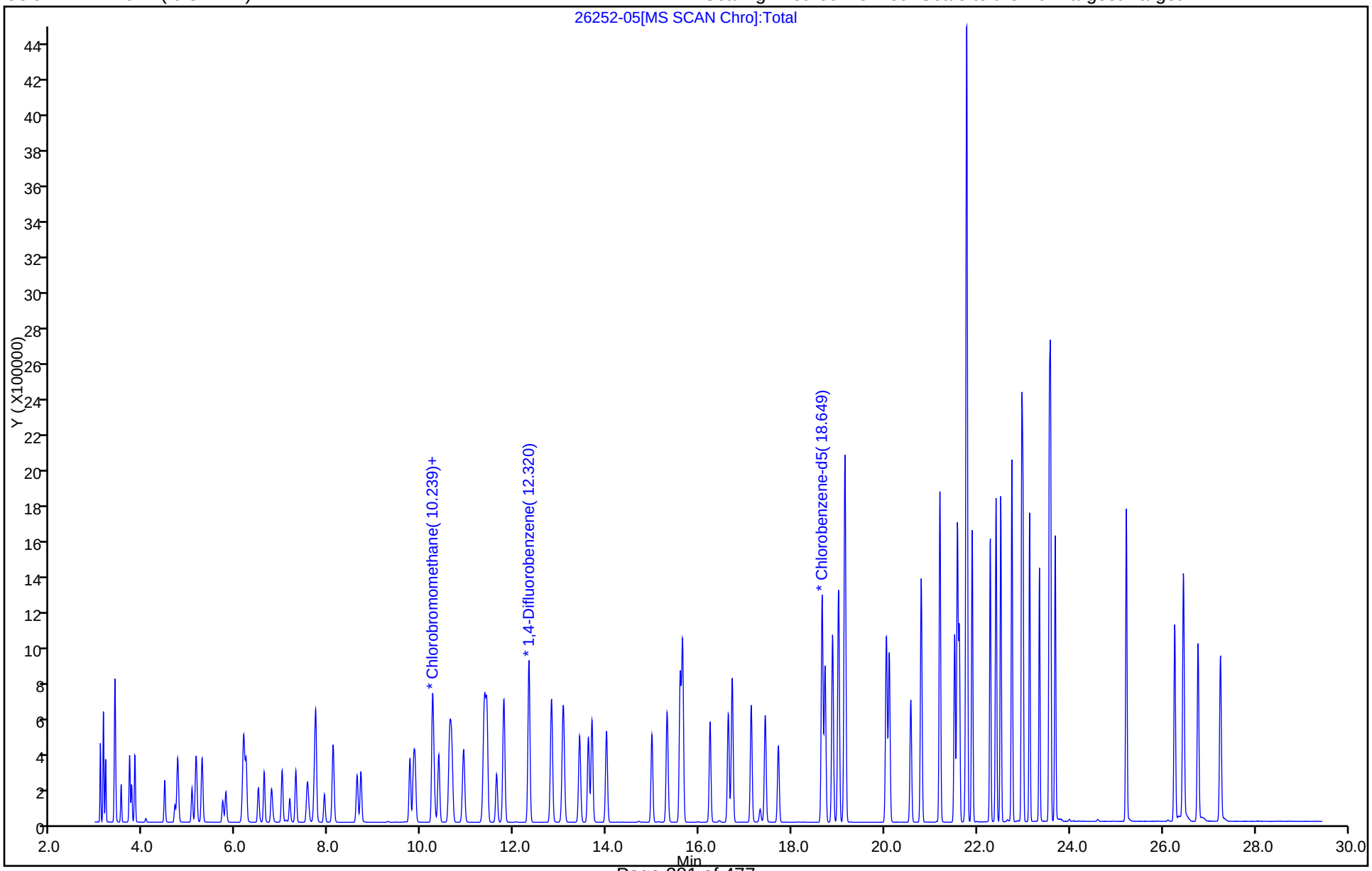
Report Date: 08-Aug-2017 14:13:59 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-05.D

Injection Date:	07-Aug-2017 16:19:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	ccvis			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 10-Jul-2017 12:41:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0025833-001
Misc. Info.: bfb
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 10:09:13 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: daiglep Date: 11-Jul-2017 10:07:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		10.239				10.0	ND	
* 50 1,4-Difluorobenzene	114		12.326				10.0	ND	
* 74 Chlorobenzene-d5	117		18.654				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

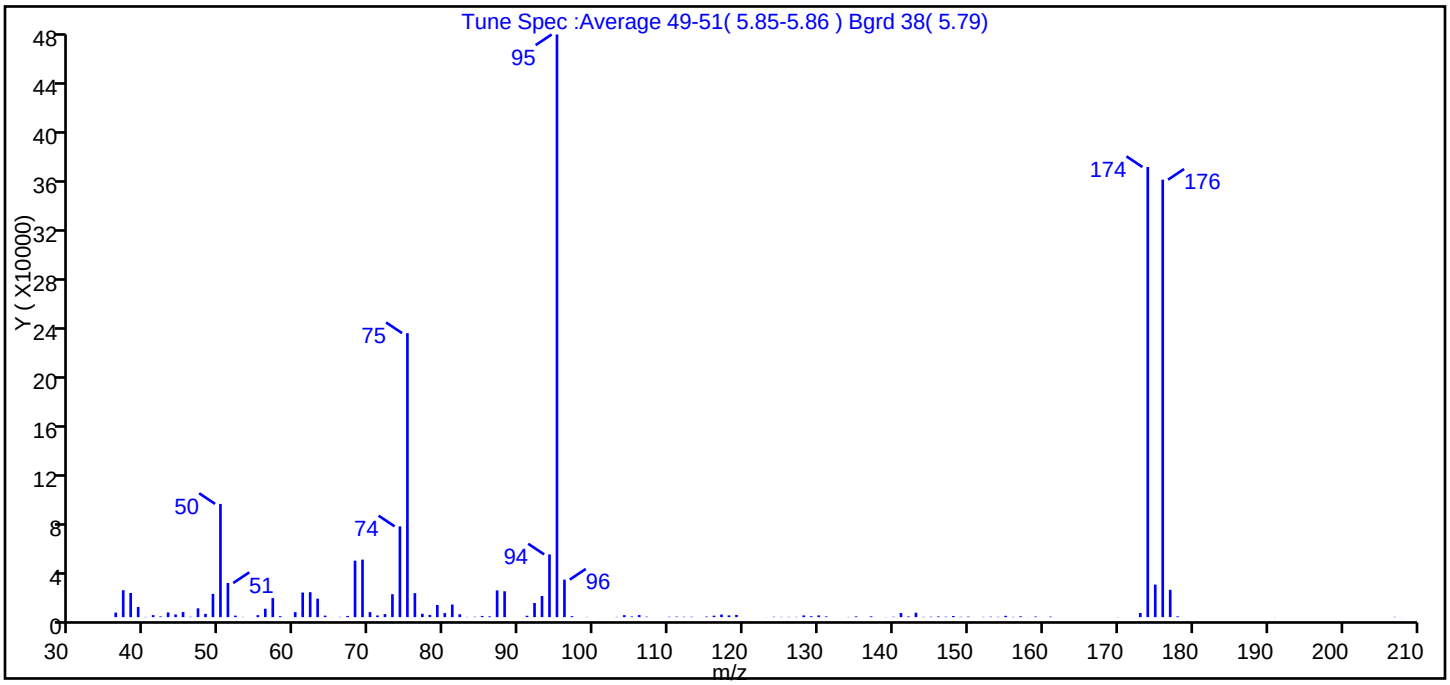
ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File:	\\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_01.D				
Injection Date:	10-Jul-2017 12:41:30	Instrument ID:	CHX.i		
Lims ID:	bfb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	200.0 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Tune Method:	BFB Method TO-15				

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	19.4
75	30.0 to 66.0 Percent of m/e 95	48.7
96	5.0 to 9.0 Percent of m/e 95	6.4
173	Less than 2.0 Percent of m/e 174	0.7 (0.9)
174	50.0 to 120.0 Percent of m/e 95	77.3
175	4.0 to 9.0 Percent of m/e 174	5.6 (7.2)
176	93.0 to 101.0 Percent of m/e 174	75.1 (97.2)
177	5.0 to 9.0 Percent of m/e 176	4.7 (6.2)

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_01.D\TO15_MasterMethod_X.m.rslt\s
Injection Date: 10-Jul-2017 12:41:30
Spectrum: Tune Spec :Average 49-51(5.85-5.86) Bgrd 38(5.79)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3705	66.00	197	99.00	191	141.00	3359
37.00	21904	67.00	1000	103.00	225	142.00	555
38.00	19672	68.00	45968	104.00	1622	143.00	3580
39.00	8255	69.00	46808	105.00	518	144.00	248
40.00	194	70.00	4087	106.00	1689	145.00	356
41.00	1659	71.00	1361	107.00	369	146.00	561
42.00	571	72.00	2458	110.00	309	147.00	347
43.00	3812	73.00	18688	111.00	430	148.00	905
44.00	2181	74.00	73880	112.00	318	149.00	267
45.00	4154	75.00	231104	113.00	327	150.00	421
46.00	273	76.00	19528	115.00	490	152.00	238
47.00	7194	77.00	2727	116.00	1202	153.00	345
48.00	2672	78.00	1829	117.00	2124	154.00	256
49.00	18960	79.00	9921	118.00	1448	155.00	1083
50.00	92144	80.00	3302	119.00	1792	156.00	228
51.00	27776	81.00	10252	120.00	59	157.00	657
52.00	1237	82.00	2317	123.00	83	158.00	52
53.00	181	83.00	186	124.00	297	159.00	512
54.00	21	84.00	309	125.00	201	161.00	431
55.00	1634	85.00	985	126.00	225	170.00	110
56.00	6865	86.00	648	127.00	209	173.00	3382
57.00	15511	87.00	21760	128.00	1412	174.00	366272
58.00	780	88.00	21056	129.00	720	175.00	26496
59.00	54	91.00	1148	130.00	1440	176.00	355968
60.00	4054	92.00	11502	131.00	592	177.00	22224
61.00	20000	93.00	17216	134.00	177	178.00	654
62.00	20312	94.00	51040	135.00	623	191.00	101
63.00	15038	95.00	474112	137.00	632	207.00	224
64.00	1246	96.00	30536	139.00	114	208.00	80
65.00	92	97.00	808	140.00	310		

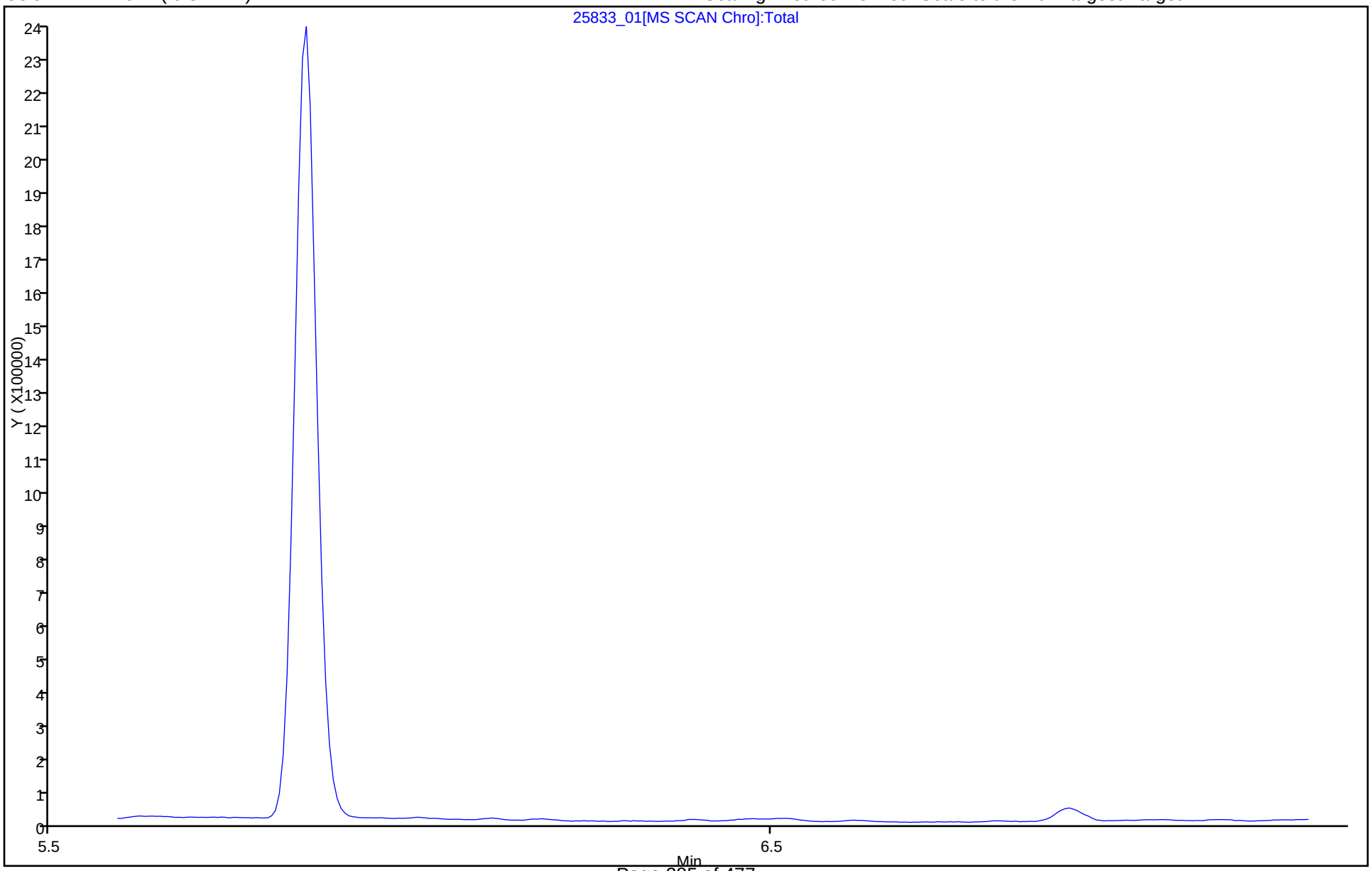
Report Date: 11-Jul-2017 10:09:13 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_01.D

Injection Date:	10-Jul-2017 12:41:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252_01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 07-Aug-2017 11:31:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-001
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:11:27 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:11:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
9 BFB									
* 40 Chlorobromomethane	128		10.234				10.0	ND	
* 50 1,4-Difluorobenzene	114		12.320				10.0	ND	
* 74 Chlorobenzene-d5	117		18.649				10.0	ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

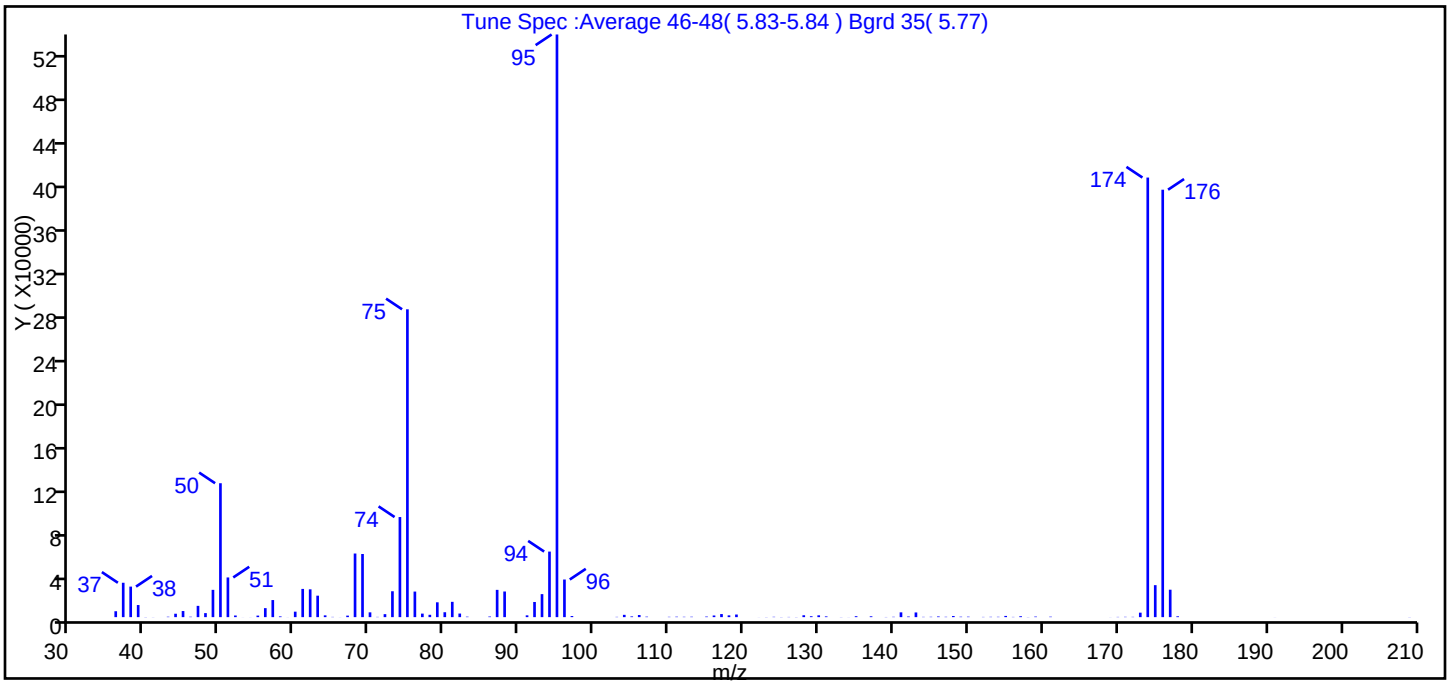
ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

MS Tune Report

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252_01.D
Injection Date: 07-Aug-2017 11:31:30 Instrument ID: CHX.i
Lims ID: bfb
Client ID:
Operator ID: ert ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 200.0 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_X.m Limit Group: AI_TO15_ICAL
Tune Method: BFB Method TO-15

9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100 Percent Relative Abundance	100.0
50	8.0 to 40.0 Percent of m/e 95	23.0
75	30.0 to 66.0 Percent of m/e 95	52.8
96	5.0 to 9.0 Percent of m/e 95	6.5
173	Less than 2.0 Percent of m/e 174	0.8 (1.0)
174	50.0 to 120.0 Percent of m/e 95	75.4
175	4.0 to 9.0 Percent of m/e 174	5.5 (7.3)
176	93.0 to 101.0 Percent of m/e 174	73.4 (97.2)
177	5.0 to 9.0 Percent of m/e 176	4.7 (6.4)

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252_01.D\TO15_MasterMethod_X.m.rslt\s
Injection Date: 07-Aug-2017 11:31:30
Spectrum: Tune Spec :Average 46-48(5.83-5.84) Bgrd 35(5.77)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5441	66.00	62	105.00	666	143.00	4322
37.00	31672	67.00	1404	106.00	1951	144.00	256
38.00	28128	68.00	58600	107.00	438	145.00	326
39.00	11147	69.00	58152	110.00	298	146.00	620
40.00	130	70.00	4418	111.00	414	147.00	319
41.00	78	71.00	228	112.00	320	148.00	1015
42.00	7	72.00	2754	113.00	371	149.00	401
43.00	379	73.00	23848	115.00	536	150.00	417
44.00	3143	74.00	92192	116.00	1519	152.00	213
45.00	5617	75.00	283520	117.00	2842	153.00	299
46.00	380	76.00	23552	118.00	1642	154.00	310
47.00	10393	77.00	3258	119.00	2413	155.00	1123
48.00	3709	78.00	2164	122.00	51	156.00	214
49.00	25144	79.00	13665	123.00	117	157.00	832
50.00	123336	80.00	4530	124.00	305	158.00	116
51.00	36560	81.00	14099	125.00	125	159.00	511
52.00	1507	82.00	3309	126.00	193	161.00	421
53.00	39	83.00	431	127.00	120	169.00	57
54.00	55	86.00	564	128.00	1731	170.00	215
55.00	1415	87.00	25120	129.00	829	171.00	286
56.00	8291	88.00	23616	130.00	1660	172.00	267
57.00	15737	91.00	1656	131.00	696	173.00	4123
58.00	668	92.00	13959	133.00	106	174.00	404864
59.00	50	93.00	21200	134.00	59	175.00	29456
60.00	5048	94.00	60384	135.00	859	176.00	393664
61.00	26000	95.00	536640	137.00	766	177.00	25272
62.00	25616	96.00	34656	139.00	147	178.00	756
63.00	19768	97.00	1011	140.00	309	191.00	51
64.00	1643	103.00	251	141.00	4411	209.00	109
65.00	227	104.00	2126	142.00	558		

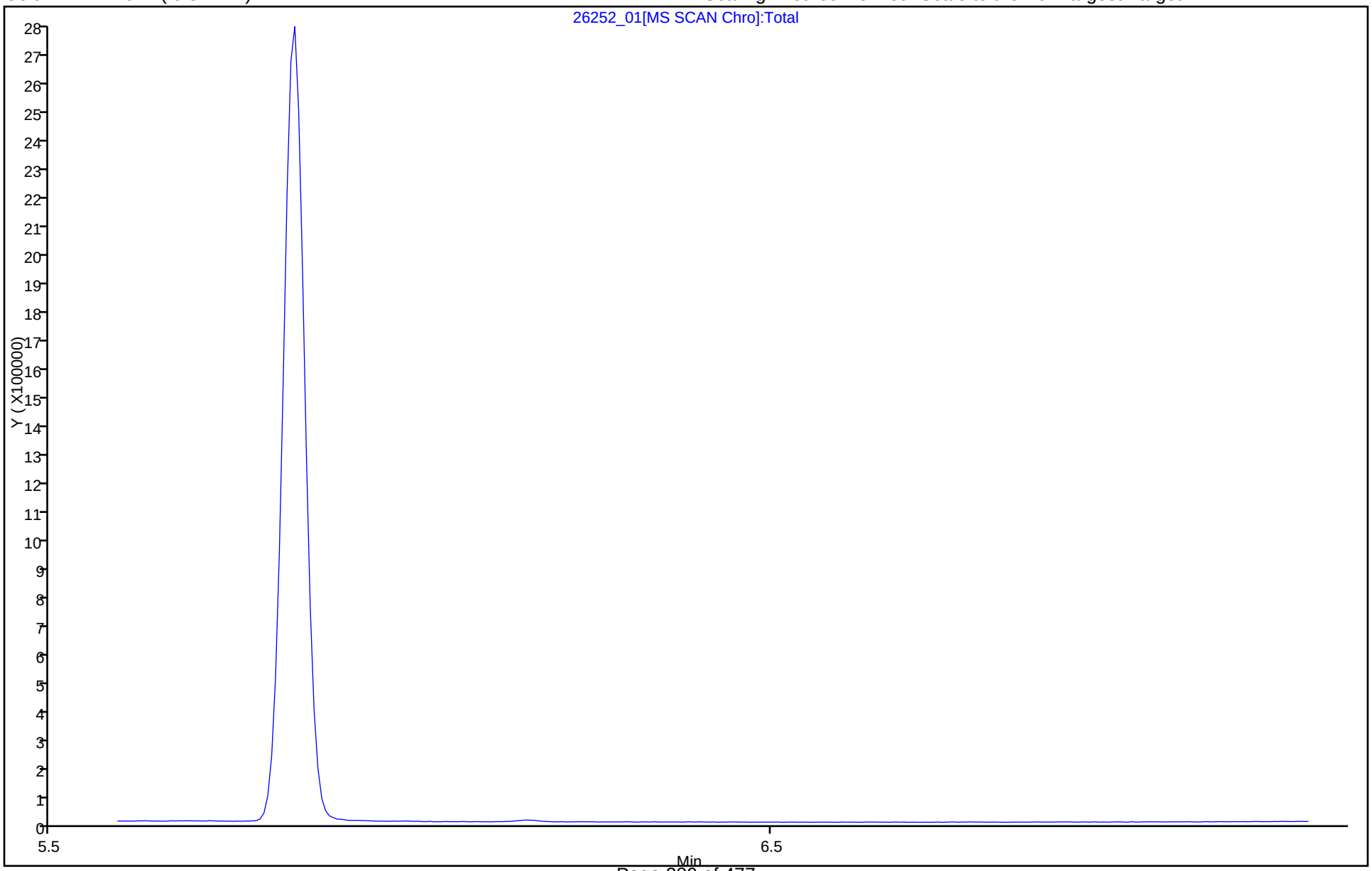
Report Date: 08-Aug-2017 14:11:27 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252_01.D

Injection Date:	07-Aug-2017 11:31:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	200.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: Lab Sample ID: MB 200-119430/7

Matrix: Air Lab File ID: 26252-07.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 18:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.16	U	0.50	0.16
75-01-4	Vinyl chloride	62.50	0.018	U	0.20	0.018
75-00-3	Chloroethane	64.52	0.13	U	0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	0.035	U	0.20	0.035
75-09-2	Methylene Chloride	84.93	0.068	U	0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	0.041	U	0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	U	0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	0.017	U	0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	0.029	U	0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	0.026	U	0.20	0.026
56-23-5	Carbon tetrachloride	153.81	0.011	U	0.20	0.011
71-43-2	Benzene	78.11	0.028	U	0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	0.034	U	0.20	0.034
79-01-6	Trichloroethene	131.39	0.0091	U	0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	0.035	U	0.20	0.035
108-88-3	Toluene	92.14	0.035	U	0.20	0.035
127-18-4	Tetrachloroethene	165.83	0.0098	U	0.20	0.0098
108-90-7	Chlorobenzene	112.56	0.025	U	0.20	0.025
100-41-4	Ethylbenzene	106.17	0.034	U	0.20	0.034
179601-23-1	m,p-Xylene	106.17	0.077	U	0.50	0.077
95-47-6	Xylene, o-	106.17	0.040	U	0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	0.040	U	0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	0.057	U	0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	0.050	U	0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	0.045	U	0.20	0.045
91-20-3	Naphthalene	128.17	0.10	U	0.50	0.10

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: Lab Sample ID: MB 200-119430/7

Matrix: Air Lab File ID: 26252-07.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 18:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	0.33	U	1.0	0.33
75-01-4	Vinyl chloride	62.50	0.046	U	0.51	0.046
75-00-3	Chloroethane	64.52	0.34	U	1.3	0.34
75-35-4	1,1-Dichloroethene	96.94	0.14	U	0.79	0.14
75-09-2	Methylene Chloride	84.93	0.24	U	1.7	0.24
1634-04-4	Methyl tert-butyl ether	88.15	0.15	U	0.72	0.15
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	U	0.79	0.20
75-34-3	1,1-Dichloroethane	98.96	0.069	U	0.81	0.069
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	U	0.79	0.11
71-55-6	1,1,1-Trichloroethane	133.41	0.14	U	1.1	0.14
56-23-5	Carbon tetrachloride	153.81	0.069	U	1.3	0.069
71-43-2	Benzene	78.11	0.089	U	0.64	0.089
107-06-2	1,2-Dichloroethane	98.96	0.14	U	0.81	0.14
79-01-6	Trichloroethene	131.39	0.049	U	1.1	0.049
78-87-5	1,2-Dichloropropane	112.99	0.16	U	0.92	0.16
108-88-3	Toluene	92.14	0.13	U	0.75	0.13
127-18-4	Tetrachloroethene	165.83	0.066	U	1.4	0.066
108-90-7	Chlorobenzene	112.56	0.12	U	0.92	0.12
100-41-4	Ethylbenzene	106.17	0.15	U	0.87	0.15
179601-23-1	m,p-Xylene	106.17	0.33	U	2.2	0.33
95-47-6	Xylene, o-	106.17	0.17	U	0.87	0.17
108-67-8	1,3,5-Trimethylbenzene	120.20	0.20	U	0.98	0.20
95-63-6	1,2,4-Trimethylbenzene	120.20	0.28	U	0.98	0.28
541-73-1	1,3-Dichlorobenzene	147.00	0.30	U	1.2	0.30
95-50-1	1,2-Dichlorobenzene	147.00	0.27	U	1.2	0.27
91-20-3	Naphthalene	128.17	0.52	U	2.6	0.52

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-07.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 07-Aug-2017 18:00:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-007
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:18:30 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:18:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.065					ND	
2 Dichlorodifluoromethane	85		3.130					ND	
3 Chlorodifluoromethane	51		3.178					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.381					ND	
5 Chloromethane	50		3.515					ND	
6 Butane	43		3.697					ND	
7 Vinyl chloride	62		3.739					ND	
8 Butadiene	54		3.809					ND	
10 Bromomethane	94		4.456					ND	
11 Chloroethane	64		4.676					ND	
12 2-Methylbutane	43		4.734					ND	
13 Vinyl bromide	106		5.045					ND	
14 Trichlorofluoromethane	101		5.130					ND	
16 Pentane	43		5.264					ND	
17 Ethanol	45	5.729	5.708	0.021	98	1739		0.1545	
18 Ethyl ether	59		5.778					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.157					ND	
19 Acrolein	56		6.163					ND	
21 1,1-Dichloroethene	96		6.216					ND	
22 Acetone	43		6.478					ND	
23 Carbon disulfide	76		6.601					ND	
24 Isopropyl alcohol	45	6.810	6.762	0.048	97	4063		0.1033	
25 3-Chloro-1-propene	41		6.992					ND	
26 Acetonitrile	41		7.158					ND	
27 Methylene Chloride	49		7.286					ND	
28 2-Methyl-2-propanol	59		7.538					ND	
29 Methyl tert-butyl ether	73		7.698					ND	
31 trans-1,2-Dichloroethene	61		7.720					ND	
32 Acrylonitrile	53		7.901					ND	
33 Hexane	57		8.089					ND	
34 1,1-Dichloroethane	63		8.608					ND	
35 Vinyl acetate	43		8.688					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
37 cis-1,2-Dichloroethene	96		9.752					ND	
38 2-Butanone (MEK)	72		9.827					ND	
39 Ethyl acetate	88		9.859					ND	
* 40 Chlorobromomethane	128	10.228	10.234	-0.006	96	189321	10.0	10.0	
41 Tetrahydrofuran	42		10.261					ND	
42 Chloroform	83		10.373					ND	
43 Cyclohexane	84		10.608					ND	
44 1,1,1-Trichloroethane	97		10.651					ND	
45 Carbon tetrachloride	117		10.908					ND	
46 Isooctane	57		11.363					ND	
47 Benzene	78		11.411					ND	
48 1,2-Dichloroethane	62		11.620					ND	
49 n-Heptane	43		11.780					ND	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	1079273	10.0	10.0	
52 n-Butanol	56		12.791					ND	
53 Trichloroethene	95		12.807					ND	
A 51 GRO	1	13.248	(4.724-21.773)		0	3884808		0	
54 1,2-Dichloropropane	63		13.412					ND	
55 Methyl methacrylate	69		13.604					ND	
56 1,4-Dioxane	88		13.674					ND	
57 Dibromomethane	174		13.684					ND	
58 Dichlorobromomethane	83		13.995					ND	
60 cis-1,3-Dichloropropene	75		14.974					ND	
A 59 TVOC as Toluene	92	15.158	(3.055-27.261)		0	4081163		0	
61 4-Methyl-2-pentanone (MIBK	43		15.300					ND	
65 Toluene	92		15.584					ND	
64 n-Octane	43		15.637					ND	
66 trans-1,3-Dichloropropene	75		16.231					ND	
67 1,1,2-Trichloroethane	83		16.621					ND	
68 Tetrachloroethene	166		16.707					ND	
69 2-Hexanone	43		17.119					ND	
71 Chlorodibromomethane	129		17.424					ND	
72 Ethylene Dibromide	107		17.707					ND	
* 74 Chlorobenzene-d5	117	18.644	18.649	-0.005	91	961216	10.0	10.0	
75 Chlorobenzene	112		18.713					ND	
76 Ethylbenzene	91		18.874					ND	
77 n-Nonane	57		19.002					ND	
78 m-Xylene & p-Xylene	106		19.141					ND	
S 73 Xylenes, Total	106		19.600					ND	
79 o-Xylene	106		20.035					ND	
80 Styrene	104		20.099					ND	
81 Bromoform	173		20.564					ND	
82 Isopropylbenzene	105		20.789					ND	
84 1,1,2,2-Tetrachloroethane	83		21.511					ND	
85 N-Propylbenzene	91		21.570					ND	
86 1,2,3-Trichloropropane	75		21.613					ND	
87 n-Decane	57		21.763					ND	
88 4-Ethyltoluene	105		21.773					ND	
89 2-Chlorotoluene	91		21.779					ND	
90 1,3,5-Trimethylbenzene	105		21.891					ND	
91 Alpha Methyl Styrene	118		22.281					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 tert-Butylbenzene	119		22.405					ND	
93 1,2,4-Trimethylbenzene	105		22.506					ND	
94 sec-Butylbenzene	105		22.747					ND	
95 4-Isopropyltoluene	119		22.961					ND	
96 1,3-Dichlorobenzene	146		22.988					ND	
97 1,4-Dichlorobenzene	146		23.132					ND	
98 Benzyl chloride	91		23.341					ND	
100 n-Butylbenzene	91		23.555					ND	
99 Undecane	57		23.581					ND	
101 1,2-Dichlorobenzene	146		23.683					ND	
102 Dodecane	57		25.218					ND	
103 1,2,4-Trichlorobenzene	180		26.267					ND	
104 Hexachlorobutadiene	225		26.454					ND	
105 Naphthalene	128		26.765					ND	
106 1,2,3-Trichlorobenzene	180		27.251					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 119 Difluoroethane TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 36 Methyl cyclohexane TIC	55		0.000					ND	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

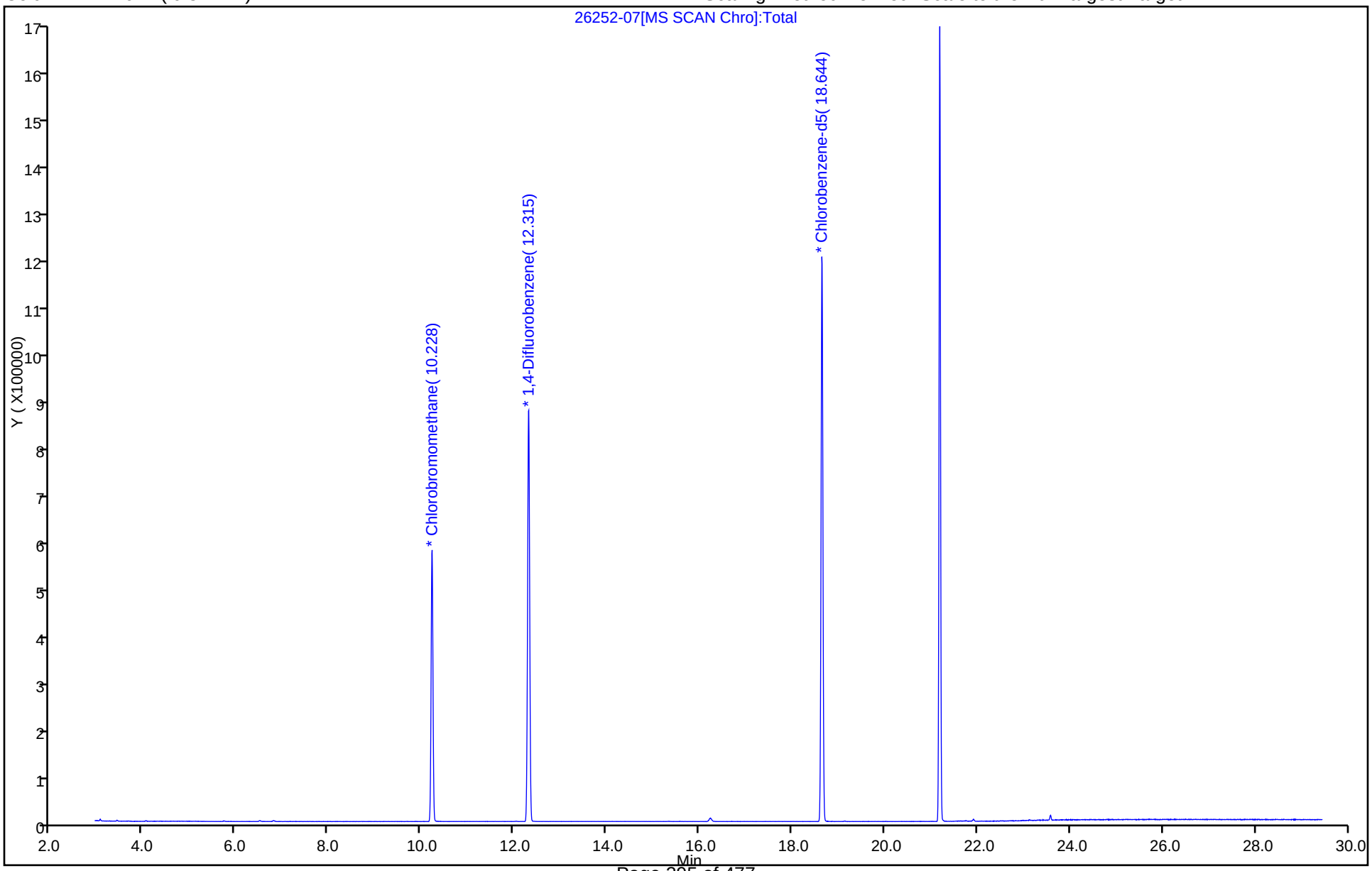
Report Date: 08-Aug-2017 14:18:30 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-07.D

Injection Date:	07-Aug-2017 18:00:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	mb			Worklist Smp#:	7
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Client Sample ID: Lab Sample ID: LCS 200-119430/6

Matrix: Air Lab File ID: 26252-06.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 08/07/2017 17:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 119430 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50.49	8.29		0.50	0.16
75-01-4	Vinyl chloride	62.50	7.77		0.20	0.018
75-00-3	Chloroethane	64.52	7.89		0.50	0.13
75-35-4	1,1-Dichloroethene	96.94	7.27		0.20	0.035
75-09-2	Methylene Chloride	84.93	8.12		0.50	0.068
1634-04-4	Methyl tert-butyl ether	88.15	7.86		0.20	0.041
156-60-5	trans-1,2-Dichloroethene	96.94	8.33		0.20	0.050
75-34-3	1,1-Dichloroethane	98.96	7.78		0.20	0.017
156-59-2	cis-1,2-Dichloroethene	96.94	7.50		0.20	0.029
71-55-6	1,1,1-Trichloroethane	133.41	8.10		0.20	0.026
56-23-5	Carbon tetrachloride	153.81	8.03		0.20	0.011
71-43-2	Benzene	78.11	7.96		0.20	0.028
107-06-2	1,2-Dichloroethane	98.96	8.51		0.20	0.034
79-01-6	Trichloroethene	131.39	7.68		0.20	0.0091
78-87-5	1,2-Dichloropropane	112.99	8.27		0.20	0.035
108-88-3	Toluene	92.14	8.78		0.20	0.035
127-18-4	Tetrachloroethene	165.83	7.84		0.20	0.0098
108-90-7	Chlorobenzene	112.56	8.37		0.20	0.025
100-41-4	Ethylbenzene	106.17	8.69		0.20	0.034
179601-23-1	m,p-Xylene	106.17	16.9		0.50	0.077
95-47-6	Xylene, o-	106.17	8.29		0.20	0.040
108-67-8	1,3,5-Trimethylbenzene	120.20	8.66		0.20	0.040
95-63-6	1,2,4-Trimethylbenzene	120.20	8.84		0.20	0.057
541-73-1	1,3-Dichlorobenzene	147.00	8.65		0.20	0.050
95-50-1	1,2-Dichlorobenzene	147.00	8.61		0.20	0.045
91-20-3	Naphthalene	128.17	7.02		0.50	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-06.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 07-Aug-2017 17:09:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0026252-006
Operator ID: ert Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 08-Aug-2017 14:13:58 Calib Date: 10-Jul-2017 21:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 08-Aug-2017 14:17:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41	3.060	3.065	-0.005	98	141163	10.0	9.31	
2 Dichlorodifluoromethane	85	3.124	3.130	-0.006	99	399422	10.0	8.41	
3 Chlorodifluoromethane	51	3.172	3.178	-0.006	97	282175	10.0	8.71	
4 1,2-Dichloro-1,1,2,2-tetra	85	3.376	3.381	-0.005	97	422164	10.0	9.05	
5 Chloromethane	50	3.509	3.515	-0.006	99	157789	10.0	8.29	
6 Butane	43	3.691	3.697	-0.006	99	275534	10.0	8.62	
7 Vinyl chloride	62	3.734	3.739	-0.005	98	164996	10.0	7.77	
8 Butadiene	54	3.809	3.809	0.000	96	123680	10.0	7.73	
9 BFB									
10 Bromomethane	94	4.451	4.456	-0.005	98	127754	10.0	7.77	
11 Chloroethane	64	4.670	4.676	-0.006	99	75554	10.0	7.89	
12 2-Methylbutane	43	4.729	4.734	-0.005	94	203463	10.0	9.05	
13 Vinyl bromide	106	5.039	5.045	-0.006	98	123894	10.0	7.42	
14 Trichlorofluoromethane	101	5.130	5.130	0.000	98	357537	10.0	7.99	
16 Pentane	43	5.259	5.264	-0.005	98	299918	10.0	9.19	
17 Ethanol	45	5.703	5.708	-0.005	98	127840	15.0	12.9	
18 Ethyl ether	59	5.772	5.778	-0.006	95	112135	10.0	8.39	
20 1,1,2-Trichloro-1,2,2-trif	101	6.157	6.157	0.000	94	257860	10.0	7.47	
19 Acrolein	56	6.157	6.163	-0.006	98	55388	10.0	10.3	
21 1,1-Dichloroethene	96	6.211	6.216	-0.005	93	120705	10.0	7.27	
22 Acetone	43	6.473	6.478	-0.005	99	292525	10.0	10.0	
23 Carbon disulfide	76	6.601	6.601	0.000	100	436815	10.0	8.76	
24 Isopropyl alcohol	45	6.762	6.762	0.000	100	257227	10.0	7.43	
25 3-Chloro-1-propene	41	6.987	6.992	-0.005	94	198565	10.0	7.64	
26 Acetonitrile	41	7.152	7.158	-0.006	99	144224	10.0	9.49	
27 Methylene Chloride	49	7.281	7.286	-0.005	98	191444	10.0	8.12	
28 2-Methyl-2-propanol	59	7.538	7.538	0.000	97	328452	10.0	7.79	
29 Methyl tert-butyl ether	73	7.698	7.698	0.000	98	430642	10.0	7.86	
31 trans-1,2-Dichloroethene	61	7.714	7.720	-0.006	94	248946	10.0	8.33	
32 Acrylonitrile	53	7.901	7.901	0.000	94	125901	10.0	8.24	
33 Hexane	57	8.089	8.089	0.000	94	275118	10.0	8.54	
34 1,1-Dichloroethane	63	8.608	8.608	0.000	99	306143	10.0	7.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43	8.688	8.688	0.000	100	489317	10.0	9.03	
S 30 1,2-Dichloroethene, Total	61				0		20.0	15.8	
37 cis-1,2-Dichloroethene	96	9.747	9.752	-0.005	98	155910	10.0	7.50	
38 2-Butanone (MEK)	72	9.822	9.827	-0.005	99	85973	10.0	7.76	
39 Ethyl acetate	88	9.859	9.859	0.000	99	12891	10.0	8.43	
* 40 Chlorobromomethane	128	10.234	10.234	0.000	96	166680	10.0	10.0	
41 Tetrahydrofuran	42	10.261	10.261	0.000	95	250621	10.0	9.21	
42 Chloroform	83	10.368	10.373	-0.005	97	345889	10.0	7.95	
43 Cyclohexane	84	10.603	10.608	-0.005	94	230052	10.0	7.87	
44 1,1,1-Trichloroethane	97	10.646	10.651	-0.005	96	339693	10.0	8.10	
45 Carbon tetrachloride	117	10.908	10.908	0.000	97	327911	10.0	8.03	
46 Isooctane	57	11.357	11.363	-0.006	98	1073327	10.0	8.38	
47 Benzene	78	11.411	11.411	0.000	98	575654	10.0	7.96	
48 1,2-Dichloroethane	62	11.619	11.620	-0.001	96	256143	10.0	8.51	
49 n-Heptane	43	11.775	11.780	-0.005	98	449181	10.0	8.83	
* 50 1,4-Difluorobenzene	114	12.315	12.320	-0.005	97	908872	10.0	10.0	
52 n-Butanol	56	12.786	12.791	-0.005	93	153934	10.0	9.44	
53 Trichloroethene	95	12.807	12.807	0.000	94	236101	10.0	7.68	
A 51 GRO	1	13.248	(4.724-21.773)		0	81675893	10.0	0	
54 1,2-Dichloropropane	63	13.412	13.412	0.000	91	249029	10.0	8.27	
55 Methyl methacrylate	69	13.599	13.604	-0.005	90	228515	10.0	8.34	
56 1,4-Dioxane	88	13.674	13.674	0.000	98	110914	10.0	7.29	
57 Dibromomethane	174	13.679	13.684	-0.005	97	191291	10.0	7.32	
58 Dichlorobromomethane	83	13.989	13.995	-0.006	98	396003	10.0	7.94	
60 cis-1,3-Dichloropropene	75	14.974	14.974	0.000	96	342988	10.0	8.21	
A 59 TVOC as Toluene	92	15.158	(3.055-27.261)		0	127156947	10.0	0	
61 4-Methyl-2-pentanone (MIBK	43	15.300	15.300	0.000	97	596366	10.0	9.26	
65 Toluene	92	15.584	15.584	0.000	93	417018	10.0	8.78	
64 n-Octane	43	15.632	15.637	-0.005	97	673751	10.0	9.28	
66 trans-1,3-Dichloropropene	75	16.231	16.231	0.000	98	351657	10.0	7.91	
67 1,1,2-Trichloroethane	83	16.621	16.621	0.000	97	219475	10.0	8.88	
68 Tetrachloroethene	166	16.707	16.707	0.000	95	284208	10.0	7.84	
69 2-Hexanone	43	17.114	17.119	-0.005	91	589033	10.0	10.2	
71 Chlorodibromomethane	129	17.419	17.424	-0.005	97	318554	10.0	7.57	
72 Ethylene Dibromide	107	17.702	17.707	-0.005	98	357381	10.0	8.53	
* 74 Chlorobenzene-d5	117	18.649	18.649	0.000	90	763866	10.0	10.0	
75 Chlorobenzene	112	18.713	18.713	0.000	90	522552	10.0	8.37	
76 Ethylbenzene	91	18.874	18.874	0.000	99	938376	10.0	8.69	
77 n-Nonane	57	19.002	19.002	0.000	96	563750	10.0	9.49	
78 m-Xylene & p-Xylene	106	19.141	19.141	0.000	0	684571	20.0	16.9	
S 73 Xylenes, Total	106				0		30.0	25.2	
79 o-Xylene	106	20.035	20.035	0.000	98	329378	10.0	8.29	
80 Styrene	104	20.099	20.099	0.000	99	523904	10.0	8.59	
81 Bromoform	173	20.564	20.564	0.000	95	236902	10.0	6.59	
82 Isopropylbenzene	105	20.789	20.789	0.000	97	983668	10.0	8.40	
84 1,1,2,2-Tetrachloroethane	83	21.511	21.511	0.000	97	591056	10.0	9.05	
85 N-Propylbenzene	91	21.570	21.570	0.000	98	1309551	10.0	8.75	
86 1,2,3-Trichloropropane	75	21.607	21.613	-0.006	97	465905	10.0	8.75	
87 n-Decane	57	21.757	21.763	-0.006	88	754059	10.0	10.1	
88 4-Ethyltoluene	105	21.773	21.773	0.000	98	1051975	10.0	9.08	
89 2-Chlorotoluene	91	21.779	21.779	0.000	95	914665	10.0	8.94	
90 1,3,5-Trimethylbenzene	105	21.891	21.891	0.000	91	842069	10.0	8.66	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
91 Alpha Methyl Styrene	118	22.281	22.281	0.000	85	401493	10.0	9.02	
92 tert-Butylbenzene	119	22.404	22.405	0.000	90	761327	10.0	8.48	
93 1,2,4-Trimethylbenzene	105	22.506	22.506	0.000	98	863609	10.0	8.84	
94 sec-Butylbenzene	105	22.747	22.747	0.000	98	1239863	10.0	8.78	
95 4-Isopropyltoluene	119	22.961	22.961	0.000	97	1006950	10.0	8.74	
96 1,3-Dichlorobenzene	146	22.988	22.988	0.000	98	546745	10.0	8.65	
97 1,4-Dichlorobenzene	146	23.127	23.132	-0.005	92	547686	10.0	8.66	
98 Benzyl chloride	91	23.341	23.341	0.000	97	715360	10.0	8.50	
100 n-Butylbenzene	91	23.555	23.555	0.000	97	1074276	10.0	9.32	
99 Undecane	57	23.581	23.581	0.000	97	819140	10.0	10.5	
101 1,2-Dichlorobenzene	146	23.683	23.683	0.000	93	517432	10.0	8.61	
102 Dodecane	57	25.218	25.218	0.000	94	586357	10.0	9.07	
103 1,2,4-Trichlorobenzene	180	26.262	26.267	-0.005	93	333032	10.0	7.10	
104 Hexachlorobutadiene	225	26.454	26.454	0.000	97	313067	10.0	7.59	
105 Naphthalene	128	26.764	26.765	-0.001	98	741658	10.0	7.02	
106 1,2,3-Trichlorobenzene	180	27.251	27.251	0.000	94	295412	10.0	7.41	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15LCSW_00698	Amount Added: 200.00	Units: mL	
ATTO15XISs_00002	Amount Added: 20.00	Units: mL	Run Reagent

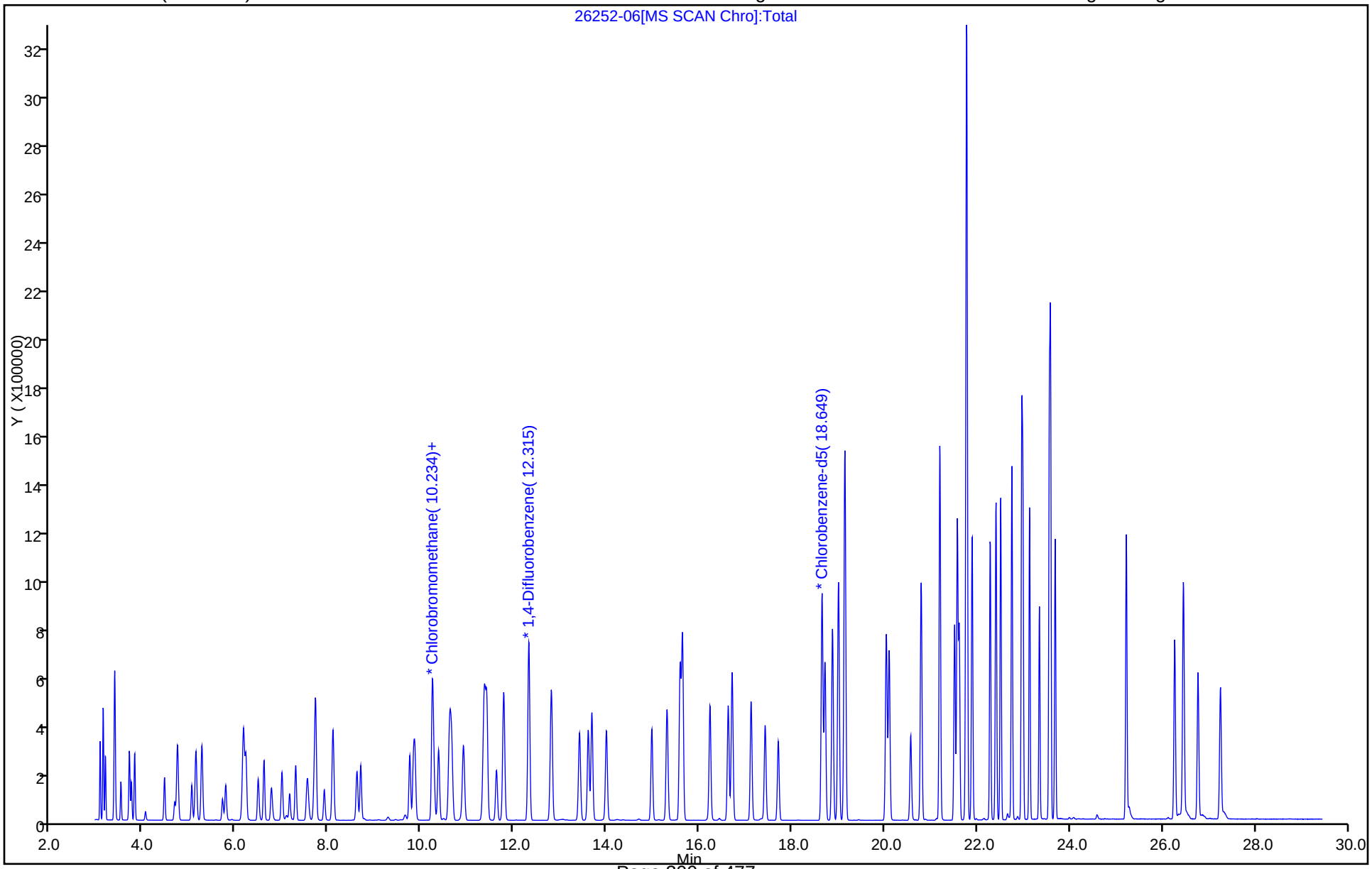
Report Date: 08-Aug-2017 14:17:10 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170807-26252.b\26252-06.D

Injection Date:	07-Aug-2017 17:09:30	Instrument ID:	CHX.i	Operator ID:	ert
Lims ID:	lcs			Worklist Smp#:	6
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Instrument ID: CHX.i Start Date: 07/10/2017 12:41

Analysis Batch Number: 118373 End Date: 07/11/2017 03:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118373/1		07/10/2017 12:41	1	25833_01.D	RTX-624 0.32(mm)
VIBLK 200-118373/2		07/10/2017 13:36	1		RTX-624 0.32(mm)
VIBLK 200-118373/3		07/10/2017 14:26	1		RTX-624 0.32(mm)
IC 200-118373/4		07/10/2017 15:17	1	25833_04.D	RTX-624 0.32(mm)
IC 200-118373/5		07/10/2017 16:07	1	25833_05.D	RTX-624 0.32(mm)
IC 200-118373/6		07/10/2017 16:58	1	25833_06.D	RTX-624 0.32(mm)
IC 200-118373/7		07/10/2017 17:48	1	25833_07.D	RTX-624 0.32(mm)
ICIS 200-118373/8		07/10/2017 18:38	1	25833_08.D	RTX-624 0.32(mm)
IC 200-118373/9		07/10/2017 19:28	1	25833_09.D	RTX-624 0.32(mm)
IC 200-118373/10		07/10/2017 20:19	1	25833_10.D	RTX-624 0.32(mm)
IC 200-118373/11		07/10/2017 21:09	1	25833_11.D	RTX-624 0.32(mm)
VIBLK 200-118373/12		07/10/2017 21:59	1		RTX-624 0.32(mm)
VIBLK 200-118373/13		07/10/2017 22:50	1		RTX-624 0.32(mm)
VIBLK 200-118373/14		07/10/2017 23:40	1		RTX-624 0.32(mm)
ICV 200-118373/15		07/11/2017 00:30	1	25833_15.D	RTX-624 0.32(mm)
ZZZZZ		07/11/2017 01:20	1		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 02:10	1		RTX-624 0.32(mm)
VIBLK 200-118373/18		07/11/2017 03:00	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39613-1

SDG No.: 200-39613-1

Instrument ID: CHX.i Start Date: 08/07/2017 11:31

Analysis Batch Number: 119430 End Date: 08/08/2017 04:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-119430/1		08/07/2017 11:31	1	26252_01.D	RTX-624 0.32(mm)
ZZZZZ		08/07/2017 12:29	1		RTX-624 0.32(mm)
CCVIS 200-119430/5		08/07/2017 16:19	1	26252-05.D	RTX-624 0.32(mm)
LCS 200-119430/6		08/07/2017 17:09	1	26252-06.D	RTX-624 0.32(mm)
MB 200-119430/7		08/07/2017 18:00	1	26252-07.D	RTX-624 0.32(mm)
ZZZZZ		08/07/2017 18:50	303		RTX-624 0.32(mm)
ZZZZZ		08/07/2017 19:40	10		RTX-624 0.32(mm)
ZZZZZ		08/07/2017 20:31	10		RTX-624 0.32(mm)
200-39613-1		08/07/2017 21:21	1	26252-11.D	RTX-624 0.32(mm)
200-39613-2		08/07/2017 22:12	1	26252-12.D	RTX-624 0.32(mm)
200-39613-3		08/07/2017 23:02	1	26252-13.D	RTX-624 0.32(mm)
200-39613-4		08/07/2017 23:53	1	26252-14.D	RTX-624 0.32(mm)
200-39613-5		08/08/2017 00:43	1	26252-15.D	RTX-624 0.32(mm)
ZZZZZ		08/08/2017 01:34	1		RTX-624 0.32(mm)
ZZZZZ		08/08/2017 02:24	1		RTX-624 0.32(mm)
ZZZZZ		08/08/2017 03:15	1		RTX-624 0.32(mm)
ZZZZZ		08/08/2017 04:05	1		RTX-624 0.32(mm)

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Top Rack	25	7/3/2017	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	DIN[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5148	.04	.04	0	-29.5	626	7-13-17	13:00	DE	22	626	7-14-17	14:15	DE	22
2	2700	.04	.07	.03	-29.5	626	7-17-17	9:00	ESE	22		7-17-17	11:15		23
3	5693		.05	.01	-29.5										
4	3196		.15	.11	-24.5										
5	3942		.10	.06	-29.5										
6	3201		.06	.02	-29.5										
7	2512		.11	.07	-29.5										
8	4319		.23	.19	-29.5										
9	2689		.06	.02	-29.5										
10	5358		.04	0	-29.5										
11	2588		.04	0	-29.5										
12	4782		.04	0	-29.5										

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL < NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
5148	7/6/17	25782	EJE		XXXX				7/10/17	FAL

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Inventory Level 1: Individual Canister Certification (TO15LL 0.01)

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv)

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.03 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

FAI 07/26/17 17:10
TestAmerica Burlington

200-39188-A-1
5148
Origin: Assay
Dest: Service
Service: 07/26/2017 [illegible]

LOG: 200
39188
#1
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type	
Top Rack	20	7/5/2017	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5131	.04	.04	0	-29.5	G25	7-5-17	14:00	GE	22	G25	7-14-17	14:15	GE	22
2	3485	.04	.04	0	-29.5	G25	7-7-17	8:45	GE	22		7-18-17	15:00		
3	6019		.04	0	-29.5										
4	5218				-29.5										
5	5874		.12	.08	-29.5										
6	2709		.08	.04	-29.5										
7	3138		.04	0	-29.5										
8	4570		.04	0	-29.5										
9	2964		.06	.02	-29.5										
10	5690		.11	.07	-29.5										
11	5516		.04	0	-29.5										
12	5024		.04	0	-29.5										

[1] Batch Certification; The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch

[2] Difference = Final Pressure - Inital Pressure . Acceptance Criteria (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister PM Authorization Date:

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: < TO15 Routine < TO15 LL < NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
5131	7/11/17	25826	KP		XXXX				7/12/17	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv)

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv)

Inventory Level Limited: Canisters may only be used for certain projects.

Comments:

FAI023 04 26 17.10
TestAmerica Burlington

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Loc: 200
39208
#1
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type
Bottom Rack	20	7/7/2017	EJE	1L / 6L	Individual / Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	2521	.04	.05	.01	-29.5	6X	7.15.17	14:00	EE	22	6X	7.14.17	14:15	EE	22
2	4371	.04	.13	.09	-29.5	6X	7.10.17	12:10	EE	22		7.8.17	9:45		
3	2786		.24	.20	-29.5										
4	4355		.19	.15	-29.5										
5	4923		.05	.01	-29.5										
6	4947		.05	.01	-29.5										
7	5006		.05	.01	-29.5										
8	5441		.05	.01	-29.5										
9	6172		.08	.04	-29.5										
10	3016		.05	.01	-29.5										
11	5128		.04	.00	-29.5										
12	5112	↓	.06	.02	-29.5	↓	↓	↓	↓	↓	↓			↓	↓

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ≤ TO15 Routine ≤ TO15 LL ≤ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
2521	7/11/17	25826	AAD KP		XXXX				7/12/17	AAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15 LNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments: _____

FA023.04.26.17:10
TestAmerica Burlington

200-39219-A-1
Log: 200-39219 #1 A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size	Certification Type
Oven 1;2	20	7/10/2017	EJE	1L / 6L	Individual / Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[2]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3087	.04	.04	0	-29.5	GS	7.11.17	11:50	CC	22	GS	7.17.17	13:45	CC	22
2	3839		.12	.08	-29.5										
3	5457		.04	0	-29.5										
4	4011		.04	0	-29.5										
5	2543		.06	.02	-29.5										
6	4030		.04	0	-29.5										
7	4163		.22	.18	-29.5										
8	2669		.20	.16	-29.5										
9	4430		.14	.10	-29.5										
10	3010		.05	.01	-29.5										
11	4074				-29.5										
12	4148	.04	.04	0	-29.5		7.11.17	14:00			GS	7.17.17	9:00	CC	22

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] Difference = Final Pressure - Initial Pressure. Acceptance Criteria: (1) The difference must be less than or equal to +/- 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister. PM Authorization: _____ Date: _____

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: TO15 Routine / TO15 LL / NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
4148	7/12/17	25870	KP		XXXX				7/14/17	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Comments: _____

FA023:04.26.17.10
TestAmerica Burlington

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200-39253-A-12
Loc: 200
39253
#12
A

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25782-03.d

Lab ID: LCS 200-118269/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	6.96	70	58-129	
Dichlorodifluoromethane	10.0	8.05	81	68-128	
Freon 22	10.0	7.55	76	64-128	
1,2-Dichlorotetrafluoroethane	10.0	8.98	90	78-138	
Chloromethane	10.0	7.11	71	57-126	
n-Butane	10.0	7.44	74	56-130	
Vinyl chloride	10.0	7.64	76	62-125	
1,3-Butadiene	10.0	7.34	73	59-125	
Bromomethane	10.0	8.74	87	68-128	
Chloroethane	10.0	8.26	83	65-125	
Bromoethene(Vinyl Bromide)	10.0	9.33	93	67-127	
Trichlorofluoromethane	10.0	9.15	91	67-127	
Ethanol	15.0	11.6	77	28-168	
Freon TF	10.0	9.59	96	68-128	
1,1-Dichloroethene	10.0	9.48	95	67-127	
Acetone	10.0	9.98	100	64-136	
Isopropyl alcohol	10.0	8.57	86	55-124	
Carbon disulfide	10.0	11.0	110	81-141	
3-Chloropropene	10.0	8.37	84	53-133	
Methylene Chloride	10.0	8.78	88	62-122	
tert-Butyl alcohol	10.0	9.78	98	64-124	
Methyl tert-butyl ether	10.0	10.2	102	67-127	
trans-1,2-Dichloroethene	10.0	10.2	102	72-132	
n-Hexane	10.0	10.4	104	71-131	
1,1-Dichloroethane	10.0	9.20	92	66-126	
Vinyl acetate	10.0	9.78	98	62-130	
Ethyl acetate	10.0	10.8	108	75-135	
Methyl Ethyl Ketone	10.0	9.71	97	62-122	
cis-1,2-Dichloroethene	10.0	9.80	98	67-127	
Chloroform	10.0	10.0	100	69-129	
Tetrahydrofuran	10.0	9.24	92	61-136	
1,1,1-Trichloroethane	10.0	10.5	105	70-130	
Cyclohexane	10.0	10.5	105	69-129	
Carbon tetrachloride	10.0	10.6	106	62-143	
2,2,4-Trimethylpentane	10.0	9.76	98	67-127	
Benzene	10.0	9.80	98	67-127	
1,2-Dichloroethane	10.0	10.4	104	67-132	
n-Heptane	10.0	8.97	90	62-130	
Trichloroethene	10.0	10.0	100	68-128	
Methyl methacrylate	10.0	10.1	101	70-130	
1,2-Dichloropropane	10.0	9.32	93	67-127	
1,4-Dioxane	10.0	9.76	98	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25782-03.d

Lab ID: LCS 200-118269/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.99	100	69-129	
cis-1,3-Dichloropropene	10.0	10.3	103	70-130	
methyl isobutyl ketone	10.0	9.02	90	62-130	
Toluene	10.0	10.4	104	67-127	
trans-1,3-Dichloropropene	10.0	10.4	104	69-129	
1,1,2-Trichloroethane	10.0	10.1	101	69-129	
Tetrachloroethene	10.0	10.6	106	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.24	92	61-127	
Dibromochloromethane	10.0	9.99	100	66-130	
1,2-Dibromoethane	10.0	10.6	106	70-130	
Chlorobenzene	10.0	10.2	102	68-128	
Ethylbenzene	10.0	10.3	103	68-128	
m,p-Xylene	20.0	20.9	105	68-128	
Xylene, o-	10.0	10.3	103	67-127	
Styrene	10.0	10.4	104	68-128	
Bromoform	10.0	9.15	92	34-170	
Cumene	10.0	10.3	103	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.48	95	69-129	
n-Propylbenzene	10.0	10.0	100	67-127	
4-Ethyltoluene	10.0	10.4	104	69-129	
1,3,5-Trimethylbenzene	10.0	10.0	100	65-125	
2-Chlorotoluene	10.0	9.94	99	67-127	
tert-Butylbenzene	10.0	9.98	100	63-125	
1,2,4-Trimethylbenzene	10.0	10.0	100	65-125	
sec-Butylbenzene	10.0	9.93	99	66-126	
4-Isopropyltoluene	10.0	10.1	101	67-129	
1,3-Dichlorobenzene	10.0	9.79	98	67-127	
1,4-Dichlorobenzene	10.0	9.95	100	66-126	
Benzyl chloride	10.0	9.53	95	54-135	
n-Butylbenzene	10.0	10.4	104	67-127	
1,2-Dichlorobenzene	10.0	9.69	97	67-127	
1,2,4-Trichlorobenzene	10.0	8.57	86	59-126	
Hexachlorobutadiene	10.0	8.92	89	62-130	
Naphthalene	10.0	7.26	73	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-25826-004.D

Lab ID: LCS 200-118357/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	13.4	134	58-129	*
Dichlorodifluoromethane	10.0	11.6	116	68-128	
Freon 22	10.0	12.4	124	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.3	113	78-138	
Chloromethane	10.0	12.1	121	57-126	
n-Butane	10.0	12.8	128	56-130	
Vinyl chloride	10.0	11.4	114	62-125	
1,3-Butadiene	10.0	11.8	118	59-125	
Bromomethane	10.0	10.7	107	68-128	
Chloroethane	10.0	11.9	119	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.5	105	67-127	
Trichlorofluoromethane	10.0	10.6	106	67-127	
Ethanol	15.0	20.6	137	28-168	
Freon TF	10.0	10.6	106	68-128	
1,1-Dichloroethene	10.0	10.8	108	67-127	
Acetone	10.0	12.9	129	64-136	
Isopropyl alcohol	10.0	13.6	136	55-124	*
Carbon disulfide	10.0	11.8	118	81-141	
3-Chloropropene	10.0	12.7	127	53-133	
Methylene Chloride	10.0	12.0	120	62-122	
tert-Butyl alcohol	10.0	13.5	135	64-124	*
Methyl tert-butyl ether	10.0	11.4	114	67-127	
trans-1,2-Dichloroethene	10.0	11.8	118	72-132	
n-Hexane	10.0	12.1	121	71-131	
1,1-Dichloroethane	10.0	11.5	115	66-126	
Vinyl acetate	10.0	12.5	125	62-130	
Ethyl acetate	10.0	11.2	112	75-135	
Methyl Ethyl Ketone	10.0	11.3	113	62-122	
cis-1,2-Dichloroethene	10.0	11.0	110	67-127	
Chloroform	10.0	9.79	98	69-129	
Tetrahydrofuran	10.0	11.6	116	61-136	
1,1,1-Trichloroethane	10.0	9.93	99	70-130	
Cyclohexane	10.0	10.4	104	69-129	
Carbon tetrachloride	10.0	10.1	101	62-143	
2,2,4-Trimethylpentane	10.0	10.8	108	67-127	
Benzene	10.0	10.3	103	67-127	
1,2-Dichloroethane	10.0	10.9	109	67-132	
n-Heptane	10.0	11.0	110	62-130	
Trichloroethene	10.0	9.62	96	68-128	
Methyl methacrylate	10.0	10.4	104	70-130	
1,2-Dichloropropane	10.0	10.4	104	67-127	
1,4-Dioxane	10.0	11.3	113	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-25826-004.D

Lab ID: LCS 200-118357/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.5	105	69-129	
cis-1,3-Dichloropropene	10.0	11.0	110	70-130	
methyl isobutyl ketone	10.0	11.8	118	62-130	
Toluene	10.0	10.1	101	67-127	
trans-1,3-Dichloropropene	10.0	10.4	104	69-129	
1,1,2-Trichloroethane	10.0	10.3	103	69-129	
Tetrachloroethene	10.0	9.08	91	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.5	125	61-127	
Dibromochloromethane	10.0	10.6	106	66-130	
1,2-Dibromoethane	10.0	10.1	101	70-130	
Chlorobenzene	10.0	9.88	99	68-128	
Ethylbenzene	10.0	10.2	102	68-128	
m,p-Xylene	20.0	20.0	100	68-128	
Xylene, o-	10.0	10.1	101	67-127	
Styrene	10.0	10.4	104	68-128	
Bromoform	10.0	10.1	101	34-170	
Cumene	10.0	10.1	101	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.3	103	69-129	
n-Propylbenzene	10.0	10.2	102	67-127	
4-Ethyltoluene	10.0	10.5	105	69-129	
1,3,5-Trimethylbenzene	10.0	9.94	99	65-125	
2-Chlorotoluene	10.0	10.7	107	67-127	
tert-Butylbenzene	10.0	9.70	97	63-125	
1,2,4-Trimethylbenzene	10.0	10.0	100	65-125	
sec-Butylbenzene	10.0	10.1	101	66-126	
4-Isopropyltoluene	10.0	10.2	102	67-129	
1,3-Dichlorobenzene	10.0	9.77	98	67-127	
1,4-Dichlorobenzene	10.0	9.52	95	66-126	
Benzyl chloride	10.0	10.1	101	54-135	
n-Butylbenzene	10.0	10.8	108	67-127	
1,2-Dichlorobenzene	10.0	9.42	94	67-127	
1,2,4-Trichlorobenzene	10.0	8.63	86	59-126	
Hexachlorobutadiene	10.0	8.46	85	62-130	
Naphthalene	10.0	9.03	90	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-25826-004.D

Lab ID: LCS 200-118357/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	13.4	134	58-129	*
Dichlorodifluoromethane	10.0	11.6	116	68-128	
Freon 22	10.0	12.4	124	64-128	
1,2-Dichlorotetrafluoroethane	10.0	11.3	113	78-138	
Chloromethane	10.0	12.1	121	57-126	
n-Butane	10.0	12.8	128	56-130	
Vinyl chloride	10.0	11.4	114	62-125	
1,3-Butadiene	10.0	11.8	118	59-125	
Bromomethane	10.0	10.7	107	68-128	
Chloroethane	10.0	11.9	119	65-125	
Bromoethene(Vinyl Bromide)	10.0	10.5	105	67-127	
Trichlorofluoromethane	10.0	10.6	106	67-127	
Ethanol	15.0	20.6	137	28-168	
Freon TF	10.0	10.6	106	68-128	
1,1-Dichloroethene	10.0	10.8	108	67-127	
Acetone	10.0	12.9	129	64-136	
Isopropyl alcohol	10.0	13.6	136	55-124	*
Carbon disulfide	10.0	11.8	118	81-141	
3-Chloropropene	10.0	12.7	127	53-133	
Methylene Chloride	10.0	12.0	120	62-122	
tert-Butyl alcohol	10.0	13.5	135	64-124	*
Methyl tert-butyl ether	10.0	11.4	114	67-127	
trans-1,2-Dichloroethene	10.0	11.8	118	72-132	
n-Hexane	10.0	12.1	121	71-131	
1,1-Dichloroethane	10.0	11.5	115	66-126	
Vinyl acetate	10.0	12.5	125	62-130	
Ethyl acetate	10.0	11.2	112	75-135	
Methyl Ethyl Ketone	10.0	11.3	113	62-122	
cis-1,2-Dichloroethene	10.0	11.0	110	67-127	
Chloroform	10.0	9.79	98	69-129	
Tetrahydrofuran	10.0	11.6	116	61-136	
1,1,1-Trichloroethane	10.0	9.93	99	70-130	
Cyclohexane	10.0	10.4	104	69-129	
Carbon tetrachloride	10.0	10.1	101	62-143	
2,2,4-Trimethylpentane	10.0	10.8	108	67-127	
Benzene	10.0	10.3	103	67-127	
1,2-Dichloroethane	10.0	10.9	109	67-132	
n-Heptane	10.0	11.0	110	62-130	
Trichloroethene	10.0	9.62	96	68-128	
Methyl methacrylate	10.0	10.4	104	70-130	
1,2-Dichloropropane	10.0	10.4	104	67-127	
1,4-Dioxane	10.0	11.3	113	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 200-25826-004.D

Lab ID: LCS 200-118357/4 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.5	105	69-129	
cis-1,3-Dichloropropene	10.0	11.0	110	70-130	
methyl isobutyl ketone	10.0	11.8	118	62-130	
Toluene	10.0	10.1	101	67-127	
trans-1,3-Dichloropropene	10.0	10.4	104	69-129	
1,1,2-Trichloroethane	10.0	10.3	103	69-129	
Tetrachloroethene	10.0	9.08	91	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	12.5	125	61-127	
Dibromochloromethane	10.0	10.6	106	66-130	
1,2-Dibromoethane	10.0	10.1	101	70-130	
Chlorobenzene	10.0	9.88	99	68-128	
Ethylbenzene	10.0	10.2	102	68-128	
m,p-Xylene	20.0	20.0	100	68-128	
Xylene, o-	10.0	10.1	101	67-127	
Styrene	10.0	10.4	104	68-128	
Bromoform	10.0	10.1	101	34-170	
Cumene	10.0	10.1	101	67-127	
1,1,2,2-Tetrachloroethane	10.0	10.3	103	69-129	
n-Propylbenzene	10.0	10.2	102	67-127	
4-Ethyltoluene	10.0	10.5	105	69-129	
1,3,5-Trimethylbenzene	10.0	9.94	99	65-125	
2-Chlorotoluene	10.0	10.7	107	67-127	
tert-Butylbenzene	10.0	9.70	97	63-125	
1,2,4-Trimethylbenzene	10.0	10.0	100	65-125	
sec-Butylbenzene	10.0	10.1	101	66-126	
4-Isopropyltoluene	10.0	10.2	102	67-129	
1,3-Dichlorobenzene	10.0	9.77	98	67-127	
1,4-Dichlorobenzene	10.0	9.52	95	66-126	
Benzyl chloride	10.0	10.1	101	54-135	
n-Butylbenzene	10.0	10.8	108	67-127	
1,2-Dichlorobenzene	10.0	9.42	94	67-127	
1,2,4-Trichlorobenzene	10.0	8.63	86	59-126	
Hexachlorobutadiene	10.0	8.46	85	62-130	
Naphthalene	10.0	9.03	90	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25870-03.D

Lab ID: LCS 200-118448/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Propylene	10.0	8.41	84	58-129	
Dichlorodifluoromethane	10.0	7.91	79	68-128	
Freon 22	10.0	8.29	83	64-128	
1,2-Dichlorotetrafluoroethane	10.0	8.99	90	78-138	
Chloromethane	10.0	8.31	83	57-126	
n-Butane	10.0	8.78	88	56-130	
Vinyl chloride	10.0	8.38	84	62-125	
1,3-Butadiene	10.0	8.12	81	59-125	
Bromomethane	10.0	8.74	87	68-128	
Chloroethane	10.0	9.20	92	65-125	
Bromoethene(Vinyl Bromide)	10.0	8.81	88	67-127	
Trichlorofluoromethane	10.0	8.46	85	67-127	
Ethanol	15.0	15.6	104	28-168	
Freon TF	10.0	8.87	89	68-128	
1,1-Dichloroethene	10.0	8.91	89	67-127	
Acetone	10.0	9.90	99	64-136	
Isopropyl alcohol	10.0	8.73	87	55-124	
Carbon disulfide	10.0	10.6	106	81-141	
3-Chloropropene	10.0	9.72	97	53-133	
Methylene Chloride	10.0	9.56	96	62-122	
tert-Butyl alcohol	10.0	8.82	88	64-124	
Methyl tert-butyl ether	10.0	9.22	92	67-127	
trans-1,2-Dichloroethene	10.0	10.0	100	72-132	
n-Hexane	10.0	10.8	108	71-131	
1,1-Dichloroethane	10.0	9.20	92	66-126	
Vinyl acetate	10.0	10.5	105	62-130	
Ethyl acetate	10.0	10.3	103	75-135	
Methyl Ethyl Ketone	10.0	9.51	95	62-122	
cis-1,2-Dichloroethene	10.0	8.91	89	67-127	
Chloroform	10.0	9.07	91	69-129	
Tetrahydrofuran	10.0	10.2	102	61-136	
1,1,1-Trichloroethane	10.0	8.54	85	70-130	
Cyclohexane	10.0	9.17	92	69-129	
Carbon tetrachloride	10.0	8.20	82	62-143	
2,2,4-Trimethylpentane	10.0	9.71	97	67-127	
Benzene	10.0	9.08	91	67-127	
1,2-Dichloroethane	10.0	8.81	88	67-132	
n-Heptane	10.0	9.77	98	62-130	
Trichloroethene	10.0	8.74	87	68-128	
Methyl methacrylate	10.0	9.51	95	70-130	
1,2-Dichloropropane	10.0	9.30	93	67-127	
1,4-Dioxane	10.0	8.43	84	66-132	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 25870-03.D

Lab ID: LCS 200-118448/3 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	8.73	87	69-129	
cis-1,3-Dichloropropene	10.0	9.14	91	70-130	
methyl isobutyl ketone	10.0	9.61	96	62-130	
Toluene	10.0	8.89	89	67-127	
trans-1,3-Dichloropropene	10.0	9.07	91	69-129	
1,1,2-Trichloroethane	10.0	9.22	92	69-129	
Tetrachloroethene	10.0	7.88	79	70-130	
Methyl Butyl Ketone (2-Hexanone)	10.0	9.67	97	61-127	
Dibromochloromethane	10.0	8.23	82	66-130	
1,2-Dibromoethane	10.0	8.86	89	70-130	
Chlorobenzene	10.0	8.59	86	68-128	
Ethylbenzene	10.0	8.84	88	68-128	
m,p-Xylene	20.0	17.4	87	68-128	
Xylene, o-	10.0	8.53	85	67-127	
Styrene	10.0	8.90	89	68-128	
Bromoform	10.0	7.85	79	34-170	
Cumene	10.0	8.48	85	67-127	
1,1,2,2-Tetrachloroethane	10.0	9.00	90	69-129	
n-Propylbenzene	10.0	8.58	86	67-127	
4-Ethyltoluene	10.0	8.47	85	69-129	
1,3,5-Trimethylbenzene	10.0	8.42	84	65-125	
2-Chlorotoluene	10.0	8.66	87	67-127	
tert-Butylbenzene	10.0	8.04	80	63-125	
1,2,4-Trimethylbenzene	10.0	8.42	84	65-125	
sec-Butylbenzene	10.0	8.38	84	66-126	
4-Isopropyltoluene	10.0	8.47	85	67-129	
1,3-Dichlorobenzene	10.0	8.07	81	67-127	
1,4-Dichlorobenzene	10.0	8.25	83	66-126	
Benzyl chloride	10.0	8.43	84	54-135	
n-Butylbenzene	10.0	9.08	91	67-127	
1,2-Dichlorobenzene	10.0	8.20	82	67-127	
1,2,4-Trichlorobenzene	10.0	7.98	80	59-126	
Hexachlorobutadiene	10.0	7.10	71	62-130	
Naphthalene	10.0	7.96	80	50-121	

Column to be used to flag recovery and RPD values

FORM III TO-15

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab File ID: 25782-04.d Lab Sample ID: MB 200-118269/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHW.i Date Analyzed: 07/06/2017 12:41

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118269/3	25782-03.d	07/06/2017 11:49
5148	200-39188-1	25782-11.d	07/06/2017 20:44

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118269/4

Matrix: Air Lab File ID: 25782-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2017 12:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118269 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39188-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118269/4

Matrix: Air | Lab File ID: 25782-04.d

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/06/2017 12:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118269 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118269/4

Matrix: Air Lab File ID: 25782-04.d

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/06/2017 12:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118269 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\25782-04.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 06-Jul-2017 12:41:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025782-004
Operator ID: pad Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2017 15:08:23 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		5.254					ND	
2 Dichlorodifluoromethane	85		5.383					ND	
3 Chlorodifluoromethane	51		5.468					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		5.800					ND	
5 Chloromethane	50		5.987					ND	
6 Butane	43		6.265					ND	
7 Vinyl chloride	62		6.319					ND	
8 Butadiene	54		6.420					ND	
10 Bromomethane	94		7.218					ND	
11 Chloroethane	64		7.469					ND	
12 2-Methylbutane	43		7.539					ND	
13 Vinyl bromide	106		7.876					ND	
14 Trichlorofluoromethane	101		7.966					ND	
16 Pentane	43		8.100					ND	
17 Ethanol	45	8.480	8.469	0.011	1	1327		0.0683	
T 15 Methyl Acetate TIC	43		8.560					ND	
18 Ethyl ether	59		8.582					ND	
19 Acrolein	56		8.962					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		8.972					ND	
21 1,1-Dichloroethene	96		9.036					ND	
22 Acetone	43		9.234					ND	
23 Carbon disulfide	76		9.432					ND	
24 Isopropyl alcohol	45	9.438	9.432	0.006	98	12486		0.1664	
25 3-Chloro-1-propene	41		9.737					ND	
26 Acetonitrile	41		9.855					ND	
27 Methylene Chloride	49		9.999					ND	
28 2-Methyl-2-propanol	59		10.122					ND	
S 30 1,2-Dichloroethene, Total	61		10.200					ND	
29 Methyl tert-butyl ether	73		10.336					ND	
31 trans-1,2-Dichloroethene	61		10.395					ND	
32 Acrylonitrile	53		10.534					ND	
33 Hexane	57		10.727					ND	
34 1,1-Dichloroethane	63		11.203					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 Vinyl acetate	43		11.224					ND	
37 cis-1,2-Dichloroethene	96		12.209					ND	
38 2-Butanone (MEK)	72		12.225					ND	
39 Ethyl acetate	88		12.230					ND	
41 Tetrahydrofuran	42		12.637					ND	
* 40 Chlorobromomethane	128	12.631	12.637	-0.006	92	256892	10.0	10.0	
42 Chloroform	83		12.728					ND	
43 Cyclohexane	84		12.995					ND	
44 1,1,1-Trichloroethane	97		13.011					ND	
45 Carbon tetrachloride	117		13.241					ND	
46 Isooctane	57		13.589					ND	
47 Benzene	78		13.653					ND	
48 1,2-Dichloroethane	62		13.803					ND	
49 n-Heptane	43		13.905					ND	
* 50 1,4-Difluorobenzene	114	14.343	14.349	-0.006	95	1289549	10.0	10.0	
52 n-Butanol	56		14.595					ND	
53 Trichloroethene	95		14.777					ND	
A 51 GRO	1	14.956	(7.529-22.383)		0	3830182		0	
T 36 Methyl cyclohexane TIC	55		15.012					ND	
54 1,2-Dichloropropane	63		15.274					ND	
55 Methyl methacrylate	69		15.349					ND	
56 1,4-Dioxane	88		15.435					ND	
57 Dibromomethane	174		15.504					ND	
58 Dichlorobromomethane	83		15.734					ND	
60 cis-1,3-Dichloropropene	75		16.563					ND	
A 59 TVOC as Toluene	92	16.678	(5.244-28.113)		0	4093802		34.5	
61 4-Methyl-2-pentanone (MIBK	43		16.788					ND	
64 n-Octane	43		17.104					ND	
65 Toluene	92		17.109					ND	
66 trans-1,3-Dichloropropene	75		17.628					ND	
67 1,1,2-Trichloroethane	83		17.986					ND	
68 Tetrachloroethene	166		18.110					ND	
69 2-Hexanone	43		18.372					ND	
71 Chlorodibromomethane	129		18.719					ND	
72 Ethylene Dibromide	107		18.992					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		19.141					ND	
* 74 Chlorobenzene-d5	117	19.832	19.832	0.000	87	1099336	10.0	10.0	
75 Chlorobenzene	112		19.891					ND	
76 Ethylbenzene	91	19.827	20.019	-0.192	44	2242		0.0105	
77 n-Nonane	57		20.089					ND	
S 73 Xylenes, Total	106		20.100					ND	
78 m-Xylene & p-Xylene	106		20.249					ND	
79 o-Xylene	106		20.998					ND	
80 Styrene	104	21.041	21.041	0.000	78	1103		0.008989	
81 Bromoform	173		21.426					ND	
82 Isopropylbenzene	105		21.587					ND	
84 1,1,2,2-Tetrachloroethane	83		22.175					ND	
85 N-Propylbenzene	91		22.245					ND	
86 1,2,3-Trichloropropane	75		22.277					ND	
87 n-Decane	57		22.373					ND	
88 4-Ethyltoluene	105		22.421					ND	
89 2-Chlorotoluene	91		22.443					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 1,3,5-Trimethylbenzene	105		22.518					ND	
91 Alpha Methyl Styrene	118		22.865					ND	
92 tert-Butylbenzene	119		22.988					ND	
93 1,2,4-Trimethylbenzene	105		23.079					ND	
94 sec-Butylbenzene	105		23.304					ND	
95 4-Isopropyltoluene	119		23.502					ND	
96 1,3-Dichlorobenzene	146	23.556	23.556	0.000	93	2056		0.0164	
97 1,4-Dichlorobenzene	146	23.705	23.695	0.010	92	2159		0.0182	
98 Benzyl chloride	91	23.909	23.903	0.006	1	1491		0.0105	
99 Undecane	57		24.107					ND	
100 n-Butylbenzene	91		24.112					ND	
101 1,2-Dichlorobenzene	146	24.272	24.272	0.000	90	1733		0.0147	
102 Dodecane	57		25.829					ND	
103 1,2,4-Trichlorobenzene	180		27.017					ND	
104 Hexachlorobutadiene	225	27.225	27.215	0.010	87	1527		0.0205	
105 Naphthalene	128		27.568					ND	
106 1,2,3-Trichlorobenzene	180	28.135	28.103	0.032	1	881		0.0154	
T 119 Difluoroethane TIC	1		0.000					ND	
T 120 Freon 115 TIC	1		0.000					ND	
T 121 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 118 Chlorotrifluoroethene TIC	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	

Reagents:

ATTO15WISs_00004 Amount Added: 20.00 Units: mL Run Reagent

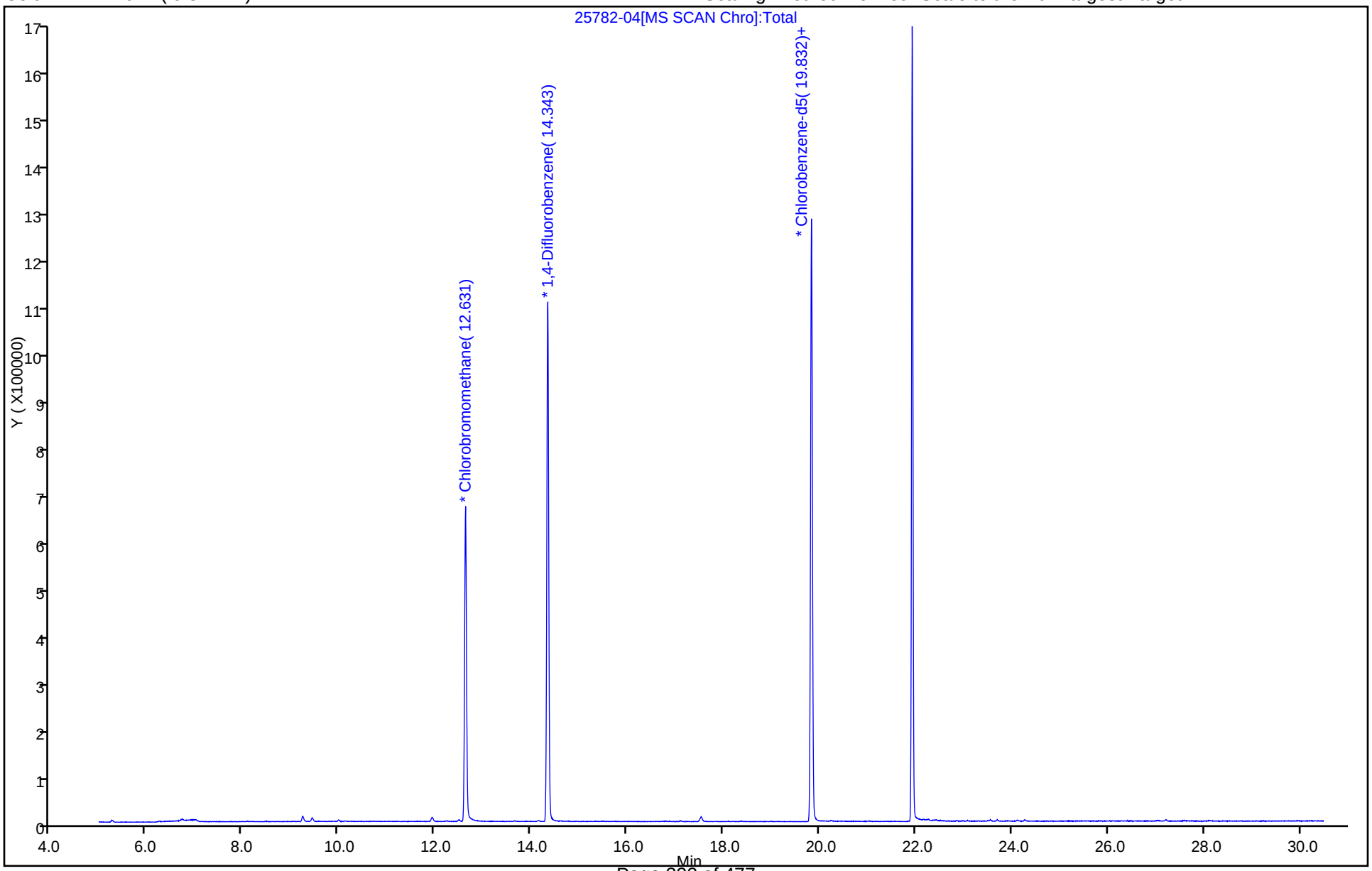
Report Date: 07-Jul-2017 15:08:30 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\25782-04.d

Injection Date:	06-Jul-2017 12:41:30	Instrument ID:	CHW.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab File ID: 200-25826-005.D Lab Sample ID: MB 200-118357/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 07/10/2017 13:30

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118357/4	200-25826-004.D	07/10/2017 12:40
5131	200-39208-1	200-25826-012.D	07/10/2017 22:53

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118357/5

Matrix: Air Lab File ID: 200-25826-005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/10/2017 13:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39208-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118357/5

Matrix: Air | Lab File ID: 200-25826-005.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/10/2017 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118357 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118357/5

Matrix: Air Lab File ID: 200-25826-005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/10/2017 13:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 10-Jul-2017 13:30:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025826-005
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 14:35:19 Calib Date: 21-Jun-2017 00:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170620-25547.b\200-25547-011.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 11-Jul-2017 14:35:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.122					ND	
2 Dichlorodifluoromethane	85		3.181					ND	
3 Chlorodifluoromethane	51		3.219					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390					ND	
5 Chloromethane	50		3.518					ND	
6 Butane	43		3.668					ND	
7 Vinyl chloride	62		3.711					ND	
8 Butadiene	54		3.770					ND	
10 Bromomethane	94		4.331					ND	
11 Chloroethane	64		4.513					ND	
12 2-Methylbutane	43		4.562					ND	
13 Vinyl bromide	106		4.834					ND	
14 Trichlorofluoromethane	101		4.904					ND	
16 Pentane	43		5.011					ND	
17 Ethanol	45		5.375					ND	
18 Ethyl ether	59		5.455					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.792					ND	
19 Acrolein	56	5.835	5.808	0.027	25	1007		0.1680	
21 1,1-Dichloroethene	96		5.856					ND	
22 Acetone	43	6.113	6.081	0.032	100	17019		0.4038	
23 Carbon disulfide	76	6.231	6.225	0.006	92	1691		0.0158	
24 Isopropyl alcohol	45		6.306					ND	
25 3-Chloro-1-propene	41		6.546					ND	
26 Acetonitrile	41		6.696					ND	
27 Methylene Chloride	49	6.808	6.808	0.000	88	3290		0.0831	
28 2-Methyl-2-propanol	59		7.006					ND	
29 Methyl tert-butyl ether	73		7.178					ND	
31 trans-1,2-Dichloroethene	61		7.199					ND	
32 Acrylonitrile	53		7.375					ND	
33 Hexane	57		7.536					ND	
34 1,1-Dichloroethane	63		8.017					ND	
35 Vinyl acetate	43		8.076					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		9.050					ND	
38 2-Butanone (MEK)	72		9.125					ND	
39 Ethyl acetate	88		9.141					ND	
* 40 Chlorobromomethane	128	9.494	9.499	-0.005	78	461989	10.0	10.0	
41 Tetrahydrofuran	42		9.526					ND	
42 Chloroform	83	9.606	9.612	-0.006	95	19454		0.1469	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84		9.842					ND	
44 1,1,1-Trichloroethane	97		9.879					ND	
45 Carbon tetrachloride	117		10.115					ND	
46 Isooctane	57		10.521					ND	
47 Benzene	78		10.585					ND	
48 1,2-Dichloroethane	62		10.773					ND	
49 n-Heptane	43		10.901					ND	
* 50 1,4-Difluorobenzene	114	11.404	11.409	-0.005	94	2413927	10.0	10.0	
52 n-Butanol	56		11.821					ND	
53 Trichloroethene	95		11.864					ND	
54 1,2-Dichloropropane	63		12.431					ND	
A 51 GRO	1	12.466	(4.552-20.380)		0	792352		0	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
55 Methyl methacrylate	69		12.597					ND	
56 1,4-Dioxane	88		12.672					ND	
57 Dibromomethane	174		12.682					ND	
58 Dichlorobromomethane	83		12.961					ND	
60 cis-1,3-Dichloropropene	75		13.886					ND	
61 4-Methyl-2-pentanone (MIBK	43		14.202					ND	
A 59 TVOC as Toluene	92	14.386	(3.112-25.660)		0	914118		0	
65 Toluene	92		14.464					ND	
A 63 Toluene Range	92	14.464	(14.424-14.504)		0	7286		NC	
64 n-Octane	43		14.501					ND	
A 62 C8 Range	1	14.507	(14.463-14.551)		0	6060		NC	
66 trans-1,3-Dichloropropene	75		15.068					ND	
67 1,1,2-Trichloroethane	83		15.443					ND	
68 Tetrachloroethene	166		15.523					ND	
69 2-Hexanone	43		15.919					ND	
71 Chlorodibromomethane	129		16.202					ND	
72 Ethylene Dibromide	107		16.475					ND	
* 74 Chlorobenzene-d5	117	17.369	17.374	-0.005	87	2152268	10.0	10.0	
75 Chlorobenzene	112		17.433					ND	
76 Ethylbenzene	91		17.588					ND	
77 n-Nonane	57		17.711					ND	
78 m-Xylene & p-Xylene	106		17.845					ND	
79 o-Xylene	106		18.701					ND	
80 Styrene	104		18.760					ND	
81 Bromoform	173		19.204					ND	
82 Isopropylbenzene	105		19.423					ND	
S 73 Xylenes, Total	106		19.600					ND	
* 83 4-Bromofluorobenzene	95	19.814	19.814	0.000	89	1369620	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.124					ND	
85 N-Propylbenzene	91		20.183					ND	
86 1,2,3-Trichloropropane	75		20.220					ND	
87 n-Decane	57		20.370					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105		20.381					ND	
89 2-Chlorotoluene	91		20.386					ND	
90 1,3,5-Trimethylbenzene	105		20.493					ND	
91 Alpha Methyl Styrene	118		20.873					ND	
92 tert-Butylbenzene	119		20.996					ND	
93 1,2,4-Trimethylbenzene	105		21.097					ND	
94 sec-Butylbenzene	105		21.333					ND	
95 4-Isopropyltoluene	119		21.547					ND	
96 1,3-Dichlorobenzene	146	21.558	21.558	-0.005	1	2177		0.0133	M
97 1,4-Dichlorobenzene	146	21.702	21.702	0.000	90	2495		0.0154	
98 Benzyl chloride	91	21.921	21.921	0.005	82	2853		0.0152	M
100 n-Butylbenzene	91		22.119					ND	
99 Undecane	57		22.151					ND	
101 1,2-Dichlorobenzene	146	22.242	22.237	0.005	76	2194		0.0144	
102 Dodecane	57		23.724					ND	
103 1,2,4-Trichlorobenzene	180	24.714	24.709	0.006	85	3842		0.0376	
104 Hexachlorobutadiene	225		24.890					ND	
105 Naphthalene	128	25.195	25.190	0.005	96	7554		0.0370	
106 1,2,3-Trichlorobenzene	180	25.650	25.650	0.000	58	2919		0.0322	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

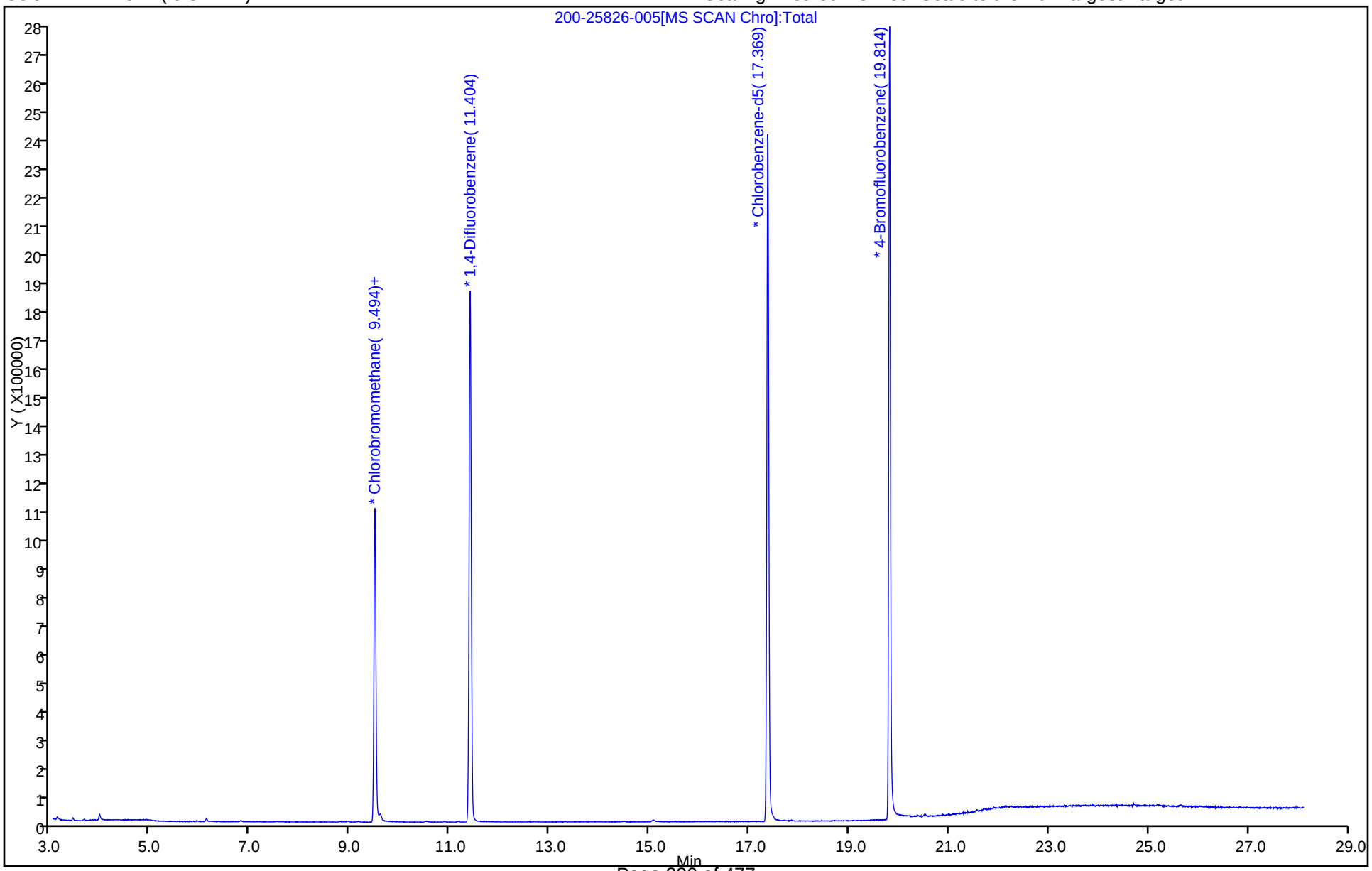
Report Date: 11-Jul-2017 14:35:20 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D

Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

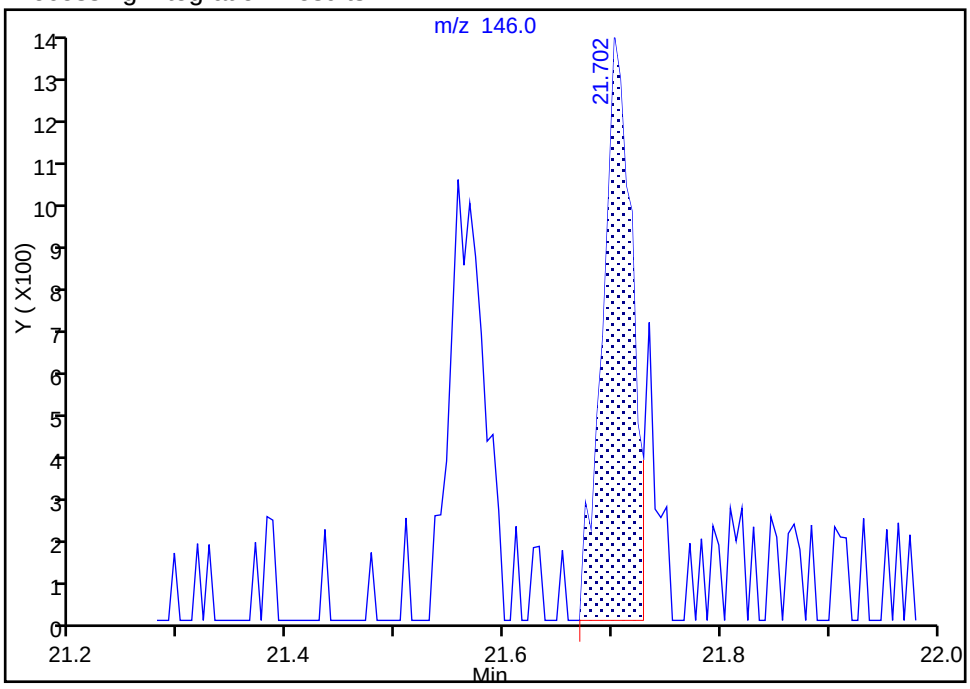
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D				
Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

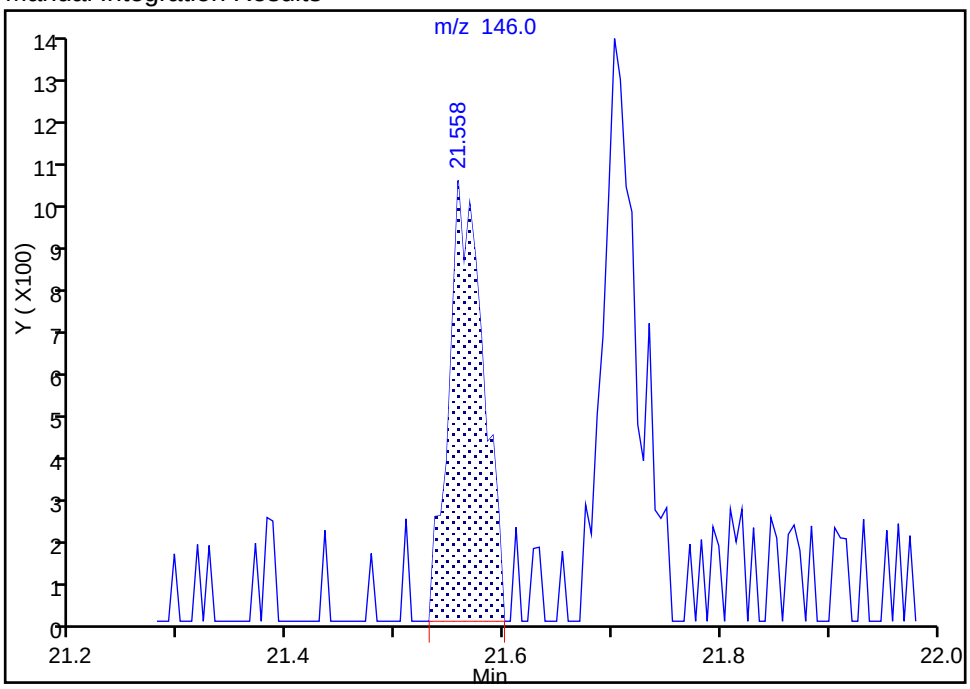
Processing Integration Results

RT: 21.70
Area: 2495
Amount: 0.015253
Amount Units: ppb v/v



Manual Integration Results

RT: 21.56
Area: 2177
Amount: 0.013309
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:18

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

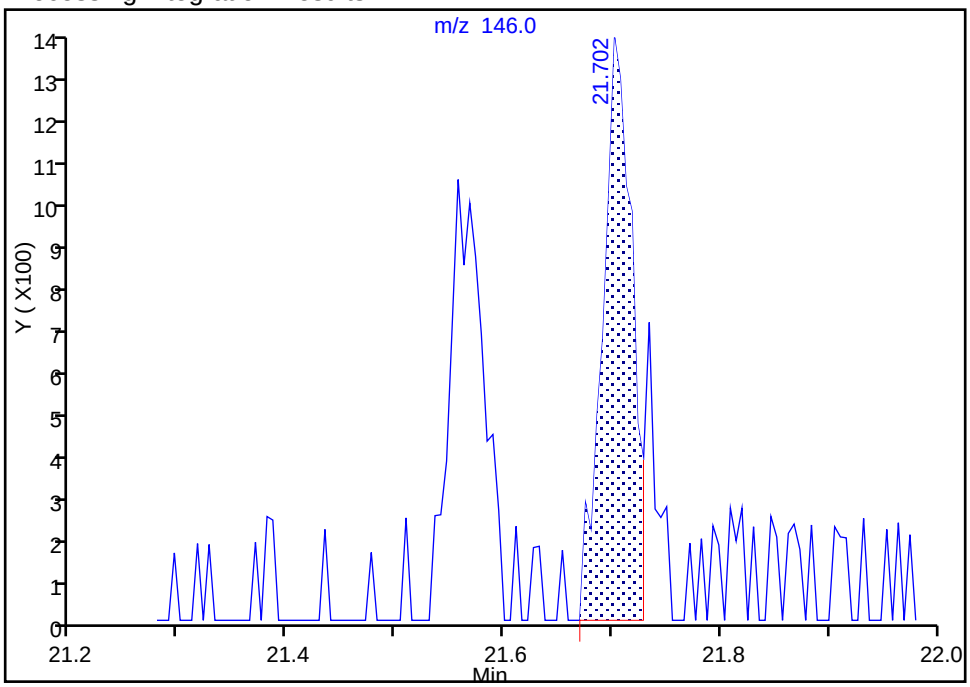
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D				
Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

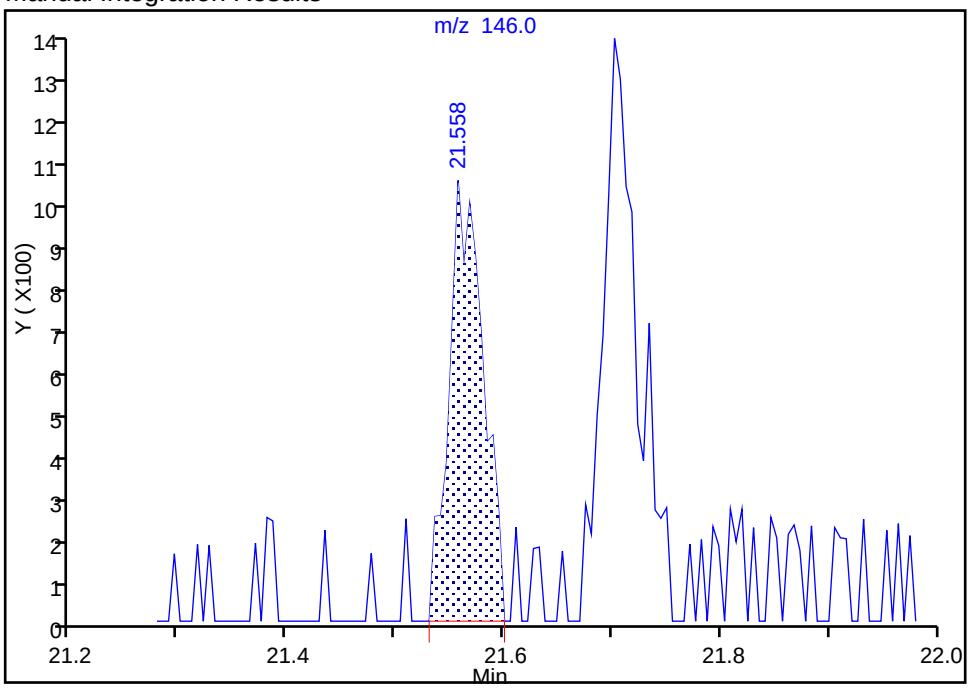
Processing Integration Results

RT: 21.70
Area: 2495
Amount: 0.015253
Amount Units: ppb v/v



Manual Integration Results

RT: 21.56
Area: 2177
Amount: 0.013309
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:32
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

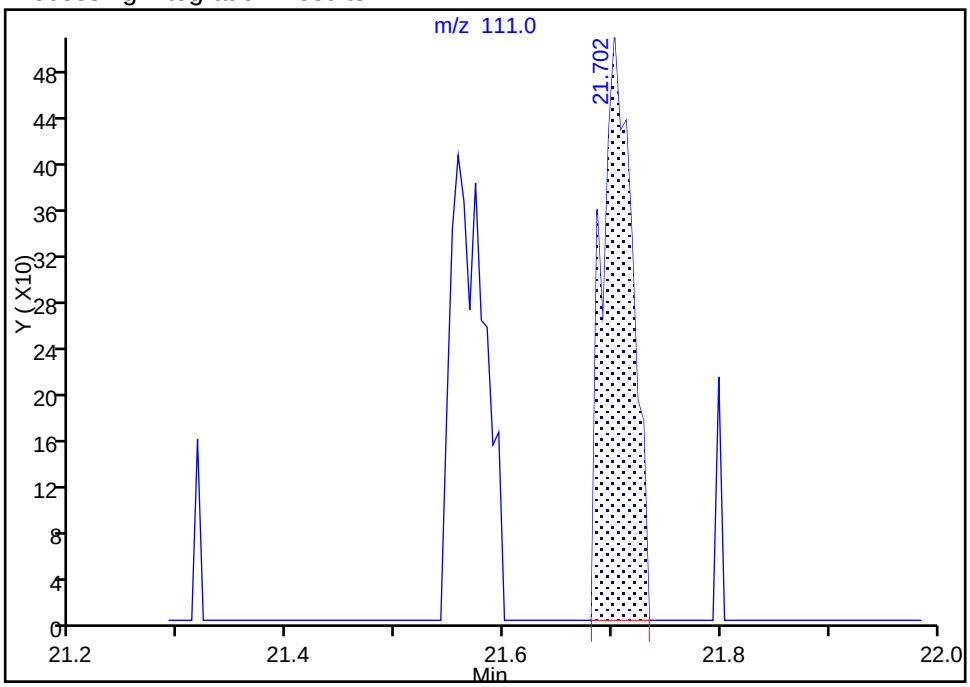
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D
Injection Date: 10-Jul-2017 13:30:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 2

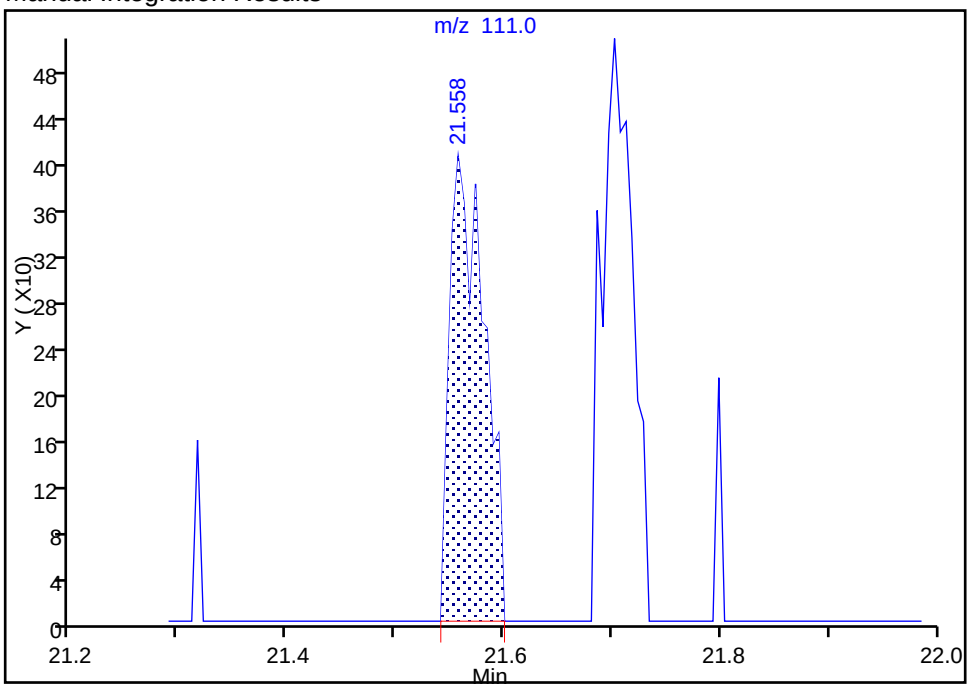
Processing Integration Results

RT: 21.70
Area: 992
Amount: 0.015253
Amount Units: ppb v/v



Manual Integration Results

RT: 21.56
Area: 885
Amount: 0.013309
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:41
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

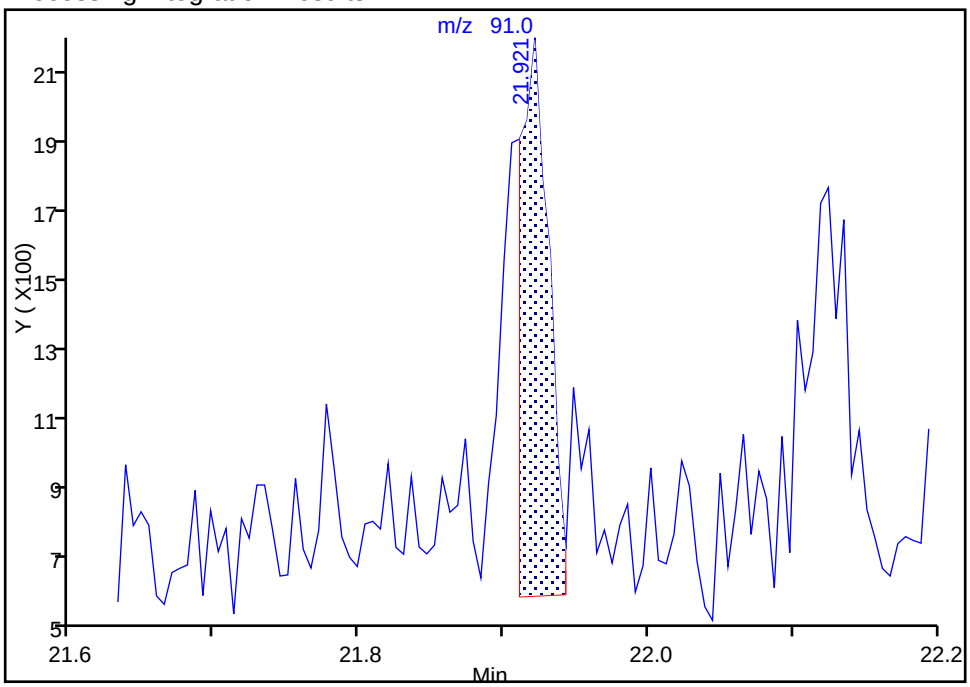
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D				
Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

98 Benzyl chloride, CAS: 100-44-7

Signal: 1

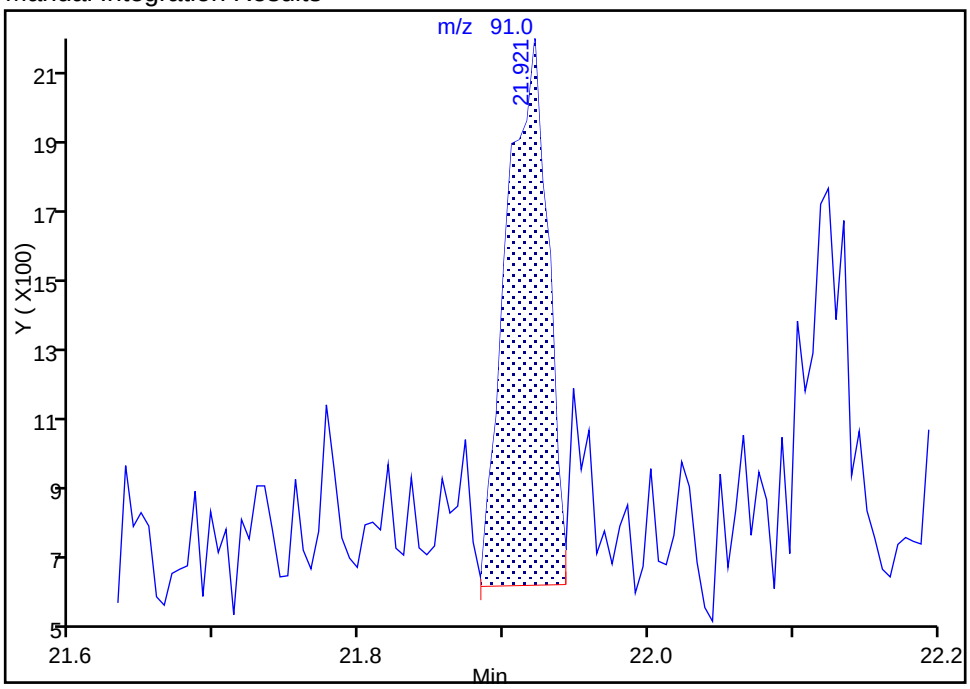
Processing Integration Results

RT: 21.92
Area: 2044
Amount: 0.010923
Amount Units: ppb v/v



Manual Integration Results

RT: 21.92
Area: 2853
Amount: 0.015246
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:54

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab File ID: 200-25826-005.D Lab Sample ID: MB 200-118357/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHG.i Date Analyzed: 07/10/2017 13:30

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118357/4	200-25826-004.D	07/10/2017 12:40
2521	200-39219-1	200-25826-014.D	07/11/2017 00:34

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118357/5

Matrix: Air Lab File ID: 200-25826-005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/10/2017 13:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39219-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118357/5

Matrix: Air | Lab File ID: 200-25826-005.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/10/2017 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118357 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118357/5

Matrix: Air Lab File ID: 200-25826-005.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/10/2017 13:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 10-Jul-2017 13:30:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025826-005
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 14:35:19 Calib Date: 21-Jun-2017 00:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170620-25547.b\200-25547-011.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 11-Jul-2017 14:35:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.122					ND	
2 Dichlorodifluoromethane	85		3.181					ND	
3 Chlorodifluoromethane	51		3.219					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390					ND	
5 Chloromethane	50		3.518					ND	
6 Butane	43		3.668					ND	
7 Vinyl chloride	62		3.711					ND	
8 Butadiene	54		3.770					ND	
10 Bromomethane	94		4.331					ND	
11 Chloroethane	64		4.513					ND	
12 2-Methylbutane	43		4.562					ND	
13 Vinyl bromide	106		4.834					ND	
14 Trichlorofluoromethane	101		4.904					ND	
16 Pentane	43		5.011					ND	
17 Ethanol	45		5.375					ND	
18 Ethyl ether	59		5.455					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.792					ND	
19 Acrolein	56	5.835	5.808	0.027	25	1007		0.1680	
21 1,1-Dichloroethene	96		5.856					ND	
22 Acetone	43	6.113	6.081	0.032	100	17019		0.4038	
23 Carbon disulfide	76	6.231	6.225	0.006	92	1691		0.0158	
24 Isopropyl alcohol	45		6.306					ND	
25 3-Chloro-1-propene	41		6.546					ND	
26 Acetonitrile	41		6.696					ND	
27 Methylene Chloride	49	6.808	6.808	0.000	88	3290		0.0831	
28 2-Methyl-2-propanol	59		7.006					ND	
29 Methyl tert-butyl ether	73		7.178					ND	
31 trans-1,2-Dichloroethene	61		7.199					ND	
32 Acrylonitrile	53		7.375					ND	
33 Hexane	57		7.536					ND	
34 1,1-Dichloroethane	63		8.017					ND	
35 Vinyl acetate	43		8.076					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
37 cis-1,2-Dichloroethene	96		9.050					ND	
38 2-Butanone (MEK)	72		9.125					ND	
39 Ethyl acetate	88		9.141					ND	
* 40 Chlorobromomethane	128	9.494	9.499	-0.005	78	461989	10.0	10.0	
41 Tetrahydrofuran	42		9.526					ND	
42 Chloroform	83	9.606	9.612	-0.006	95	19454		0.1469	
S 30 1,2-Dichloroethene, Total	61		9.665					ND	
43 Cyclohexane	84		9.842					ND	
44 1,1,1-Trichloroethane	97		9.879					ND	
45 Carbon tetrachloride	117		10.115					ND	
46 Isooctane	57		10.521					ND	
47 Benzene	78		10.585					ND	
48 1,2-Dichloroethane	62		10.773					ND	
49 n-Heptane	43		10.901					ND	
* 50 1,4-Difluorobenzene	114	11.404	11.409	-0.005	94	2413927	10.0	10.0	
52 n-Butanol	56		11.821					ND	
53 Trichloroethene	95		11.864					ND	
54 1,2-Dichloropropane	63		12.431					ND	
A 51 GRO	1	12.466	(4.552-20.380)		0	792352		0	
T 36 Methyl cyclohexane TIC	55		12.585					ND	
55 Methyl methacrylate	69		12.597					ND	
56 1,4-Dioxane	88		12.672					ND	
57 Dibromomethane	174		12.682					ND	
58 Dichlorobromomethane	83		12.961					ND	
60 cis-1,3-Dichloropropene	75		13.886					ND	
61 4-Methyl-2-pentanone (MIBK	43		14.202					ND	
A 59 TVOC as Toluene	92	14.386	(3.112-25.660)		0	914118		0	
65 Toluene	92		14.464					ND	
A 63 Toluene Range	92	14.464	(14.424-14.504)		0	7286		NC	
64 n-Octane	43		14.501					ND	
A 62 C8 Range	1	14.507	(14.463-14.551)		0	6060		NC	
66 trans-1,3-Dichloropropene	75		15.068					ND	
67 1,1,2-Trichloroethane	83		15.443					ND	
68 Tetrachloroethene	166		15.523					ND	
69 2-Hexanone	43		15.919					ND	
71 Chlorodibromomethane	129		16.202					ND	
72 Ethylene Dibromide	107		16.475					ND	
* 74 Chlorobenzene-d5	117	17.369	17.374	-0.005	87	2152268	10.0	10.0	
75 Chlorobenzene	112		17.433					ND	
76 Ethylbenzene	91		17.588					ND	
77 n-Nonane	57		17.711					ND	
78 m-Xylene & p-Xylene	106		17.845					ND	
79 o-Xylene	106		18.701					ND	
80 Styrene	104		18.760					ND	
81 Bromoform	173		19.204					ND	
82 Isopropylbenzene	105		19.423					ND	
S 73 Xylenes, Total	106		19.600					ND	
* 83 4-Bromofluorobenzene	95	19.814	19.814	0.000	89	1369620	10.0	10.0	
84 1,1,2,2-Tetrachloroethane	83		20.124					ND	
85 N-Propylbenzene	91		20.183					ND	
86 1,2,3-Trichloropropane	75		20.220					ND	
87 n-Decane	57		20.370					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105		20.381					ND	
89 2-Chlorotoluene	91		20.386					ND	
90 1,3,5-Trimethylbenzene	105		20.493					ND	
91 Alpha Methyl Styrene	118		20.873					ND	
92 tert-Butylbenzene	119		20.996					ND	
93 1,2,4-Trimethylbenzene	105		21.097					ND	
94 sec-Butylbenzene	105		21.333					ND	
95 4-Isopropyltoluene	119		21.547					ND	
96 1,3-Dichlorobenzene	146	21.558	21.558	-0.005	1	2177		0.0133	M
97 1,4-Dichlorobenzene	146	21.702	21.702	0.000	90	2495		0.0154	
98 Benzyl chloride	91	21.921	21.921	0.005	82	2853		0.0152	M
100 n-Butylbenzene	91		22.119					ND	
99 Undecane	57		22.151					ND	
101 1,2-Dichlorobenzene	146	22.242	22.237	0.005	76	2194		0.0144	
102 Dodecane	57		23.724					ND	
103 1,2,4-Trichlorobenzene	180	24.714	24.709	0.006	85	3842		0.0376	
104 Hexachlorobutadiene	225		24.890					ND	
105 Naphthalene	128	25.195	25.190	0.005	96	7554		0.0370	
106 1,2,3-Trichlorobenzene	180	25.650	25.650	0.000	58	2919		0.0322	
T 15 Methyl Acetate TIC	43		0.000					ND	
T 70 1,2-Dibromo-3-Chloropropan	75		0.000					ND	
T 109 1,3-Dichloropropane TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 107 Methyl acetylene TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

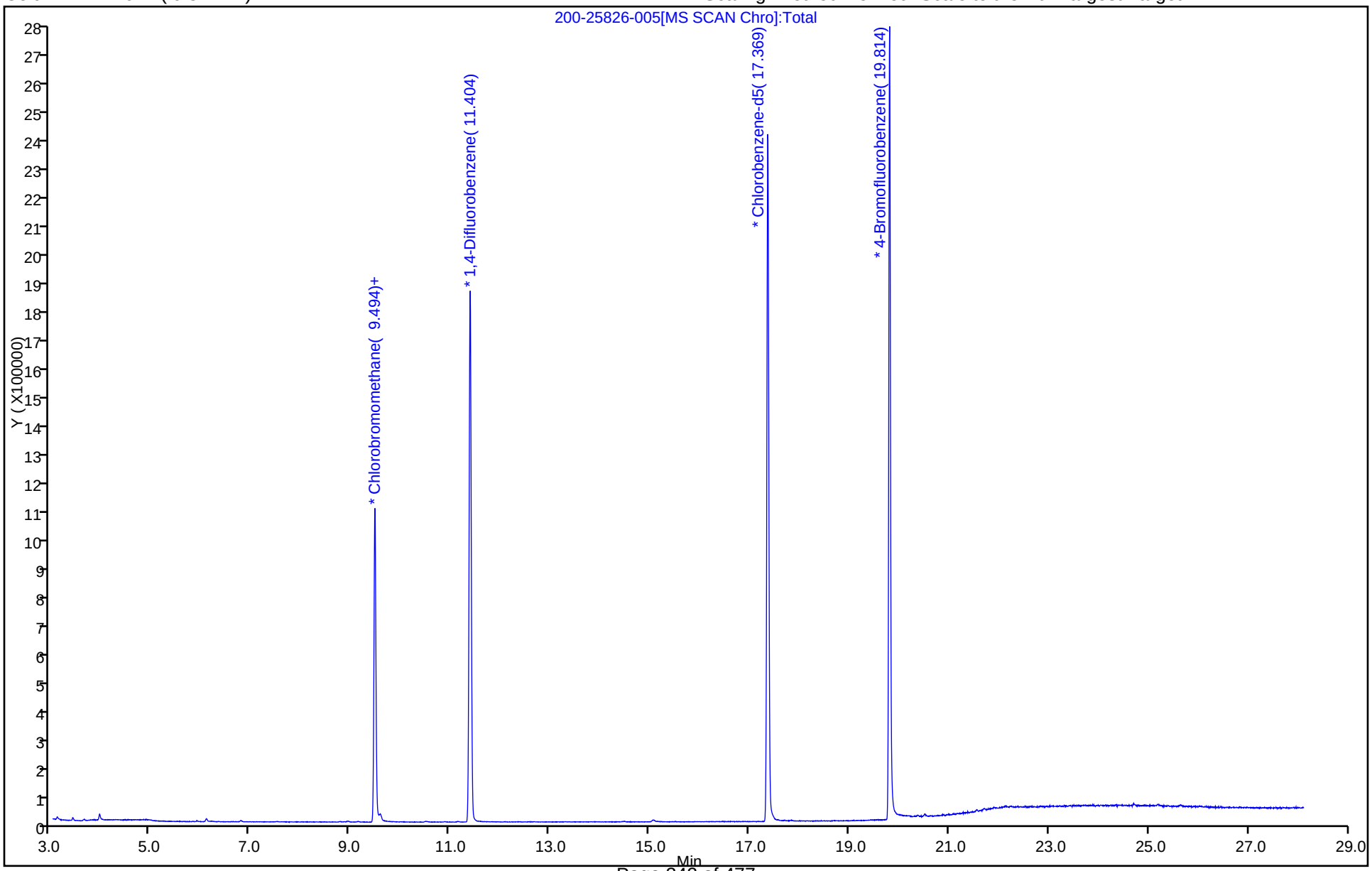
Report Date: 11-Jul-2017 14:35:20 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D

Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

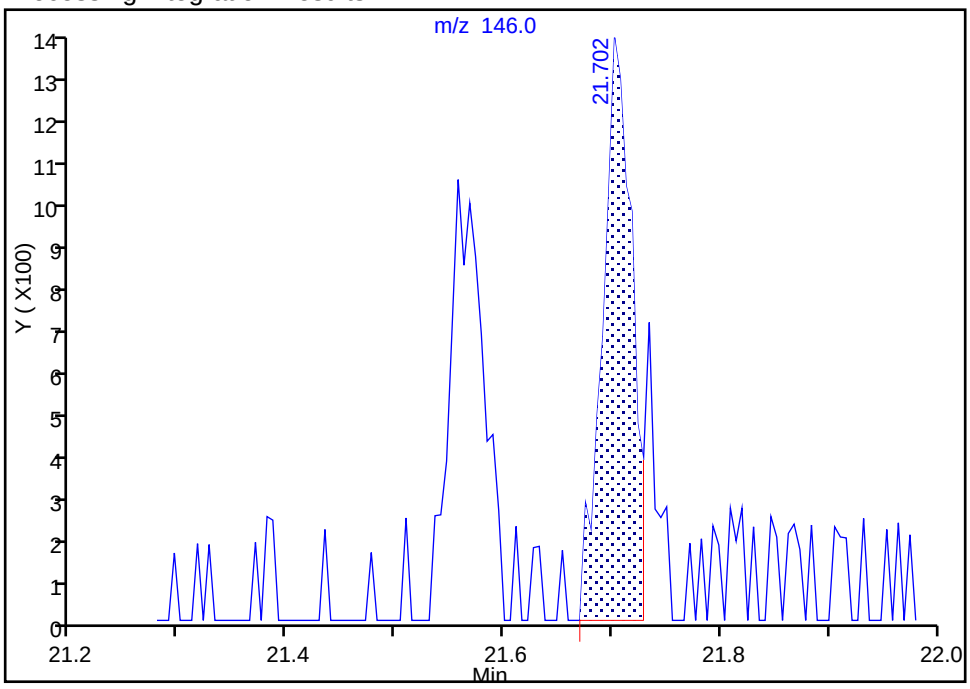
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D				
Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

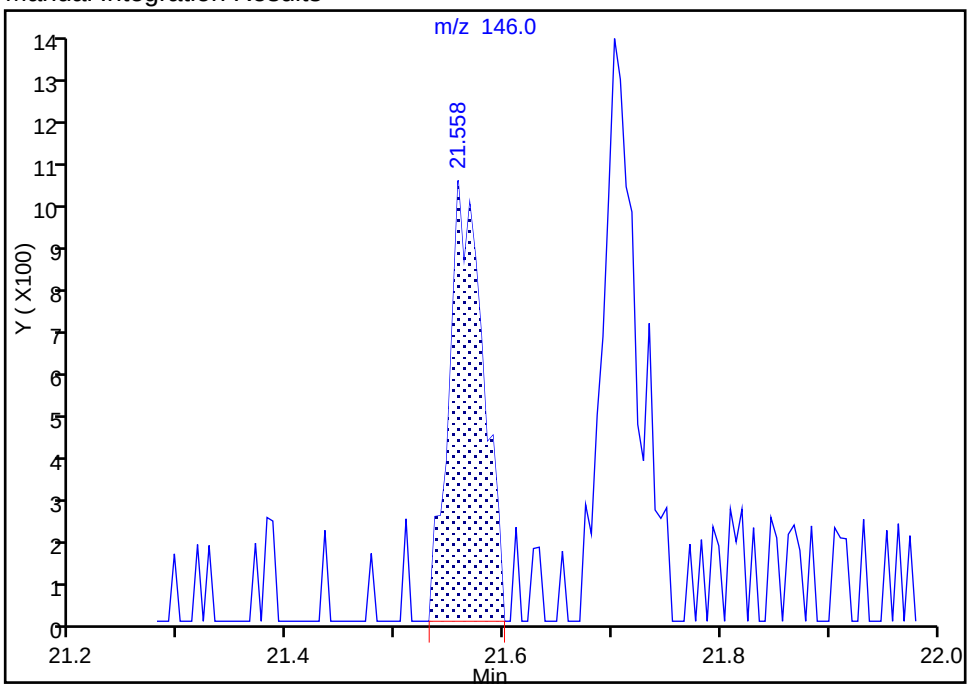
Processing Integration Results

RT: 21.70
Area: 2495
Amount: 0.015253
Amount Units: ppb v/v



Manual Integration Results

RT: 21.56
Area: 2177
Amount: 0.013309
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:18

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

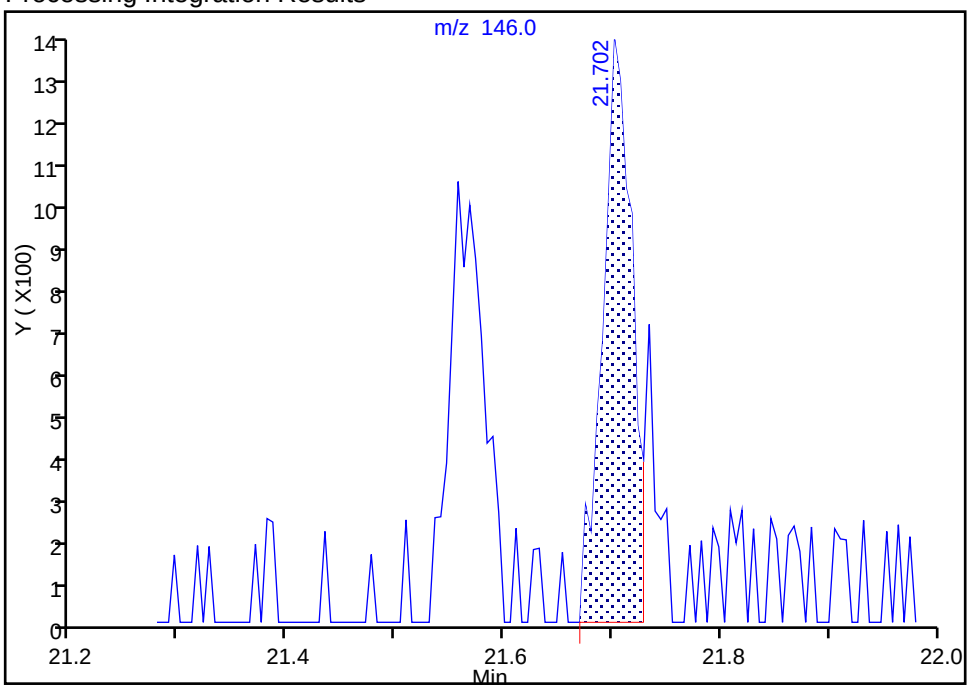
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D				
Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

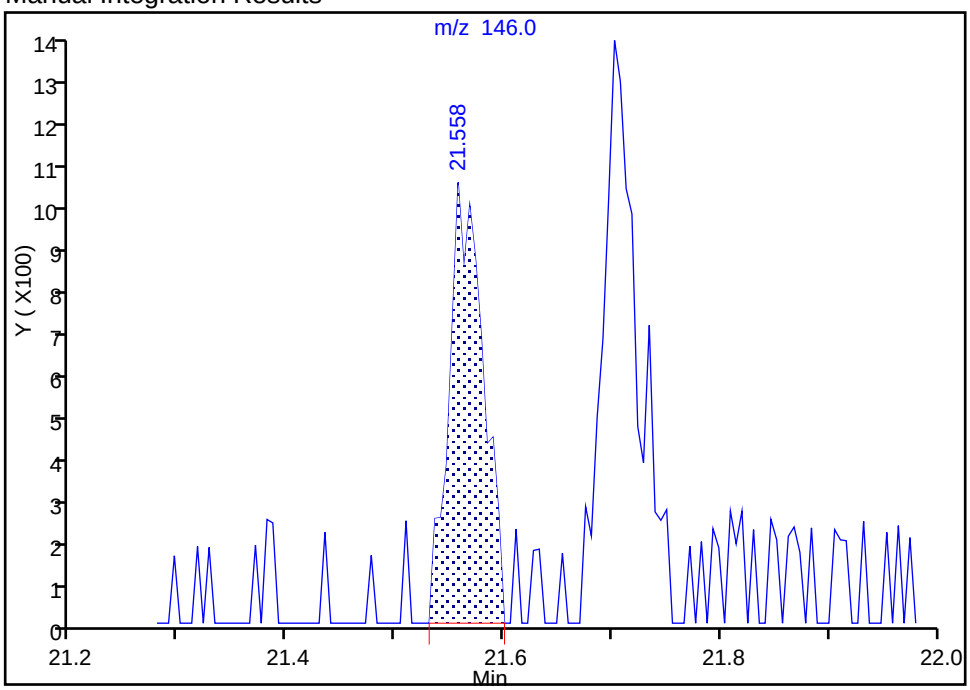
Processing Integration Results

RT: 21.70
Area: 2495
Amount: 0.015253
Amount Units: ppb v/v



Manual Integration Results

RT: 21.56
Area: 2177
Amount: 0.013309
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:32
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

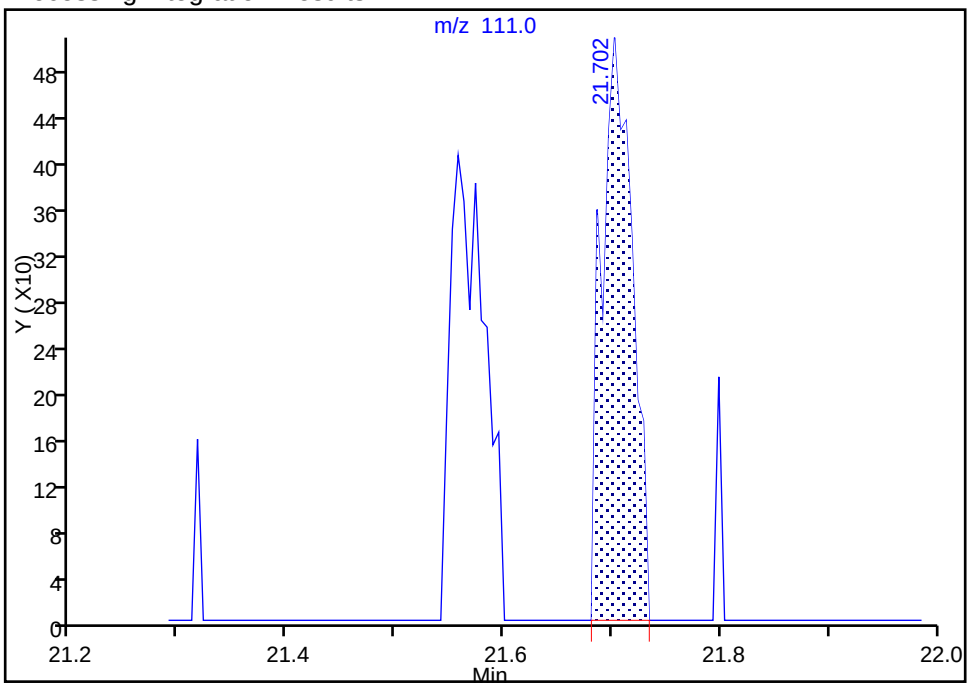
Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D
Injection Date: 10-Jul-2017 13:30:30 Instrument ID: CHG.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_MasterMethod_(v1)_G Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

96 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 2

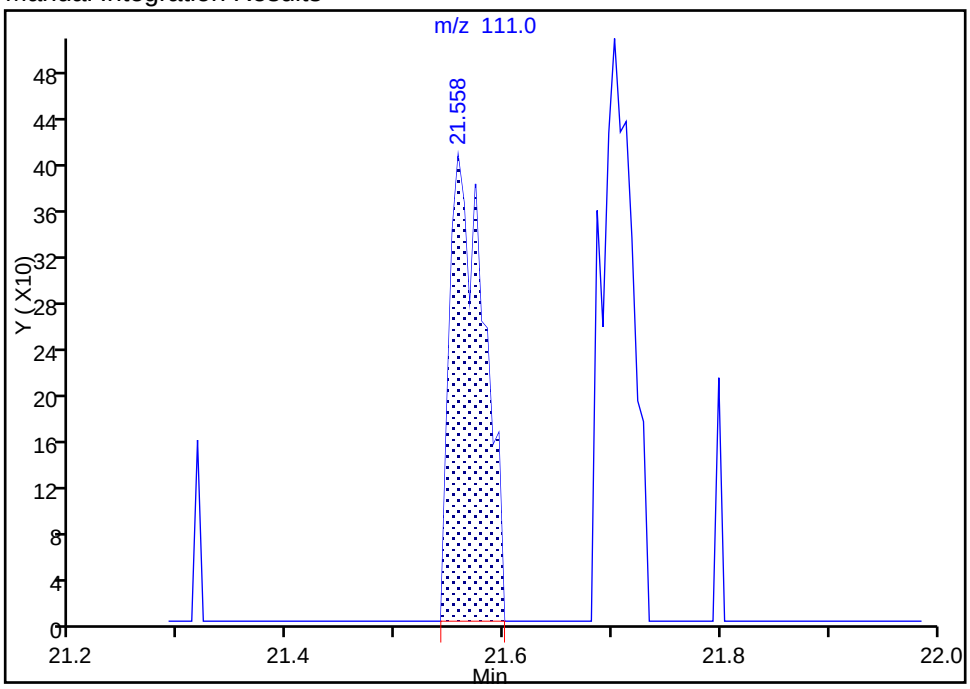
Processing Integration Results

RT: 21.70
Area: 992
Amount: 0.015253
Amount Units: ppb v/v



Manual Integration Results

RT: 21.56
Area: 885
Amount: 0.013309
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:41
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

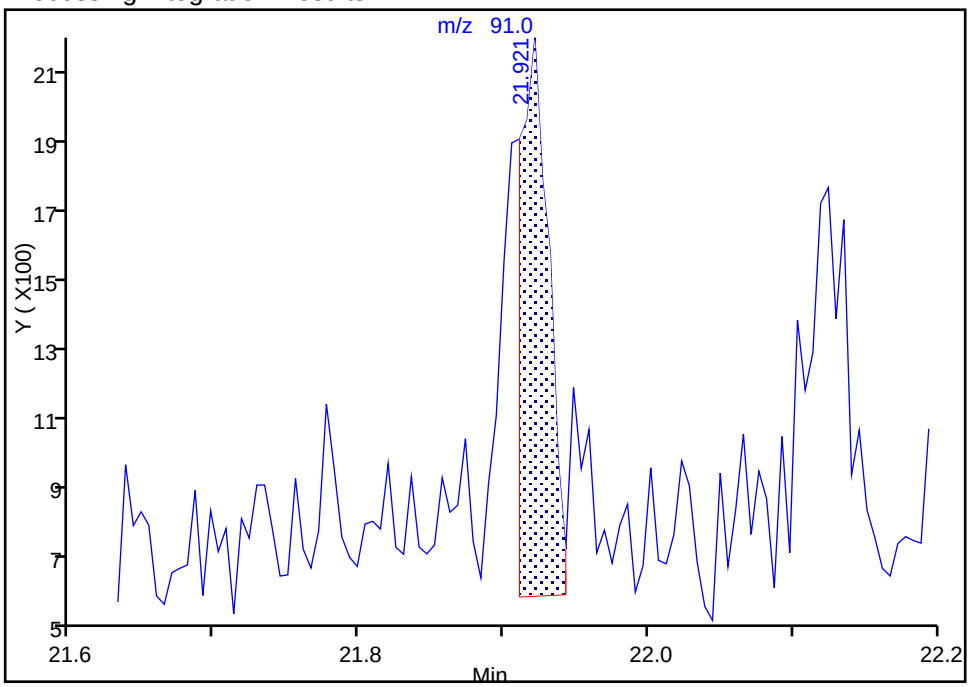
Data File:	\\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-005.D				
Injection Date:	10-Jul-2017 13:30:30	Instrument ID:	CHG.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

98 Benzyl chloride, CAS: 100-44-7

Signal: 1

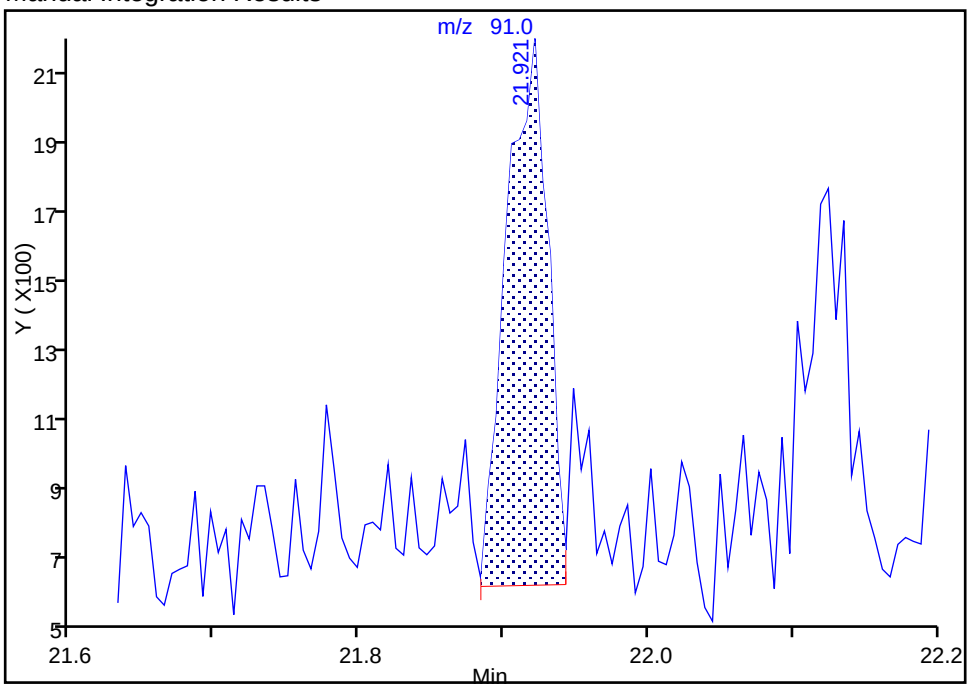
Processing Integration Results

RT: 21.92
Area: 2044
Amount: 0.010923
Amount Units: ppb v/v



Manual Integration Results

RT: 21.92
Area: 2853
Amount: 0.015246
Amount Units: ppb v/v



Reviewer: puangmaleek, 11-Jul-2017 14:34:54

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab File ID: 25870-04.D Lab Sample ID: MB 200-118448/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: CHB.i Date Analyzed: 07/12/2017 12:16

GC Column: RTX-624 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-118448/3	25870-03.D	07/12/2017 11:23
4148	200-39253-12	25870-17.D	07/12/2017 23:54

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39253-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-118448/4

Matrix: Air | Lab File ID: 25870-04.D

Analysis Method: TO-15 | Date Collected:

Sample wt/vol: 200(mL) | Date Analyzed: 07/12/2017 12:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118448 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	5.0	U	5.0	5.0
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.50
75-45-6	Freon 22	0.50	U	0.50	0.50
76-14-2	1,2-Dichlorotetrafluoroethane	0.20	U	0.20	0.20
74-87-3	Chloromethane	0.50	U	0.50	0.50
106-97-8	n-Butane	0.50	U	0.50	0.50
75-01-4	Vinyl chloride	0.20	U	0.20	0.20
106-99-0	1,3-Butadiene	0.20	U	0.20	0.20
74-83-9	Bromomethane	0.20	U	0.20	0.20
75-00-3	Chloroethane	0.50	U	0.50	0.50
593-60-2	Bromoethene(Vinyl Bromide)	0.20	U	0.20	0.20
75-69-4	Trichlorofluoromethane	0.20	U	0.20	0.20
64-17-5	Ethanol	5.0	U	5.0	5.0
76-13-1	Freon TF	0.20	U	0.20	0.20
75-35-4	1,1-Dichloroethene	0.20	U	0.20	0.20
67-64-1	Acetone	5.0	U	5.0	5.0
67-63-0	Isopropyl alcohol	5.0	U	5.0	5.0
75-15-0	Carbon disulfide	0.50	U	0.50	0.50
107-05-1	3-Chloropropene	0.50	U	0.50	0.50
75-09-2	Methylene Chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	5.0	U	5.0	5.0
1634-04-4	Methyl tert-butyl ether	0.20	U	0.20	0.20
156-60-5	trans-1,2-Dichloroethene	0.20	U	0.20	0.20
110-54-3	n-Hexane	0.20	U	0.20	0.20
75-34-3	1,1-Dichloroethane	0.20	U	0.20	0.20
108-05-4	Vinyl acetate	5.0	U	5.0	5.0
141-78-6	Ethyl acetate	5.0	U	5.0	5.0
78-93-3	Methyl Ethyl Ketone	0.50	U	0.50	0.50
156-59-2	cis-1,2-Dichloroethene	0.20	U	0.20	0.20
540-59-0	1,2-Dichloroethene, Total	0.40	U	0.40	0.40
67-66-3	Chloroform	0.20	U	0.20	0.20
109-99-9	Tetrahydrofuran	5.0	U	5.0	5.0
71-55-6	1,1,1-Trichloroethane	0.20	U	0.20	0.20
110-82-7	Cyclohexane	0.20	U	0.20	0.20
56-23-5	Carbon tetrachloride	0.20	U	0.20	0.20
540-84-1	2,2,4-Trimethylpentane	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118448/4

Matrix: Air Lab File ID: 25870-04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/12/2017 12:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118448 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.20	U	0.20	0.20
107-06-2	1,2-Dichloroethane	0.20	U	0.20	0.20
142-82-5	n-Heptane	0.20	U	0.20	0.20
79-01-6	Trichloroethene	0.20	U	0.20	0.20
80-62-6	Methyl methacrylate	0.50	U	0.50	0.50
78-87-5	1,2-Dichloropropane	0.20	U	0.20	0.20
123-91-1	1,4-Dioxane	5.0	U	5.0	5.0
75-27-4	Bromodichloromethane	0.20	U	0.20	0.20
10061-01-5	cis-1,3-Dichloropropene	0.20	U	0.20	0.20
108-10-1	methyl isobutyl ketone	0.50	U	0.50	0.50
108-88-3	Toluene	0.20	U	0.20	0.20
10061-02-6	trans-1,3-Dichloropropene	0.20	U	0.20	0.20
79-00-5	1,1,2-Trichloroethane	0.20	U	0.20	0.20
127-18-4	Tetrachloroethene	0.20	U	0.20	0.20
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.50	U	0.50	0.50
124-48-1	Dibromochloromethane	0.20	U	0.20	0.20
106-93-4	1,2-Dibromoethane	0.20	U	0.20	0.20
108-90-7	Chlorobenzene	0.20	U	0.20	0.20
100-41-4	Ethylbenzene	0.20	U	0.20	0.20
179601-23-1	m,p-Xylene	0.50	U	0.50	0.50
95-47-6	Xylene, o-	0.20	U	0.20	0.20
1330-20-7	Xylene (total)	0.70	U	0.70	0.70
100-42-5	Styrene	0.20	U	0.20	0.20
75-25-2	Bromoform	0.20	U	0.20	0.20
98-82-8	Cumene	0.20	U	0.20	0.20
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U	0.20	0.20
103-65-1	n-Propylbenzene	0.20	U	0.20	0.20
622-96-8	4-Ethyltoluene	0.20	U	0.20	0.20
108-67-8	1,3,5-Trimethylbenzene	0.20	U	0.20	0.20
95-49-8	2-Chlorotoluene	0.20	U	0.20	0.20
98-06-6	tert-Butylbenzene	0.20	U	0.20	0.20
95-63-6	1,2,4-Trimethylbenzene	0.20	U	0.20	0.20
135-98-8	sec-Butylbenzene	0.20	U	0.20	0.20
99-87-6	4-Isopropyltoluene	0.20	U	0.20	0.20
541-73-1	1,3-Dichlorobenzene	0.20	U	0.20	0.20
106-46-7	1,4-Dichlorobenzene	0.20	U	0.20	0.20

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-118448/4

Matrix: Air Lab File ID: 25870-04.D

Analysis Method: TO-15 Date Collected:

Sample wt/vol: 200(mL) Date Analyzed: 07/12/2017 12:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118448 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.20	U	0.20	0.20
104-51-8	n-Butylbenzene	0.20	U	0.20	0.20
95-50-1	1,2-Dichlorobenzene	0.20	U	0.20	0.20
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.50
87-68-3	Hexachlorobutadiene	0.20	U	0.20	0.20
91-20-3	Naphthalene	0.50	U	0.50	0.50

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\25870-04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 12-Jul-2017 12:16:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Sample Info: 200-0025870-004
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 14-Jul-2017 09:27:11 Calib Date: 09-Jun-2017 10:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20170608-25406.b\25406-17.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: puangmaleek Date: 13-Jul-2017 10:45:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
1 Propene	41		3.140					ND	
2 Dichlorodifluoromethane	85		3.199					ND	
3 Chlorodifluoromethane	51		3.231					ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.417					ND	
5 Chloromethane	50		3.540					ND	
6 Butane	43		3.722					ND	
7 Vinyl chloride	62		3.754					ND	
8 Butadiene	54		3.823					ND	
10 Bromomethane	94		4.490					ND	
11 Chloroethane	64		4.730					ND	
12 2-Methylbutane	43		4.805					ND	
13 Vinyl bromide	106		5.136					ND	
14 Trichlorofluoromethane	101		5.237					ND	
15 Pentane	43		5.376					ND	
16 Ethanol	45		5.718					ND	
17 Ethyl ether	59		5.851					ND	
18 Acrolein	56		6.219					ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.267					ND	
20 1,1-Dichloroethene	96		6.337					ND	
21 Acetone	43		6.492					ND	
22 Isopropyl alcohol	45		6.732					ND	
23 Carbon disulfide	76		6.769					ND	
24 3-Chloro-1-propene	41		7.041					ND	
26 Acetonitrile	41		7.105					ND	
T 25 Methyl Acetate TIC	43		7.200					ND	
27 Methylene Chloride	49	7.292	7.297	-0.005	58	4655		0.1289	7
28 2-Methyl-2-propanol	59		7.436					ND	
29 Methyl tert-butyl ether	73		7.650					ND	
30 trans-1,2-Dichloroethene	61		7.708					ND	
31 Acrylonitrile	53		7.783					ND	
32 Hexane	57		8.039					ND	
33 1,1-Dichloroethane	63		8.450					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 Vinyl acetate	43		8.461					ND	
36 2-Butanone (MEK)	72		9.347					ND	
37 cis-1,2-Dichloroethene	96		9.352					ND	
35 Ethyl acetate	88		9.363					ND	
* 39 Chlorobromomethane	128	9.715	9.720	-0.005	83	342440	10.0	10.0	
38 Tetrahydrofuran	42		9.736					ND	
40 Chloroform	83		9.795					ND	
S 41 1,2-Dichloroethene, Total	61		10.000					ND	
42 1,1,1-Trichloroethane	97		10.051					ND	
43 Cyclohexane	84		10.067					ND	
44 Carbon tetrachloride	117		10.259					ND	
45 Isooctane	57		10.542					ND	
46 Benzene	78		10.585					ND	
47 1,2-Dichloroethane	62		10.686					ND	
48 n-Heptane	43		10.793					ND	
A 49 GRO	1	10.878	(4.795-16.962)		0	3464168		0	
* 50 1,4-Difluorobenzene	114	11.124	11.129	-0.005	93	1736136	10.0	10.0	
51 n-Butanol	56		11.332					ND	
53 Trichloroethene	95		11.498					ND	
T 52 Methyl cyclohexane TIC	55		11.500					ND	
54 1,2-Dichloropropane	63		11.866					ND	
55 Methyl methacrylate	69		11.903					ND	
56 1,4-Dioxane	88		11.999					ND	
57 Dibromomethane	174		12.053					ND	
58 Dichlorobromomethane	83		12.223					ND	
A 59 TVOC as Toluene	1	12.498	(3.130-21.867)		0	3737603		0	
60 cis-1,3-Dichloropropene	75		12.848					ND	
61 4-Methyl-2-pentanone (MIBK	43		13.003					ND	
63 n-Octane	43		13.264					ND	
64 Toluene	92		13.280					ND	
66 trans-1,3-Dichloropropene	75		13.643					ND	
67 1,1,2-Trichloroethane	83		13.915					ND	
68 Tetrachloroethene	166		14.054					ND	
69 2-Hexanone	43		14.177					ND	
70 Chlorodibromomethane	129		14.470					ND	
71 Ethylene Dibromide	107		14.673					ND	
* 72 Chlorobenzene-d5	117	15.228	15.233	-0.005	83	1435453	10.0	10.0	
73 Chlorobenzene	112		15.271					ND	
74 Ethylbenzene	91		15.335					ND	
75 n-Nonane	57		15.356					ND	
76 m-Xylene & p-Xylene	106		15.484					ND	
78 o-Xylene	106		15.997					ND	
S 77 Xylenes, Total	106		16.000					ND	
79 Styrene	104		16.018					ND	
80 Bromoform	173		16.311					ND	
81 Isopropylbenzene	105		16.408					ND	
83 1,1,2,2-Tetrachloroethane	83		16.813					ND	
84 N-Propylbenzene	91		16.888					ND	
85 1,2,3-Trichloropropane	75		16.899					ND	
86 n-Decane	57		16.952					ND	
87 4-Ethyltoluene	105		17.011					ND	
88 2-Chlorotoluene	91		17.053					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 1,3,5-Trimethylbenzene	105		17.080					ND	
90 Alpha Methyl Styrene	118		17.352					ND	
91 tert-Butylbenzene	119		17.454					ND	
92 1,2,4-Trimethylbenzene	105		17.523					ND	
93 sec-Butylbenzene	105		17.710					ND	
94 4-Isopropyltoluene	119		17.865					ND	
95 1,3-Dichlorobenzene	146	17.939	17.939	0.000	1	2632		0.0170	7
96 1,4-Dichlorobenzene	146	18.046	18.051	-0.005	23	2448		0.0162	7
97 Benzyl chloride	91		18.201					ND	
98 Undecane	57		18.329					ND	
99 n-Butylbenzene	91	18.366	18.366	0.000	7	2717		0.0119	7
100 1,2-Dichlorobenzene	146	18.537	18.537	0.000	36	2333		0.0159	7
T 101 1,2-Dibromo-3-Chloropropan	75		19.300					ND	
102 Dodecane	57		19.786					ND	
103 1,2,4-Trichlorobenzene	180	20.901	20.901	0.000	1	2759		0.0309	7
104 Hexachlorobutadiene	225		21.067					ND	
105 Naphthalene	128	21.397	21.382	0.015	36	7093		0.0364	7M
106 1,2,3-Trichlorobenzene	180	21.862	21.857	0.006	1	2155		0.0298	7M
T 107 Methyl acetylene TIC	1		0.000					ND	
T 108 1,1,1,2-Tetrachloroethane	1		0.000					ND	
T 117 Chlorotrifluoroethene TIC	1		0.000					ND	
T 118 Difluoroethane TIC	1		0.000					ND	
T 119 Freon 115 TIC	1		0.000					ND	
T 120 1,1,1-Trifluoro-2,2-dichlo	1		0.000					ND	
T 121 1,3-Dichloropropane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15BISs_00006 Amount Added: 20.00 Units: mL Run Reagent

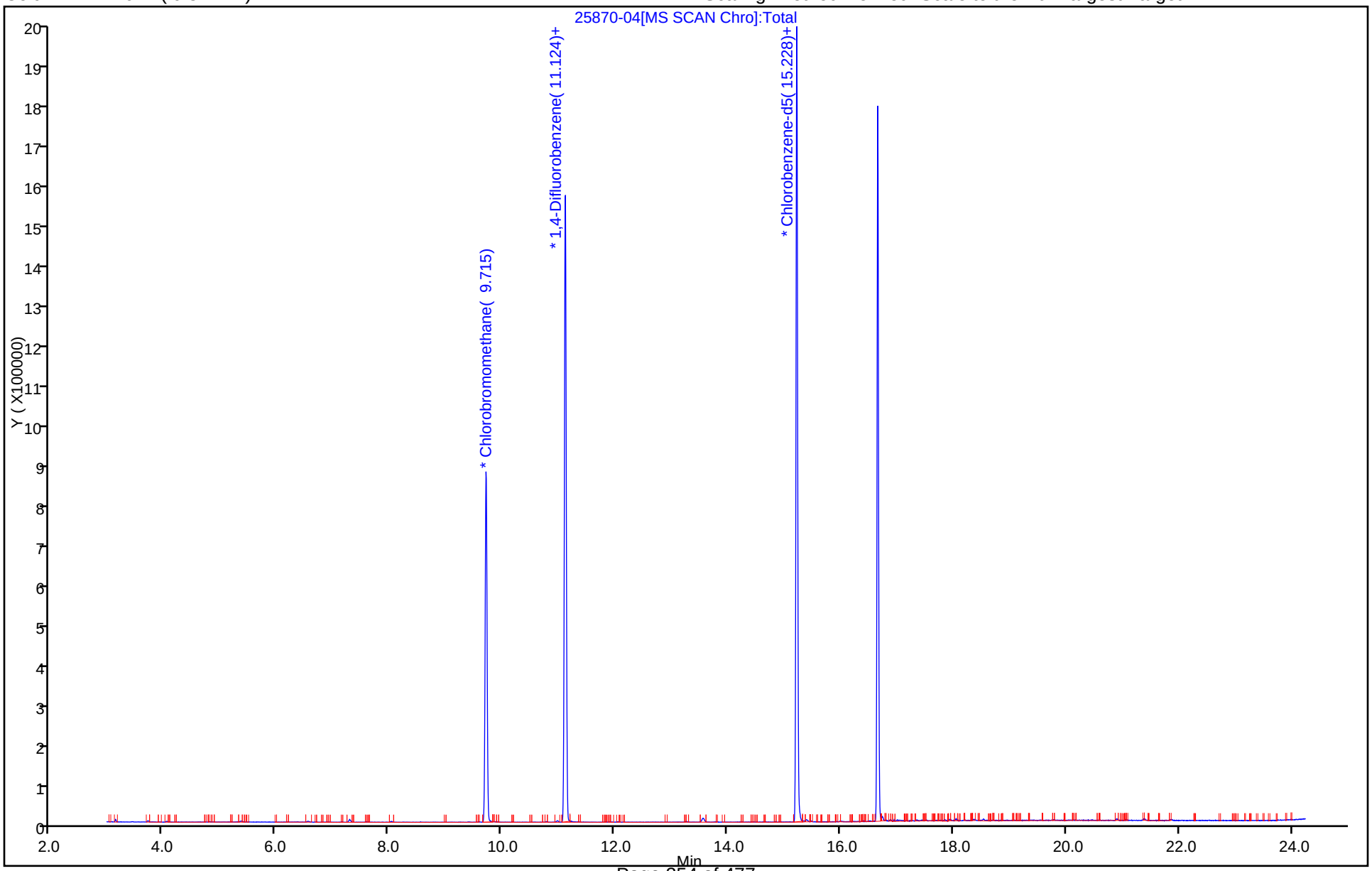
Report Date: 14-Jul-2017 09:28:21 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\25870-04.D

Injection Date:	12-Jul-2017 12:16:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	200.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

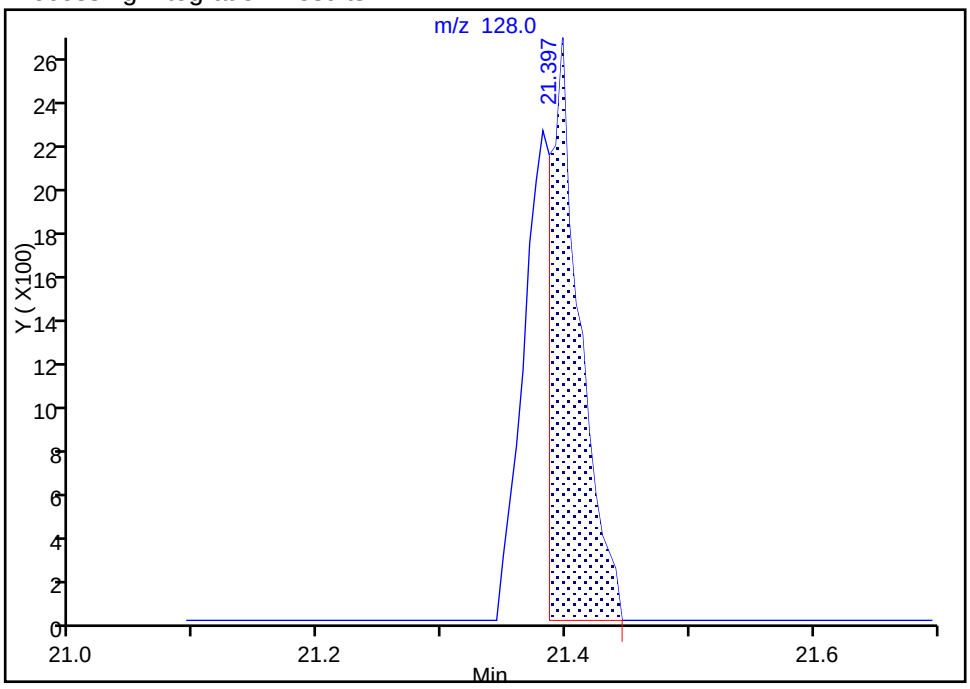
Data File:	\\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\25870-04.D				
Injection Date:	12-Jul-2017 12:16:30	Instrument ID:	CHB.i		
Lims ID:	mb				
Client ID:					
Operator ID:	pad	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	200.000 mL	Dil. Factor:	1.0000		
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Signal: 1

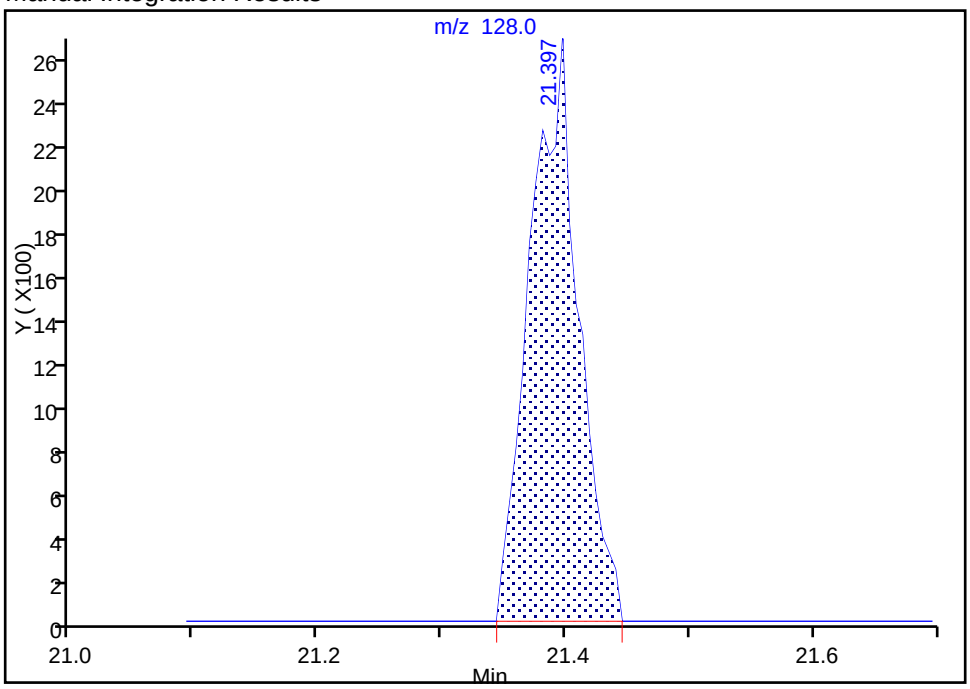
Processing Integration Results

RT: 21.40
Area: 4355
Amount: 0.022337
Amount Units: ppb v/v



Manual Integration Results

RT: 21.40
Area: 7093
Amount: 0.036380
Amount Units: ppb v/v



Reviewer: puangmaleek, 13-Jul-2017 10:43:15
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

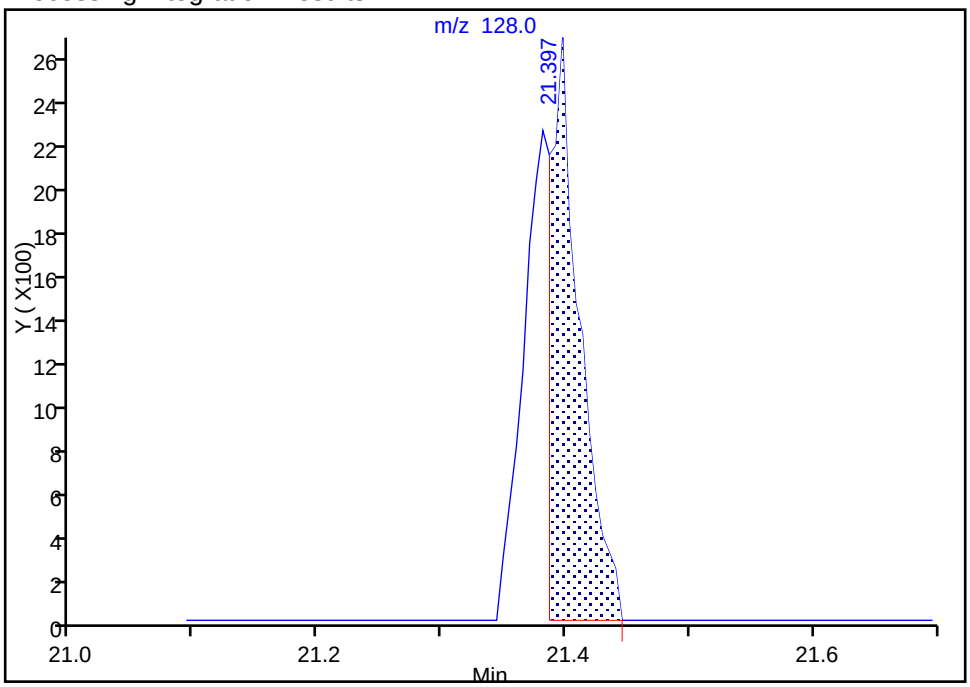
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\25870-04.D
Injection Date: 12-Jul-2017 12:16:30 Instrument ID: CHB.i
Lims ID: mb
Client ID:
Operator ID: pad ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 200.000 mL Dil. Factor: 1.0000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector MS SCAN

105 Naphthalene, CAS: 91-20-3

Signal: 1

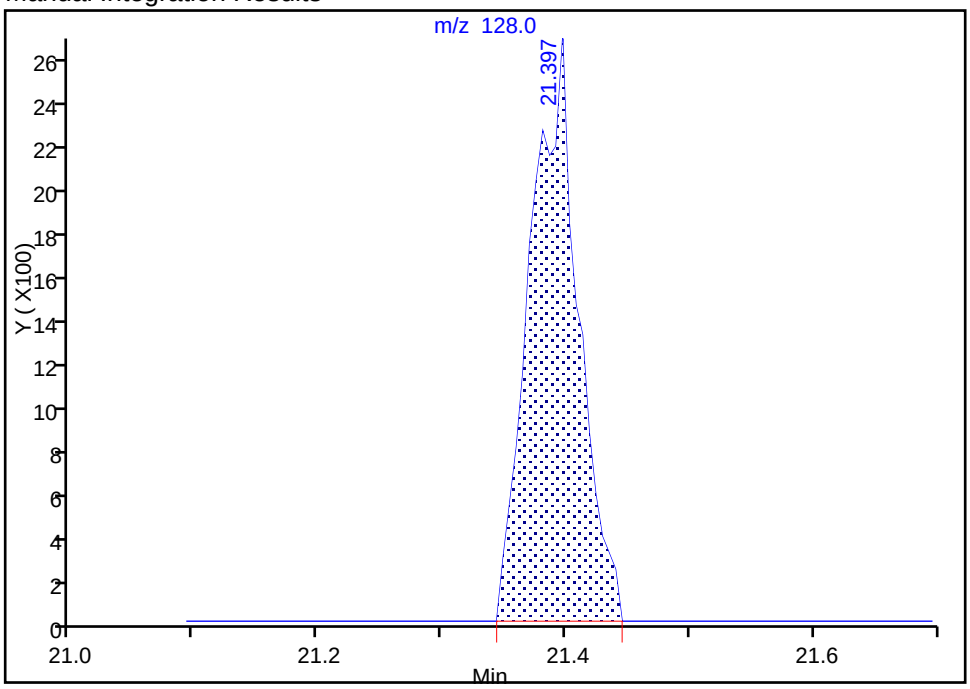
Processing Integration Results

RT: 21.40
Area: 4355
Amount: 0.022337
Amount Units: ppb v/v



Manual Integration Results

RT: 21.40
Area: 7093
Amount: 0.036380
Amount Units: ppb v/v



Reviewer: puangmaleek, 13-Jul-2017 10:43:49
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab File ID: 25526-01.d BFB Injection Date: 06/19/2017

Instrument ID: CHW.i BFB Injection Time: 12:59

Analysis Batch No.: 117699

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.4	
75	30.0 - 66.0% of mass 95	48.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.6	(0.7) 1
174	50.0 - 120.0% of mass 95	85.8	
175	4.0 - 9.0 % of mass 174	6.4	(7.5) 1
176	93.0 - 101.0% of mass 174	82.5	(96.2) 1
177	5.0 - 9.0% of mass 176	5.5	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117699/3	25526-03.d	06/19/2017	14:42
	IC 200-117699/4	25526-04.d	06/19/2017	15:34
	IC 200-117699/5	25526-05.d	06/19/2017	16:26
	IC 200-117699/6	25526-06.d	06/19/2017	17:19
	ICIS 200-117699/7	25526-07.d	06/19/2017	18:11
	IC 200-117699/8	25526-08.d	06/19/2017	19:04
	IC 200-117699/9	25526-09.d	06/19/2017	19:56
	IC 200-117699/10	25526-10.d	06/19/2017	20:48
	ICV 200-117699/13	25526-13.d	06/19/2017	23:25

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab File ID: 25782-01.d BFB Injection Date: 07/06/2017

Instrument ID: CHW.i BFB Injection Time: 10:01

Analysis Batch No.: 118269

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	19.6	
75	30.0 - 66.0% of mass 95	50.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.6	(0.6) 1
174	50.0 - 120.0% of mass 95	90.4	
175	4.0 - 9.0 % of mass 174	6.4	(7.0) 1
176	93.0 - 101.0% of mass 174	89.2	(98.7) 1
177	5.0 - 9.0% of mass 176	5.7	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118269/2	25782-02.d	07/06/2017	10:56
	LCS 200-118269/3	25782-03.d	07/06/2017	11:49
	MB 200-118269/4	25782-04.d	07/06/2017	12:41
5148	200-39188-1	25782-11.d	07/06/2017	20:44

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab File ID: 200-25547-001.D BFB Injection Date: 06/20/2017

Instrument ID: CHG.i BFB Injection Time: 15:41

Analysis Batch No.: 117742

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	17.0	
75	30.0 - 66.0% of mass 95	44.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	75.2	
175	4.0 - 9.0 % of mass 174	5.3	(7.0) 1
176	93.0 - 101.0% of mass 174	74.4	(98.9) 1
177	5.0 - 9.0% of mass 176	4.9	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117742/4	200-25547-004.D	06/20/2017	18:11
	IC 200-117742/5	200-25547-005.D	06/20/2017	19:01
	IC 200-117742/6	200-25547-006.D	06/20/2017	19:52
	IC 200-117742/7	200-25547-007.D	06/20/2017	20:43
	ICIS 200-117742/8	200-25547-008.D	06/20/2017	21:33
	IC 200-117742/9	200-25547-009.D	06/20/2017	22:24
	IC 200-117742/10	200-25547-010.D	06/20/2017	23:14
	IC 200-117742/11	200-25547-011.D	06/21/2017	00:04
	ICV 200-117742/14	200-25547-014.D	06/21/2017	02:35

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab File ID: 200-25826-001.D BFB Injection Date: 07/10/2017

Instrument ID: CHG.i BFB Injection Time: 10:00

Analysis Batch No.: 118357

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.8	
75	30.0 - 66.0% of mass 95	47.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	69.5	
175	4.0 - 9.0 % of mass 174	4.9	(7.0) 1
176	93.0 - 101.0% of mass 174	68.2	(98.0) 1
177	5.0 - 9.0% of mass 176	4.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118357/3	200-25826-003.D	07/10/2017	11:49
	LCS 200-118357/4	200-25826-004.D	07/10/2017	12:40
	MB 200-118357/5	200-25826-005.D	07/10/2017	13:30
5131	200-39208-1	200-25826-012.D	07/10/2017	22:53

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab File ID: 200-25547-001.D BFB Injection Date: 06/20/2017

Instrument ID: CHG.i BFB Injection Time: 15:41

Analysis Batch No.: 117742

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	17.0	
75	30.0 - 66.0% of mass 95	44.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	75.2	
175	4.0 - 9.0 % of mass 174	5.3	(7.0) 1
176	93.0 - 101.0% of mass 174	74.4	(98.9) 1
177	5.0 - 9.0% of mass 176	4.9	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117742/4	200-25547-004.D	06/20/2017	18:11
	IC 200-117742/5	200-25547-005.D	06/20/2017	19:01
	IC 200-117742/6	200-25547-006.D	06/20/2017	19:52
	IC 200-117742/7	200-25547-007.D	06/20/2017	20:43
	ICIS 200-117742/8	200-25547-008.D	06/20/2017	21:33
	IC 200-117742/9	200-25547-009.D	06/20/2017	22:24
	IC 200-117742/10	200-25547-010.D	06/20/2017	23:14
	IC 200-117742/11	200-25547-011.D	06/21/2017	00:04
	ICV 200-117742/14	200-25547-014.D	06/21/2017	02:35

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab File ID: 200-25826-001.D BFB Injection Date: 07/10/2017

Instrument ID: CHG.i BFB Injection Time: 10:00

Analysis Batch No.: 118357

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.8	
75	30.0 - 66.0% of mass 95	47.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4) 1
174	50.0 - 120.0% of mass 95	69.5	
175	4.0 - 9.0 % of mass 174	4.9	(7.0) 1
176	93.0 - 101.0% of mass 174	68.2	(98.0) 1
177	5.0 - 9.0% of mass 176	4.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118357/3	200-25826-003.D	07/10/2017	11:49
	LCS 200-118357/4	200-25826-004.D	07/10/2017	12:40
	MB 200-118357/5	200-25826-005.D	07/10/2017	13:30
2521	200-39219-1	200-25826-014.D	07/11/2017	00:34

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab File ID: 25406-01.D BFB Injection Date: 06/08/2017

Instrument ID: CHB.i BFB Injection Time: 15:13

Analysis Batch No.: 117412

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.2	
75	30.0 - 66.0% of mass 95	39.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	99.6	
175	4.0 - 9.0 % of mass 174	7.0	(7.0) 1
176	93.0 - 101.0% of mass 174	97.5	(97.9) 1
177	5.0 - 9.0% of mass 176	6.4	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-117412/3	25406-03.D	06/08/2017	16:56
	IC 200-117412/4	25406-04.D	06/08/2017	17:49
	IC 200-117412/5	25406-05.D	06/08/2017	18:41
	IC 200-117412/6	25406-06.D	06/08/2017	19:34
	ICIS 200-117412/7	25406-07.D	06/08/2017	20:27
	IC 200-117412/8	25406-08.D	06/08/2017	21:20
	IC 200-117412/9	25406-09.D	06/08/2017	22:13
	IC 200-117412/17	25406-17.D	06/09/2017	10:03
	ICV 200-117412/19	25406-19.D	06/09/2017	12:24

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab File ID: 25870-01.D BFB Injection Date: 07/12/2017

Instrument ID: CHB.i BFB Injection Time: 09:40

Analysis Batch No.: 118448

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.3	
75	30.0 - 66.0% of mass 95	40.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.5	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	94.4	
175	4.0 - 9.0 % of mass 174	6.6	(7.0) 1
176	93.0 - 101.0% of mass 174	92.4	(97.9) 1
177	5.0 - 9.0% of mass 176	6.2	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-118448/2	25870-02.D	07/12/2017	10:30
	LCS 200-118448/3	25870-03.D	07/12/2017	11:23
	MB 200-118448/4	25870-04.D	07/12/2017	12:16
4148	200-39253-12	25870-17.D	07/12/2017	23:54

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Sample No.: ICIS 200-117699/7 Date Analyzed: 06/19/2017 18:11

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25526-07.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		204313	12.63	1027163	14.34	989484	19.83
UPPER LIMIT		286038	12.96	1438028	14.67	1385278	20.16
LOWER LIMIT		122588	12.30	616298	14.01	593690	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117699/13		273297	12.64	1348834	14.34	1232220	19.84

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Sample No.: CCVIS 200-118269/2 Date Analyzed: 07/06/2017 10:56

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25782-02.d Heated Purge: (Y/N) N

Calibration ID: 37394

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		269086	12.64	1291870	14.35	1193201	19.83
UPPER LIMIT		376720	12.97	1808618	14.68	1670481	20.16
LOWER LIMIT		161452	12.31	775122	14.02	715921	19.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118269/3		288330	12.63	1394723	14.34	1267023	19.83
MB 200-118269/4		256892	12.63	1289549	14.34	1099336	19.83
200-39188-1	5148	267411	12.63	1322215	14.34	1150073	19.84

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Sample No.: ICIS 200-117742/8 Date Analyzed: 06/20/2017 21:33

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-25547-008.D Heated Purge: (Y/N) N

Calibration ID: 37395

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		505730	9.53	2206442	11.43	2097673	17.39
UPPER LIMIT		708022	9.86	3089019	11.76	2936742	17.72
LOWER LIMIT		303438	9.20	1323865	11.10	1258604	17.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117742/14		522402	9.51	2342689	11.42	2278126	17.39

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Sample No.: CCVIS 200-118357/3 Date Analyzed: 07/10/2017 11:49

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-25826-003.D Heated Purge: (Y/N) N

Calibration ID: 37395

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		443256	9.50	1949248	11.41	1927575	17.37
UPPER LIMIT		620558	9.83	2728947	11.74	2698605	17.70
LOWER LIMIT		265954	9.17	1169549	11.08	1156545	17.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118357/4		427152	9.50	2226072	11.41	2054866	17.37
MB 200-118357/5		461989	9.49	2413927	11.40	2152268	17.37
200-39208-1	5131	413775	9.49	1978794	11.40	1739004	17.37

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Sample No.: ICIS 200-117742/8 Date Analyzed: 06/20/2017 21:33

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-25547-008.D Heated Purge: (Y/N) N

Calibration ID: 37395

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		505730	9.53	2206442	11.43	2097673	17.39
UPPER LIMIT		708022	9.86	3089019	11.76	2936742	17.72
LOWER LIMIT		303438	9.20	1323865	11.10	1258604	17.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117742/14		522402	9.51	2342689	11.42	2278126	17.39

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Sample No.: CCVIS 200-118357/3 Date Analyzed: 07/10/2017 11:49

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 200-25826-003.D Heated Purge: (Y/N) N

Calibration ID: 37395

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		443256	9.50	1949248	11.41	1927575	17.37
UPPER LIMIT		620558	9.83	2728947	11.74	2698605	17.70
LOWER LIMIT		265954	9.17	1169549	11.08	1156545	17.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118357/4		427152	9.50	2226072	11.41	2054866	17.37
MB 200-118357/5		461989	9.49	2413927	11.40	2152268	17.37
200-39219-1	2521	422098	9.49	2070009	11.40	1809292	17.37

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Sample No.: ICIS 200-117412/7 Date Analyzed: 06/08/2017 20:27

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25406-07.D Heated Purge: (Y/N) N

Calibration ID: 37388

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		266084	9.72	1292169	11.12	1160346	15.23
UPPER LIMIT		372518	10.05	1809037	11.45	1624484	15.56
LOWER LIMIT		159650	9.39	775301	10.79	696208	14.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-117412/19		309106	9.72	1514922	11.13	1348144	15.23

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Sample No.: CCVIS 200-118448/2 Date Analyzed: 07/12/2017 10:30

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm)

Lab File ID (Standard): 25870-02.D Heated Purge: (Y/N) N

Calibration ID: 37388

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		336976	9.72	1659654	11.13	1527323	15.23
UPPER LIMIT		471766	10.05	2323516	11.46	2138252	15.56
LOWER LIMIT		202186	9.39	995792	10.80	916394	14.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-118448/3		356051	9.73	1767102	11.13	1574302	15.23
MB 200-118448/4		342440	9.72	1736136	11.12	1435453	15.23
200-39253-12	4148	314105	9.72	1591670	11.12	1323822	15.23

BCM = Bromochloromethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO-15

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Client Sample ID: 5148 Lab Sample ID: 200-39188-1

Matrix: Air Lab File ID: 25782-11.d

Analysis Method: TO-15 Date Collected: 07/03/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/06/2017 20:44

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118269 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Client Sample ID: 5148 Lab Sample ID: 200-39188-1

Matrix: Air Lab File ID: 25782-11.d

Analysis Method: TO-15 Date Collected: 07/03/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/06/2017 20:44

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118269 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Client Sample ID: 5148 Lab Sample ID: 200-39188-1

Matrix: Air Lab File ID: 25782-11.d

Analysis Method: TO-15 Date Collected: 07/03/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/06/2017 20:44

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118269 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\25782-11.d
Lims ID: 200-39188-A-1
Client ID: 5148
Sample Type: Client
Inject. Date: 06-Jul-2017 20:44:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025782-011
Operator ID: ert Instrument ID: CHW.i

Method: \\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\TO15_MasterMethod_(v1).m
Limit Group: AI_TO15_ICAL
Last Update: 07-Jul-2017 15:08:23 Calib Date: 19-Jun-2017 20:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHW.i\20170619-25526.b\25526-10.d

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: tobere Date: 07-Jul-2017 10:44:01

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41	5.265	5.254	0.011	86	4441	0.1818	
	2 Dichlorodifluoromethane	85		5.383				ND	
	3 Chlorodifluoromethane	51		5.468				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		5.800				ND	
	5 Chloromethane	50		5.987				ND	
	6 Butane	43		6.265				ND	
	7 Vinyl chloride	62		6.319				ND	
	8 Butadiene	54		6.420				ND	
	10 Bromomethane	94		7.218				ND	
	11 Chloroethane	64		7.469				ND	
	13 Vinyl bromide	106		7.876				ND	
	14 Trichlorofluoromethane	101		7.966				ND	
	17 Ethanol	45		8.469				ND	
	20 1,1,2-Trichloro-1,2,2-trif	101		8.972				ND	
	21 1,1-Dichloroethene	96		9.036				ND	
	22 Acetone	43	9.234	9.234	0.000	97	28099	0.4103	
	23 Carbon disulfide	76	9.422	9.432	-0.010	96	3837	0.0310	
	24 Isopropyl alcohol	45	9.432	9.432	0.000	98	13000	0.1665	
	25 3-Chloro-1-propene	41		9.737				ND	
	27 Methylene Chloride	49		9.999				ND	
	28 2-Methyl-2-propanol	59		10.122				ND	
S	30 1,2-Dichloroethene, Total	61		10.200				ND	
	29 Methyl tert-butyl ether	73		10.336				ND	
	31 trans-1,2-Dichloroethene	61		10.395				ND	
	33 Hexane	57		10.727				ND	
	34 1,1-Dichloroethane	63		11.203				ND	
	35 Vinyl acetate	43		11.224				ND	
	37 cis-1,2-Dichloroethene	96		12.209				ND	
	38 2-Butanone (MEK)	72		12.225				ND	
	39 Ethyl acetate	88		12.230				ND	
	41 Tetrahydrofuran	42		12.637				ND	
*	40 Chlorobromomethane	128	12.632	12.637	-0.005	91	267411	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83		12.728				ND	
	43 Cyclohexane	84		12.995				ND	
	44 1,1,1-Trichloroethane	97		13.011				ND	
	45 Carbon tetrachloride	117		13.241				ND	
	46 Isooctane	57		13.589				ND	
	47 Benzene	78	13.648	13.653	-0.005	97	8335	0.0529	M
	48 1,2-Dichloroethane	62		13.803				ND	
	49 n-Heptane	43		13.905				ND	
*	50 1,4-Difluorobenzene	114	14.343	14.349	-0.006	95	1322215	10.0	
	53 Trichloroethene	95		14.777				ND	
	54 1,2-Dichloropropane	63		15.274				ND	
	55 Methyl methacrylate	69		15.349				ND	
	56 1,4-Dioxane	88		15.435				ND	
	57 Dibromomethane	174		15.504				ND	
	58 Dichlorobromomethane	83		15.734				ND	
	60 cis-1,3-Dichloropropene	75		16.563				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.788				ND	
	65 Toluene	92	17.104	17.109	-0.005	95	1569	0.0148	M
	66 trans-1,3-Dichloropropene	75		17.628				ND	
	67 1,1,2-Trichloroethane	83		17.986				ND	
	68 Tetrachloroethene	166		18.110				ND	
	69 2-Hexanone	43		18.372				ND	
	71 Chlorodibromomethane	129		18.719				ND	
	72 Ethylene Dibromide	107		18.992				ND	
*	74 Chlorobenzene-d5	117	19.838	19.832	0.006	88	1150073	10.0	
	75 Chlorobenzene	112		19.891				ND	
	76 Ethylbenzene	91		20.019				ND	
S	73 Xylenes, Total	106		20.100				ND	
	78 m-Xylene & p-Xylene	106		20.249				ND	
	79 o-Xylene	106		20.998				ND	
	80 Styrene	104		21.041				ND	
	81 Bromoform	173		21.426				ND	
	82 Isopropylbenzene	105		21.587				ND	
	84 1,1,2,2-Tetrachloroethane	83		22.175				ND	
	85 N-Propylbenzene	91		22.245				ND	
	88 4-Ethyltoluene	105		22.421				ND	
	89 2-Chlorotoluene	91		22.443				ND	
	90 1,3,5-Trimethylbenzene	105		22.518				ND	
	92 tert-Butylbenzene	119		22.988				ND	
	93 1,2,4-Trimethylbenzene	105		23.079				ND	
	94 sec-Butylbenzene	105		23.304				ND	
	95 4-Isopropyltoluene	119		23.502				ND	
	96 1,3-Dichlorobenzene	146		23.556				ND	
	97 1,4-Dichlorobenzene	146		23.695				ND	
	98 Benzyl chloride	91		23.903				ND	
	100 n-Butylbenzene	91		24.112				ND	
	101 1,2-Dichlorobenzene	146		24.272				ND	
	103 1,2,4-Trichlorobenzene	180		27.017				ND	
	104 Hexachlorobutadiene	225		27.215				ND	
	105 Naphthalene	128		27.568				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ATTO15WISs_00004	Amount Added: 20.00	Units: mL	Run Reagent

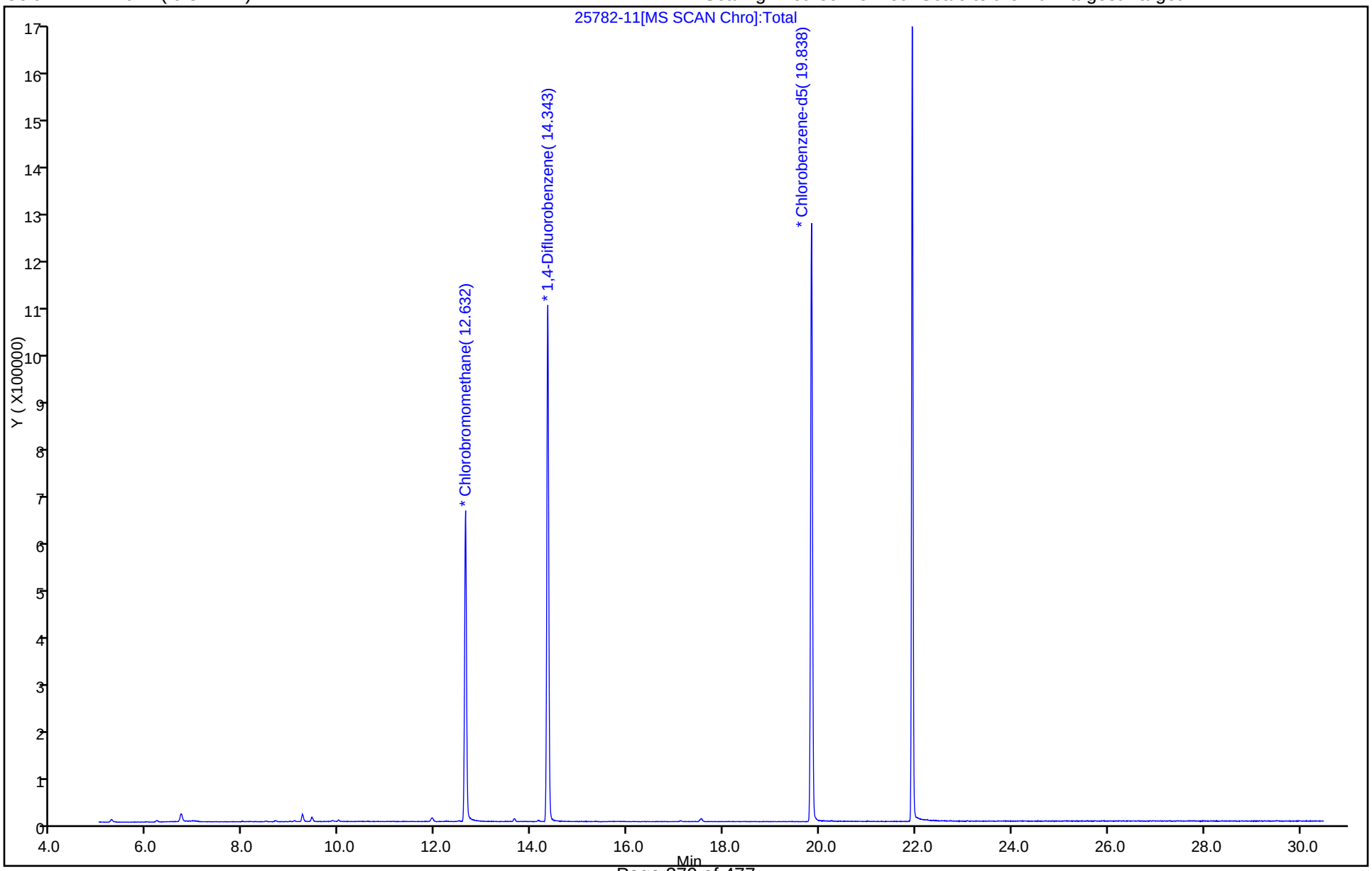
Report Date: 07-Jul-2017 15:09:13 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\25782-11.d

Injection Date:	06-Jul-2017 20:44:30	Instrument ID:	CHW.i	Operator ID:	ert
Lims ID:	200-39188-A-1	Lab Sample ID:	200-39188-1	Worklist Smp#:	11
Client ID:	5148				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	10
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Burlington

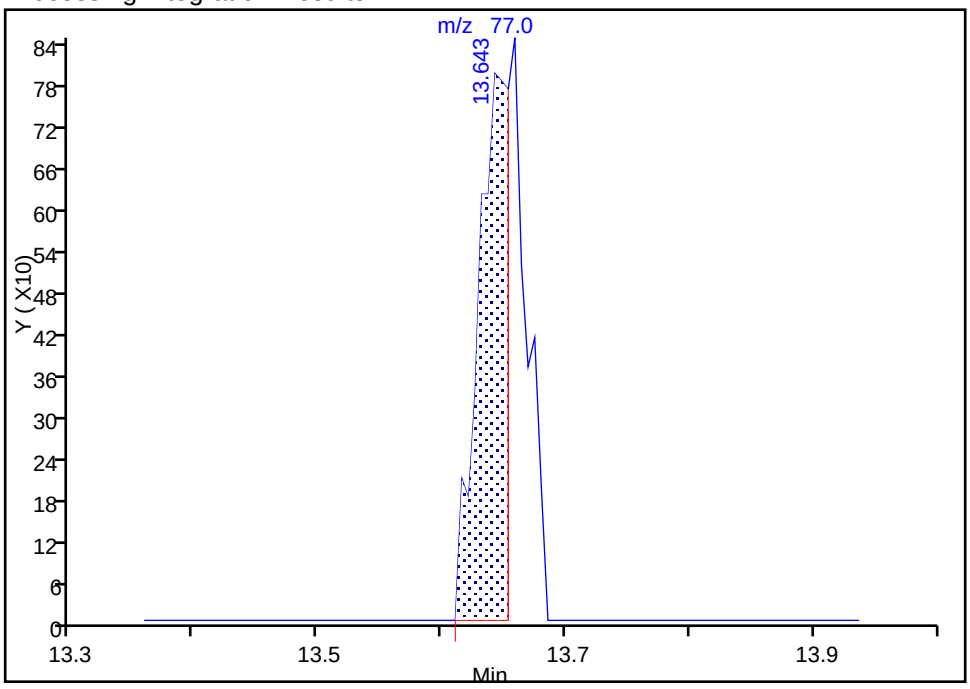
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\25782-11.d				
Injection Date:	06-Jul-2017 20:44:30	Instrument ID:	CHW.i		
Lims ID:	200-39188-A-1	Lab Sample ID:	200-39188-1		
Client ID:	5148				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Signal: 2

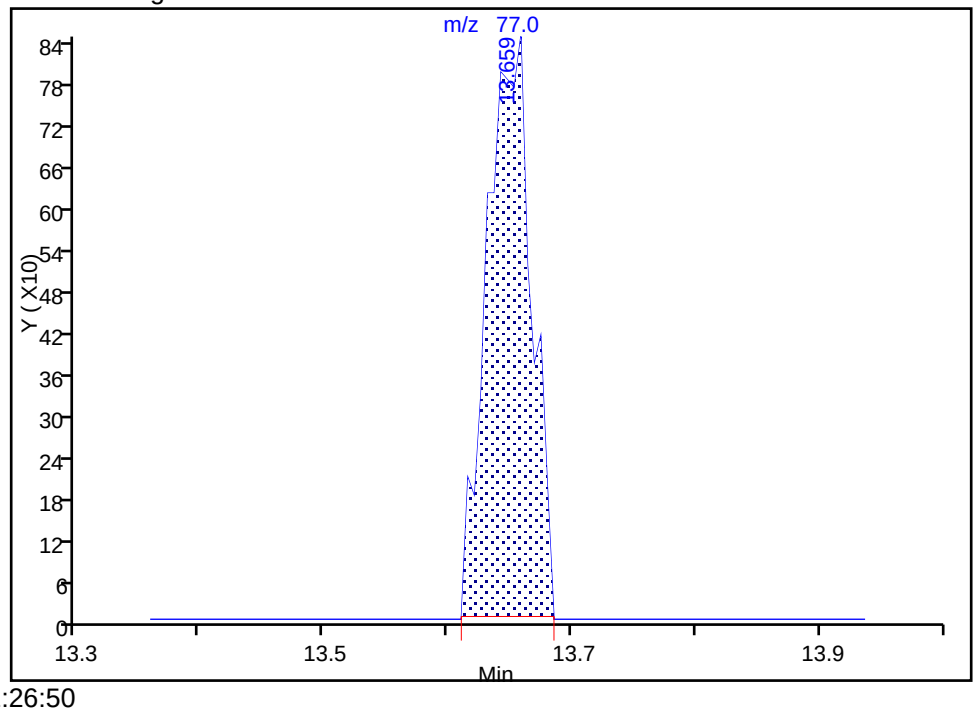
Processing Integration Results

RT: 13.64
Area: 1378
Amount: 0.052945
Amount Units: ppb v/v



Manual Integration Results

RT: 13.66
Area: 2107
Amount: 0.052945
Amount Units: ppb v/v



Reviewer: tobere, 07-Jul-2017 11:26:50

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Burlington

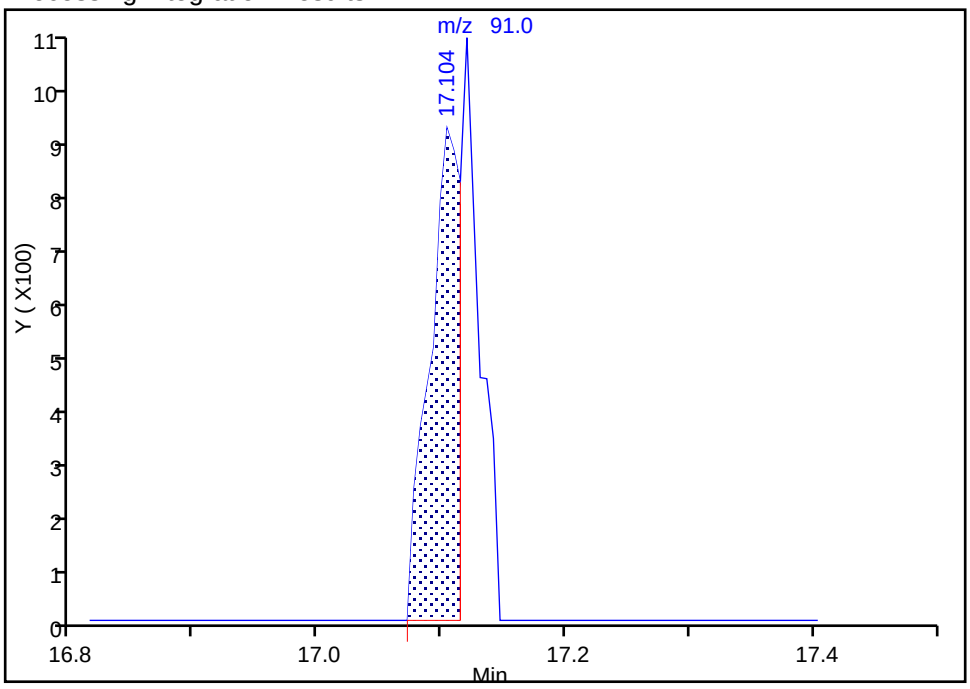
Data File:	\\ChromNA\Burlington\ChromData\CHW.i\20170706-25782.b\25782-11.d				
Injection Date:	06-Jul-2017 20:44:30	Instrument ID:	CHW.i		
Lims ID:	200-39188-A-1	Lab Sample ID:	200-39188-1		
Client ID:	5148				
Operator ID:	ert	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 2

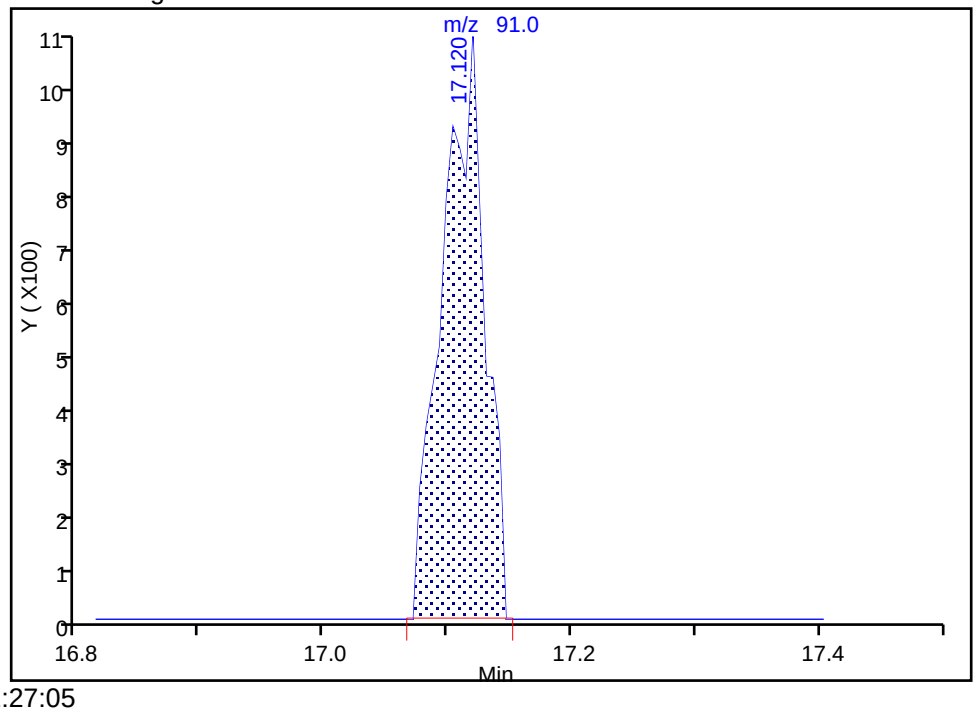
Processing Integration Results

RT: 17.10
Area: 1484
Amount: 0.014812
Amount Units: ppb v/v



Manual Integration Results

RT: 17.12
Area: 2402
Amount: 0.014812
Amount Units: ppb v/v



Reviewer: tobere, 07-Jul-2017 11:27:05

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39208-1

SDG No.:

Client Sample ID: 5131 | Lab Sample ID: 200-39208-1

Matrix: Air | Lab File ID: 200-25826-012.D

Analysis Method: TO-15 | Date Collected: 07/06/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/10/2017 22:53

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118357 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U *	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U *	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U *	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39208-1

SDG No.:

Client Sample ID: 5131 | Lab Sample ID: 200-39208-1

Matrix: Air | Lab File ID: 200-25826-012.D

Analysis Method: TO-15 | Date Collected: 07/06/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/10/2017 22:53

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118357 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Client Sample ID: 5131 Lab Sample ID: 200-39208-1

Matrix: Air Lab File ID: 200-25826-012.D

Analysis Method: TO-15 Date Collected: 07/06/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/10/2017 22:53

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-012.D
Lims ID: 200-39208-A-1
Client ID: 5131
Sample Type: Client
Inject. Date: 10-Jul-2017 22:53:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025826-012
Misc. Info.: 39208-01
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 14:41:54 Calib Date: 21-Jun-2017 00:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170620-25547.b\200-25547-011.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 11-Jul-2017 14:41:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.122				ND	
2 Dichlorodifluoromethane	85		3.181				ND	
3 Chlorodifluoromethane	51		3.219				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.390				ND	
5 Chloromethane	50		3.518				ND	
6 Butane	43		3.668				ND	
7 Vinyl chloride	62		3.711				ND	
8 Butadiene	54		3.770				ND	
10 Bromomethane	94		4.331				ND	
11 Chloroethane	64		4.513				ND	
13 Vinyl bromide	106		4.834				ND	
14 Trichlorofluoromethane	101		4.904				ND	
17 Ethanol	45		5.375				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		5.792				ND	
21 1,1-Dichloroethene	96		5.856				ND	
22 Acetone	43		6.081				ND	
23 Carbon disulfide	76		6.225				ND	
24 Isopropyl alcohol	45		6.306				ND	
25 3-Chloro-1-propene	41		6.546				ND	
27 Methylene Chloride	49	6.808	6.808	0.000	88	3104	0.0876	
28 2-Methyl-2-propanol	59		7.006				ND	
29 Methyl tert-butyl ether	73		7.178				ND	
31 trans-1,2-Dichloroethene	61		7.199				ND	
33 Hexane	57		7.536				ND	
34 1,1-Dichloroethane	63		8.017				ND	
35 Vinyl acetate	43		8.076				ND	
37 cis-1,2-Dichloroethene	96		9.050				ND	
38 2-Butanone (MEK)	72		9.125				ND	
39 Ethyl acetate	88		9.141				ND	
* 40 Chlorobromomethane	128	9.494	9.499	-0.005	81	413775	10.0	
41 Tetrahydrofuran	42		9.526				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.611	9.612	-0.001	96	18486	0.1558	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.842				ND	
	44 1,1,1-Trichloroethane	97		9.879				ND	
	45 Carbon tetrachloride	117		10.115				ND	
	46 Isooctane	57		10.521				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.404	11.409	-0.005	95	1978794	10.0	
	53 Trichloroethene	95		11.864				ND	
	54 1,2-Dichloropropane	63		12.431				ND	
	55 Methyl methacrylate	69		12.597				ND	
	56 1,4-Dioxane	88		12.672				ND	
	57 Dibromomethane	174		12.682				ND	
	58 Dichlorobromomethane	83		12.961				ND	
	60 cis-1,3-Dichloropropene	75		13.886				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.202				ND	
	65 Toluene	92		14.464				ND	
	66 trans-1,3-Dichloropropene	75		15.068				ND	
	67 1,1,2-Trichloroethane	83		15.443				ND	
	68 Tetrachloroethene	166		15.523				ND	
	69 2-Hexanone	43		15.919				ND	
	71 Chlorodibromomethane	129		16.202				ND	
	72 Ethylene Dibromide	107		16.475				ND	
*	74 Chlorobenzene-d5	117	17.369	17.374	-0.005	88	1739004	10.0	
	75 Chlorobenzene	112		17.433				ND	
	76 Ethylbenzene	91		17.588				ND	
	78 m-Xylene & p-Xylene	106		17.845				ND	
	79 o-Xylene	106		18.701				ND	
	80 Styrene	104		18.760				ND	
	81 Bromoform	173		19.204				ND	
	82 Isopropylbenzene	105		19.423				ND	
S	73 Xylenes, Total	106		19.600				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.124				ND	
	85 N-Propylbenzene	91		20.183				ND	
	88 4-Ethyltoluene	105		20.381				ND	
	89 2-Chlorotoluene	91		20.386				ND	
	90 1,3,5-Trimethylbenzene	105		20.493				ND	
	92 tert-Butylbenzene	119		20.996				ND	
	93 1,2,4-Trimethylbenzene	105		21.097				ND	
	94 sec-Butylbenzene	105		21.333				ND	
	95 4-Isopropyltoluene	119		21.547				ND	
	96 1,3-Dichlorobenzene	146		21.563				ND	
	97 1,4-Dichlorobenzene	146		21.702				ND	
	98 Benzyl chloride	91		21.916				ND	
	100 n-Butylbenzene	91		22.119				ND	
	101 1,2-Dichlorobenzene	146		22.237				ND	
	103 1,2,4-Trichlorobenzene	180		24.709				ND	
	104 Hexachlorobutadiene	225		24.890				ND	
	105 Naphthalene	128		25.190				ND	

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

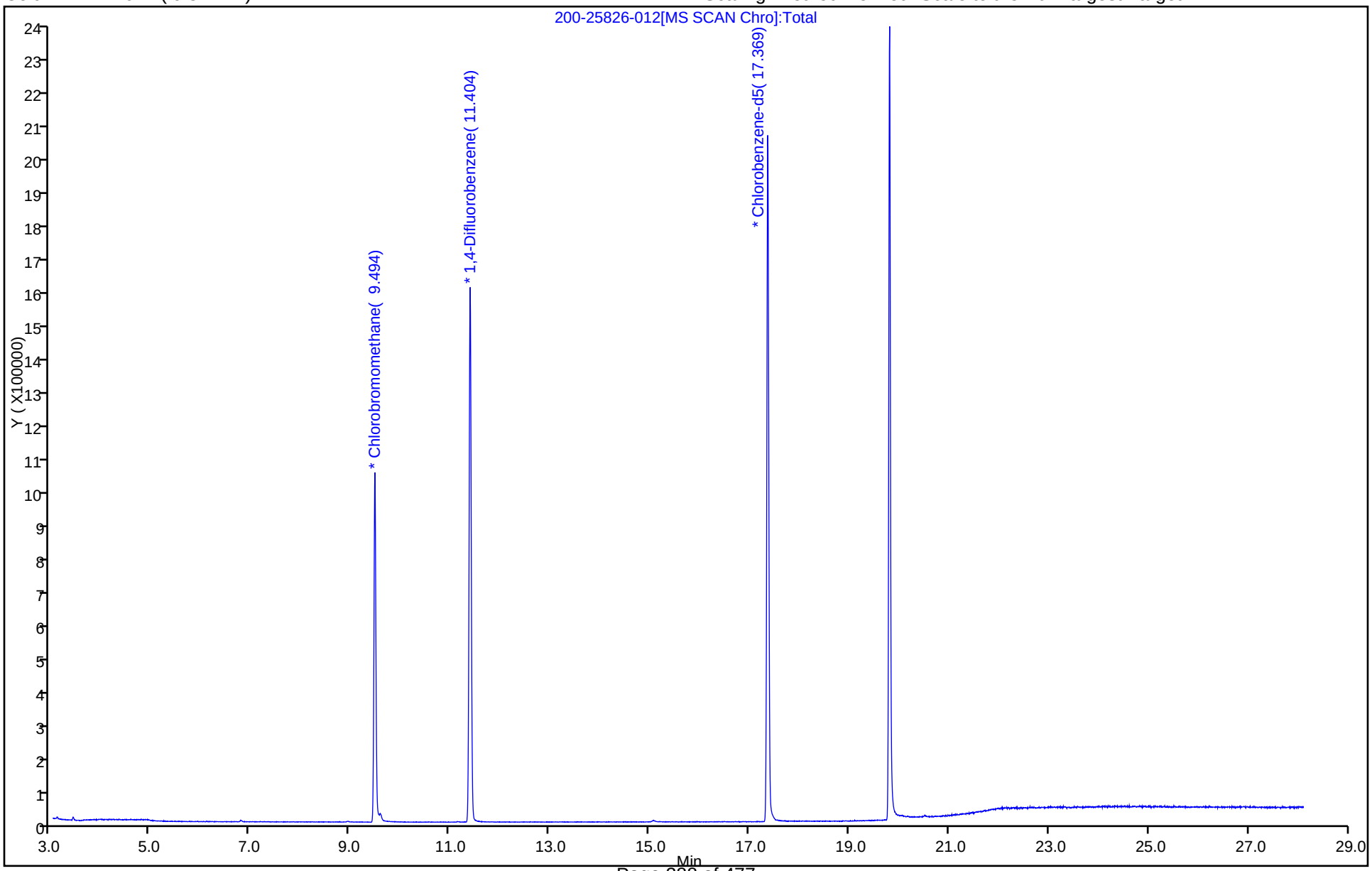
Report Date: 11-Jul-2017 14:41:55 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-012.D

Injection Date:	10-Jul-2017 22:53:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39208-A-1	Lab Sample ID:	200-39208-1	Worklist Smp#:	12
Client ID:	5131				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	11
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39219-1

SDG No.:

Client Sample ID: 2521 | Lab Sample ID: 200-39219-1

Matrix: Air | Lab File ID: 200-25826-014.D

Analysis Method: TO-15 | Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/11/2017 00:34

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118357 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U *	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U *	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U *	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Client Sample ID: 2521 Lab Sample ID: 200-39219-1

Matrix: Air Lab File ID: 200-25826-014.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 00:34

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Client Sample ID: 2521 Lab Sample ID: 200-39219-1

Matrix: Air Lab File ID: 200-25826-014.D

Analysis Method: TO-15 Date Collected: 07/07/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/11/2017 00:34

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118357 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-014.D
Lims ID: 200-39219-A-1
Client ID: 2521
Sample Type: Client
Inject. Date: 11-Jul-2017 00:34:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025826-014
Misc. Info.: 39219-01
Operator ID: pad Instrument ID: CHG.i

Method: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\TO15_MasterMethod_(v1)_G.m
Limit Group: AI_TO15_ICAL
Last Update: 11-Jul-2017 14:45:52 Calib Date: 21-Jun-2017 00:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHG.i\20170620-25547.b\200-25547-011.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: puangmaleek Date: 11-Jul-2017 14:45:52

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		3.122				ND	
2	Dichlorodifluoromethane	85		3.181				ND	
3	Chlorodifluoromethane	51		3.219				ND	
4	1,2-Dichloro-1,1,2,2-tetra	85		3.390				ND	
5	Chloromethane	50		3.518				ND	
6	Butane	43		3.668				ND	
7	Vinyl chloride	62		3.711				ND	
8	Butadiene	54		3.770				ND	
10	Bromomethane	94		4.331				ND	
11	Chloroethane	64		4.513				ND	
13	Vinyl bromide	106		4.834				ND	
14	Trichlorofluoromethane	101		4.904				ND	
17	Ethanol	45		5.375				ND	
20	1,1,2-Trichloro-1,2,2-trif	101		5.792				ND	
21	1,1-Dichloroethene	96		5.856				ND	
22	Acetone	43		6.081				ND	
23	Carbon disulfide	76		6.225				ND	
24	Isopropyl alcohol	45		6.306				ND	
25	3-Chloro-1-propene	41		6.546				ND	
27	Methylene Chloride	49	6.808	6.808	0.000	90	3441	0.0952	
28	2-Methyl-2-propanol	59		7.006				ND	
29	Methyl tert-butyl ether	73		7.178				ND	
31	trans-1,2-Dichloroethene	61		7.199				ND	
33	Hexane	57		7.536				ND	
34	1,1-Dichloroethane	63		8.017				ND	
35	Vinyl acetate	43		8.076				ND	
37	cis-1,2-Dichloroethene	96		9.050				ND	
38	2-Butanone (MEK)	72		9.125				ND	
39	Ethyl acetate	88		9.141				ND	
* 40	Chlorobromomethane	128	9.494	9.499	-0.005	83	422098	10.0	
41	Tetrahydrofuran	42		9.526				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	42 Chloroform	83	9.606	9.612	-0.006	96	17946	0.1483	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	43 Cyclohexane	84		9.842				ND	
	44 1,1,1-Trichloroethane	97		9.879				ND	
	45 Carbon tetrachloride	117		10.115				ND	
	46 Isooctane	57		10.521				ND	
	47 Benzene	78		10.585				ND	
	48 1,2-Dichloroethane	62		10.773				ND	
	49 n-Heptane	43		10.901				ND	
*	50 1,4-Difluorobenzene	114	11.404	11.409	-0.005	95	2070009	10.0	
	53 Trichloroethene	95		11.864				ND	
	54 1,2-Dichloropropane	63		12.431				ND	
	55 Methyl methacrylate	69		12.597				ND	
	56 1,4-Dioxane	88		12.672				ND	
	57 Dibromomethane	174		12.682				ND	
	58 Dichlorobromomethane	83		12.961				ND	
	60 cis-1,3-Dichloropropene	75		13.886				ND	
	61 4-Methyl-2-pentanone (MIBK	43		14.202				ND	
	65 Toluene	92		14.464				ND	
	66 trans-1,3-Dichloropropene	75		15.068				ND	
	67 1,1,2-Trichloroethane	83		15.443				ND	
	68 Tetrachloroethene	166		15.523				ND	
	69 2-Hexanone	43		15.919				ND	
	71 Chlorodibromomethane	129		16.202				ND	
	72 Ethylene Dibromide	107		16.475				ND	
*	74 Chlorobenzene-d5	117	17.369	17.374	-0.005	89	1809292	10.0	
	75 Chlorobenzene	112		17.433				ND	
	76 Ethylbenzene	91		17.588				ND	
	78 m-Xylene & p-Xylene	106		17.845				ND	
	79 o-Xylene	106		18.701				ND	
	80 Styrene	104		18.760				ND	
	81 Bromoform	173		19.204				ND	
	82 Isopropylbenzene	105		19.423				ND	
S	73 Xylenes, Total	106		19.600				ND	
	84 1,1,2,2-Tetrachloroethane	83		20.124				ND	
	85 N-Propylbenzene	91		20.183				ND	
	88 4-Ethyltoluene	105		20.381				ND	
	89 2-Chlorotoluene	91		20.386				ND	
	90 1,3,5-Trimethylbenzene	105		20.493				ND	
	92 tert-Butylbenzene	119		20.996				ND	
	93 1,2,4-Trimethylbenzene	105		21.097				ND	
	94 sec-Butylbenzene	105		21.333				ND	
	95 4-Isopropyltoluene	119		21.547				ND	
	96 1,3-Dichlorobenzene	146		21.563				ND	
	97 1,4-Dichlorobenzene	146		21.702				ND	
	98 Benzyl chloride	91		21.916				ND	
	100 n-Butylbenzene	91		22.119				ND	
	101 1,2-Dichlorobenzene	146		22.237				ND	
	103 1,2,4-Trichlorobenzene	180		24.709				ND	
	104 Hexachlorobutadiene	225		24.890				ND	
	105 Naphthalene	128		25.190				ND	

Reagents:

ATTO15GIS_00014 Amount Added: 20.00 Units: mL Run Reagent

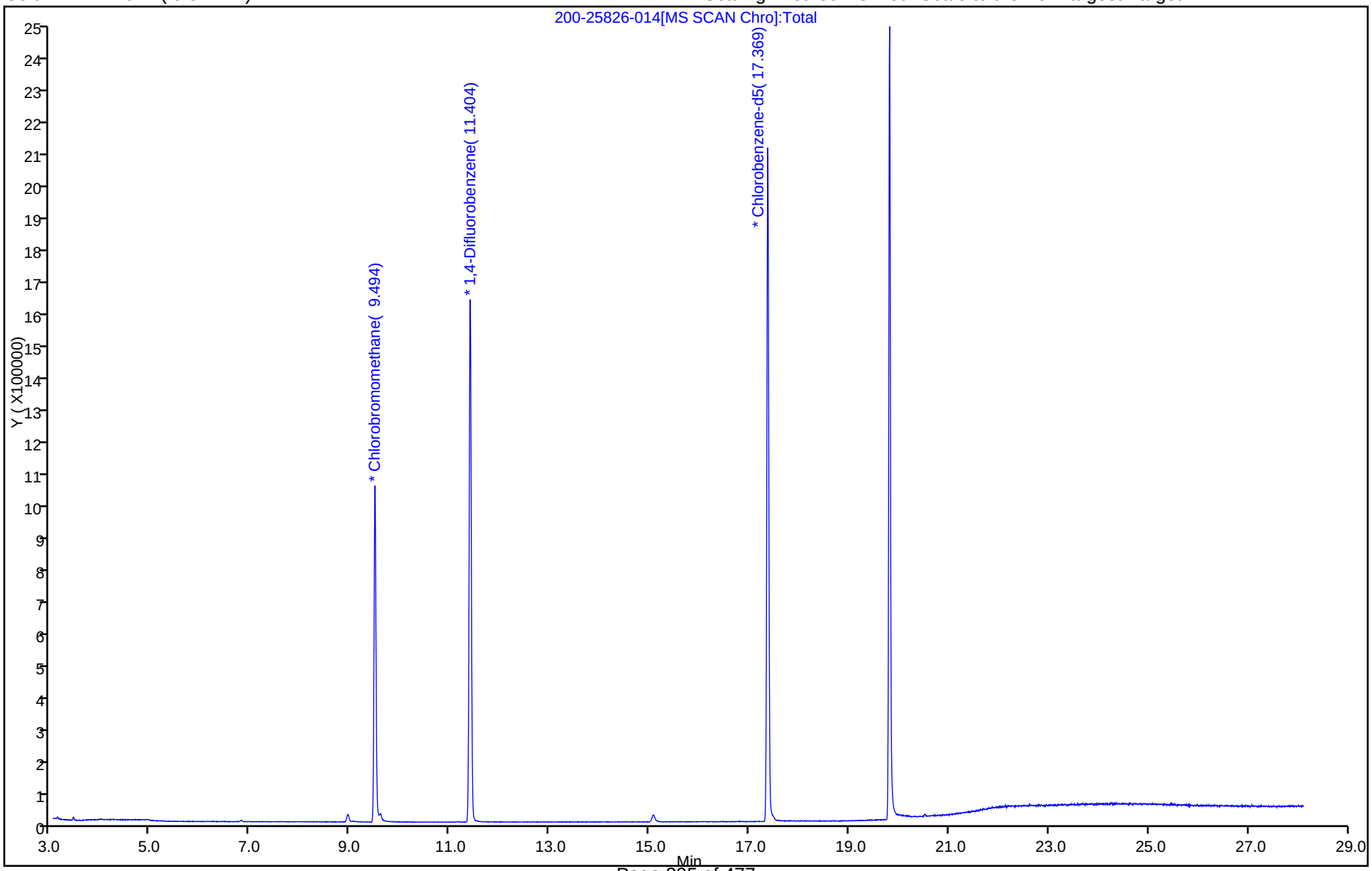
Report Date: 11-Jul-2017 14:45:53 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHG.i\20170710-25826.b\200-25826-014.D

Injection Date:	11-Jul-2017 00:34:30	Instrument ID:	CHG.i	Operator ID:	pad
Lims ID:	200-39219-A-1	Lab Sample ID:	200-39219-1	Worklist Smp#:	14
Client ID:	2521				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	13
Method:	TO15_MasterMethod_(v1)_G	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39253-1

SDG No.:

Client Sample ID: 4148 | Lab Sample ID: 200-39253-12

Matrix: Air | Lab File ID: 25870-17.D

Analysis Method: TO-15 | Date Collected: 07/10/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/12/2017 23:54

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118448 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-39253-1

SDG No.:

Client Sample ID: 4148 | Lab Sample ID: 200-39253-12

Matrix: Air | Lab File ID: 25870-17.D

Analysis Method: TO-15 | Date Collected: 07/10/2017 00:00

Sample wt/vol: 1000(mL) | Date Analyzed: 07/12/2017 23:54

Soil Aliquot Vol: | Dilution Factor: 0.2

Soil Extract Vol.: | GC Column: RTX-624 ID: 0.32(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 118448 | Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Client Sample ID: 4148 Lab Sample ID: 200-39253-12

Matrix: Air Lab File ID: 25870-17.D

Analysis Method: TO-15 Date Collected: 07/10/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 07/12/2017 23:54

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 118448 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\25870-17.D
Lims ID: 200-39253-A-12
Client ID: 4148
Sample Type: Client
Inject. Date: 12-Jul-2017 23:54:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0025870-017
Misc. Info.: 39253-12
Operator ID: pad Instrument ID: CHB.i

Method: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\TO15_LLNJ_TO3.m
Limit Group: AI_TO15_ICAL
Last Update: 14-Jul-2017 09:27:11 Calib Date: 09-Jun-2017 10:03:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal/External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20170608-25406.b\25406-17.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: puangmaleek Date: 13-Jul-2017 12:28:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.140				ND	
2 Dichlorodifluoromethane	85		3.199				ND	
3 Chlorodifluoromethane	51		3.231				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.417				ND	
5 Chloromethane	50		3.540				ND	
6 Butane	43		3.722				ND	
7 Vinyl chloride	62		3.754				ND	
8 Butadiene	54		3.823				ND	
10 Bromomethane	94		4.490				ND	
11 Chloroethane	64		4.730				ND	
13 Vinyl bromide	106		5.136				ND	
14 Trichlorofluoromethane	101		5.237				ND	
16 Ethanol	45		5.718				ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.267				ND	
20 1,1-Dichloroethene	96		6.337				ND	
21 Acetone	43		6.492				ND	
22 Isopropyl alcohol	45		6.732				ND	
23 Carbon disulfide	76		6.769				ND	
24 3-Chloro-1-propene	41		7.041				ND	
27 Methylene Chloride	49	7.292	7.297	-0.005	51	4140	0.1250	7
28 2-Methyl-2-propanol	59		7.436				ND	
29 Methyl tert-butyl ether	73		7.650				ND	
30 trans-1,2-Dichloroethene	61		7.708				ND	
32 Hexane	57		8.039				ND	
33 1,1-Dichloroethane	63		8.450				ND	
34 Vinyl acetate	43		8.461				ND	
36 2-Butanone (MEK)	72		9.347				ND	
37 cis-1,2-Dichloroethene	96		9.352				ND	
35 Ethyl acetate	88		9.363				ND	
* 39 Chlorobromomethane	128	9.715	9.720	-0.005	82	314105	10.0	
38 Tetrahydrofuran	42		9.736				ND	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	40 Chloroform	83		9.795				ND	
S	41 1,2-Dichloroethene, Total	61		10.000				ND	
	42 1,1,1-Trichloroethane	97		10.051				ND	
	43 Cyclohexane	84		10.067				ND	
	44 Carbon tetrachloride	117		10.259				ND	
	45 Isooctane	57		10.542				ND	
	46 Benzene	78		10.585				ND	
	47 1,2-Dichloroethane	62		10.686				ND	
	48 n-Heptane	43		10.793				ND	
*	50 1,4-Difluorobenzene	114	11.119	11.129	-0.010	93	1591670	10.0	
	53 Trichloroethene	95		11.498				ND	
	54 1,2-Dichloropropane	63		11.866				ND	
	55 Methyl methacrylate	69		11.903				ND	
	56 1,4-Dioxane	88		11.999				ND	
	57 Dibromomethane	174		12.053				ND	
	58 Dichlorobromomethane	83		12.223				ND	
	60 cis-1,3-Dichloropropene	75		12.848				ND	
	61 4-Methyl-2-pentanone (MIBK	43		13.003				ND	
	64 Toluene	92		13.280				ND	
	66 trans-1,3-Dichloropropene	75		13.643				ND	
	67 1,1,2-Trichloroethane	83		13.915				ND	
	68 Tetrachloroethene	166		14.054				ND	
	69 2-Hexanone	43		14.177				ND	
	70 Chlorodibromomethane	129		14.470				ND	
	71 Ethylene Dibromide	107		14.673				ND	
*	72 Chlorobenzene-d5	117	15.228	15.233	-0.005	83	1323822	10.0	
	73 Chlorobenzene	112		15.271				ND	
	74 Ethylbenzene	91		15.335				ND	
	76 m-Xylene & p-Xylene	106		15.484				ND	
	78 o-Xylene	106		15.997				ND	
S	77 Xylenes, Total	106		16.000				ND	
	79 Styrene	104		16.018				ND	
	80 Bromoform	173		16.311				ND	
	81 Isopropylbenzene	105		16.408				ND	
	83 1,1,2,2-Tetrachloroethane	83		16.813				ND	
	84 N-Propylbenzene	91		16.888				ND	
	87 4-Ethyltoluene	105		17.011				ND	
	88 2-Chlorotoluene	91		17.053				ND	
	89 1,3,5-Trimethylbenzene	105		17.080				ND	
	91 tert-Butylbenzene	119		17.454				ND	
	92 1,2,4-Trimethylbenzene	105		17.523				ND	
	93 sec-Butylbenzene	105		17.710				ND	
	94 4-Isopropyltoluene	119		17.865				ND	
	95 1,3-Dichlorobenzene	146		17.939				ND	
	96 1,4-Dichlorobenzene	146		18.051				ND	
	97 Benzyl chloride	91		18.201				ND	
	99 n-Butylbenzene	91		18.366				ND	
	100 1,2-Dichlorobenzene	146		18.537				ND	
	103 1,2,4-Trichlorobenzene	180		20.901				ND	
	104 Hexachlorobutadiene	225		21.067				ND	
	105 Naphthalene	128		21.382				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

ATTO15BISs_00006	Amount Added:	20.00	Units: mL	Run Reagent

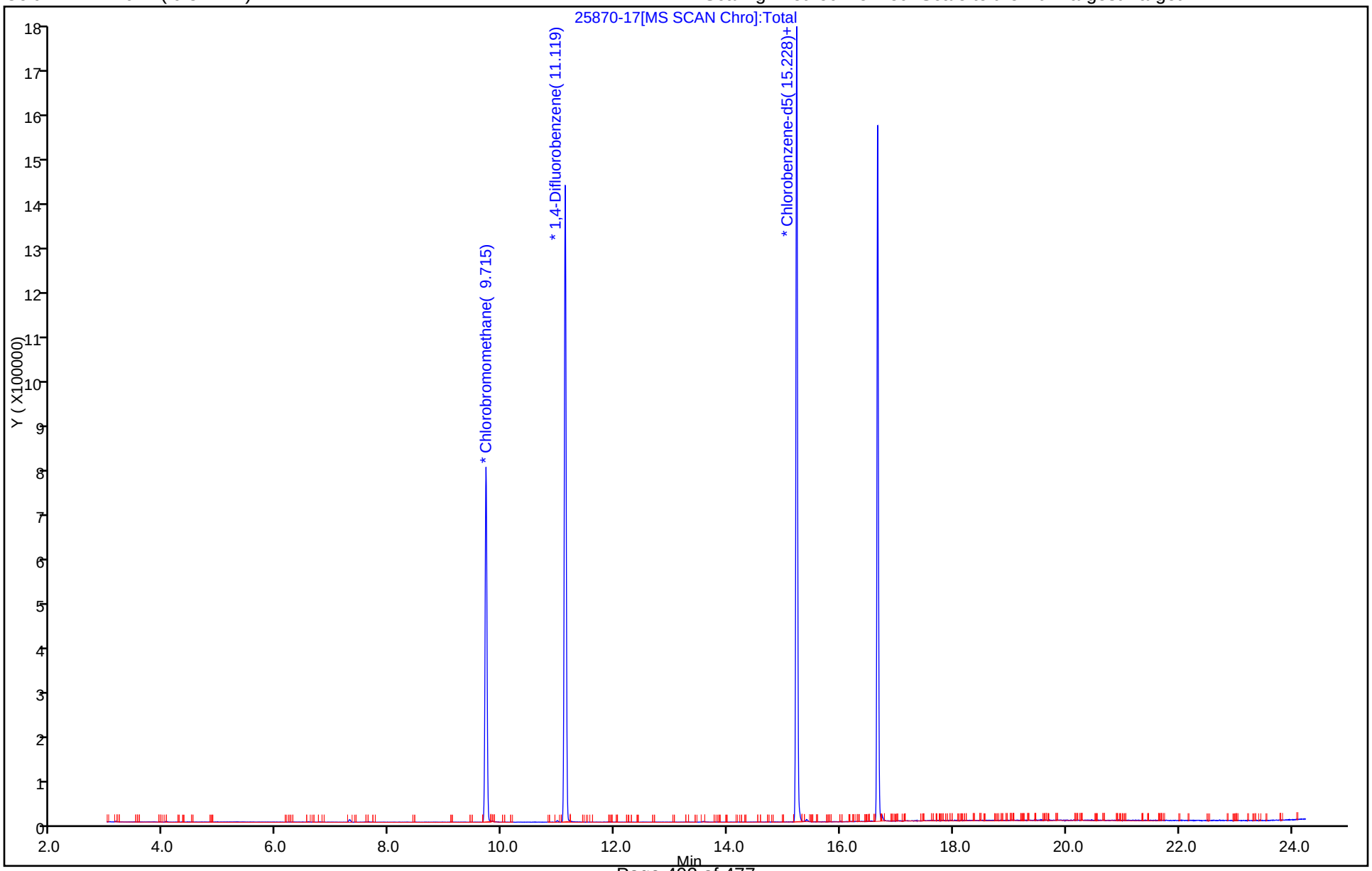
Report Date: 14-Jul-2017 10:03:46 Chrom Revision: 2.2 26-Jun-2017 09:07:56

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170712-25870.b\25870-17.D

Injection Date:	12-Jul-2017 23:54:30	Instrument ID:	CHB.i	Operator ID:	pad
Lims ID:	200-39253-A-12	Lab Sample ID:	200-39253-12	Worklist Smp#:	17
Client ID:	4148				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	17
Method:	TO15_LLNJ_TO3	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117699/3	25526-03.d
Level 2	IC 200-117699/4	25526-04.d
Level 3	IC 200-117699/5	25526-05.d
Level 4	IC 200-117699/6	25526-06.d
Level 5	ICIS 200-117699/7	25526-07.d
Level 6	IC 200-117699/8	25526-08.d
Level 7	IC 200-117699/9	25526-09.d
Level 8	IC 200-117699/10	25526-10.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.9248	+++++ 0.8281	+++++ 0.8262	1.0155	0.9720	Ave		0.9133				9.3		30.0			
Dichlorodifluoromethane	+++++ 3.6998	+++++ 3.3692	4.4638 3.4086	3.8732	3.7752	Ave		3.7650				10.5		30.0			
Freon 22	+++++ 2.0067	+++++ 1.8225	2.5393 1.8140	2.1744	2.0703	Ave		2.0712				13.0		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 3.7863	4.2180 3.4827	4.6289 3.5279	3.9610	3.8545	Ave		3.9227				10.2		30.0			
Chloromethane	+++++ 1.1582	+++++ 1.0506	1.5624 1.0336	1.2839	1.2124	Ave		1.2168				16.0		30.0			
n-Butane	+++++ 2.2994	+++++ 2.0359	2.8872 2.0181	2.4905	2.3869	Ave		2.3530				13.7		30.0			
Vinyl chloride	2.2033 1.7620	2.0170 1.5840	2.0766 1.5594	1.8392	1.7845	Ave		1.8532				12.4		30.0			
1,3-Butadiene	1.6968 1.4229	1.5146 1.2678	1.6882 1.2530	1.4794	1.4697	Ave		1.4740				11.2		30.0			
Bromomethane	+++++ 1.4808	1.6824 1.3840	1.7867 1.4182	1.5236	1.4566	Ave		1.5332				9.6		30.0			
Chloroethane	+++++ 0.8846	+++++ 0.8165	1.0882 0.8214	0.9209	0.8878	Ave		0.9032				11.0		30.0			
Isopentane	+++++ 1.7699	2.1711 1.5904	2.1753 1.5638	1.9010	1.8191	Ave		1.8558				13.3		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.5722	1.5151 1.4896	1.7251 1.5532	1.5738	1.5052	Ave		1.5620				5.1		30.0			
Trichlorofluoromethane	+++++ 3.9199	4.4598 3.6829	4.5398 3.7854	4.0169	3.8060	Ave		4.0301				8.4		30.0			
n-Pentane	+++++ 2.8430	+++++ 2.5383	3.4545 2.4955	3.0694	2.9355	Ave		2.8894				12.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.7527	+++++ 0.6409	0.9692 0.5124	0.8739	0.7872	Ave		0.7560				21.6		30.0			
Ethyl ether	+++++ 1.2025	1.1806 1.1067	1.3450 1.1109	1.2349	1.2035	Ave		1.1977				6.8		30.0			
Acrolein	+++++ 0.4773	+++++ 0.4977	+++++ 0.4913	0.5525	0.5450	Ave		0.5128				6.6		30.0			
Freon TF	+++++ 3.2341	3.7475 3.0583	3.7917 3.2085	3.2916	3.1714	Ave		3.3576				8.7		30.0			
1,1-Dichloroethene	+++++ 1.5936	1.7377 1.4993	1.7752 1.5568	1.6157	1.5512	Ave		1.6185				6.3		30.0			
Acetone	+++++ 2.6172	+++++ 2.3197	+++++ 2.1975	2.9018	2.7689	Ave		2.5610				11.6		30.0			
Isopropyl alcohol	+++++ 2.9948	+++++ 2.6626	+++++ 2.5784	3.4747	2.8922	Ave		2.9205				12.1		30.0			
Carbon disulfide	+++++ 4.5731	+++++ 4.2524	5.3443 4.2326	4.7374	4.6312	Ave		4.6285				8.8		30.0			
3-Chloropropene	+++++ 2.0713	2.2980 1.8347	2.3883 1.6850	2.3346	2.1762	Ave		2.1126				12.6		30.0			
Acetonitrile	+++++ 1.2679	+++++ 1.1265	+++++ 1.0953	1.4515	1.3567	Ave		1.2596				12.0		30.0			
Methylene Chloride	+++++ 1.9610	+++++ 1.7366	2.7678 1.7093	2.2015	2.0373	Ave		2.0689				18.8		30.0			
tert-Butyl alcohol	+++++ 3.8037	+++++ 3.4859	+++++ 3.4387	4.0347	3.5760	Ave		3.6678				6.8		30.0			
Methyl tert-butyl ether	+++++ 5.0118	4.8854 4.6743	5.3498 4.6671	5.0242	4.9371	Ave		4.9357				4.7		30.0			
trans-1,2-Dichloroethene	+++++ 2.5269	2.6326 2.3102	2.9295 2.3290	2.6296	2.5141	Ave		2.5531				8.2		30.0			
Acrylonitrile	+++++ 1.2785	+++++ 1.1472	1.4377 1.1503	1.3394	1.2786	Ave		1.2720				8.8		30.0			
n-Hexane	+++++ 2.8413	3.0062 2.5817	3.1520 2.5740	3.0036	2.8963	Ave		2.8650				7.6		30.0			
1,1-Dichloroethane	4.2711 3.2862	3.7720 2.9996	4.0230 2.9960	3.5293	3.3316	Ave		3.5261				13.2		30.0			
Vinyl acetate	+++++ 4.4521	+++++ 4.0509	+++++ 4.0274	4.5706	4.4902	Ave		4.3183				6.0		30.0			
cis-1,2-Dichloroethene	+++++ 1.8716	1.8745 1.7658	2.0582 1.8460	1.8268	1.7998	Ave		1.8633				5.1		30.0			
Methyl Ethyl Ketone	+++++ 0.9819	+++++ 0.9134	1.1636 0.9521	0.9695	0.9585	Ave		0.9898				8.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1500	+++++ 0.1435	+++++ 0.1515	0.1428	0.1458	Ave		0.1467				2.6		30.0			
Tetrahydrofuran	+++++ 0.4430	+++++ 0.4003	+++++ 0.4151	0.4832	0.4525	Ave		0.4388				7.4		30.0			
Chloroform	+++++ 3.6098	3.9096 3.3324	4.1438 3.3816	3.7093	3.5653	Ave		3.6645				7.8		30.0			
Cyclohexane	+++++ 0.5149	0.4632 0.4918	0.5265 0.5495	0.4975	0.4891	Ave		0.5046				5.6		30.0			
1,1,1-Trichloroethane	+++++ 0.7219	0.7335 0.6959	0.7817 0.7820	0.7078	0.6860	Ave		0.7298				5.3		30.0			
Carbon tetrachloride	0.6654 0.7052	0.6684 0.6843	0.7178 0.7620	0.6830	0.6671	Ave		0.6942				4.8		30.0			
2,2,4-Trimethylpentane	+++++ 1.9538	1.8784 1.8022	2.0800 1.8764	2.0094	1.9307	Ave		1.9330				4.8		30.0			
Benzene	+++++ 1.1661	1.2550 1.0928	1.3442 1.1614	1.1807	1.1343	Ave		1.1906				7.0		30.0			
1,2-Dichloroethane	+++++ 0.4562	0.4692 0.4301	0.5157 0.4662	0.4686	0.4455	Ave		0.4645				5.8		30.0			
n-Heptane	+++++ 0.7112	0.7634 0.6512	0.8110 0.6887	0.7600	0.7164	Ave		0.7288				7.3		30.0			
n-Butanol	+++++ 0.2434	+++++ 0.2264	+++++ 0.2385	0.2486	0.2299	Ave		0.2374				3.9		30.0			
Trichloroethene	0.5175 0.4916	0.5259 0.4751	0.5351 0.5292	0.4727	0.4713	Ave		0.5023				5.5		30.0			
1,2-Dichloropropane	+++++ 0.4597	0.4775 0.4304	0.5157 0.4563	0.4769	0.4567	Ave		0.4676				5.7		30.0			
Methyl methacrylate	+++++ 0.4421	+++++ 0.4145	0.4261 0.4505	0.4190	0.4233	Ave		0.4293				3.3		30.0			
1,4-Dioxane	+++++ 0.2404	+++++ 0.2244	+++++ 0.2342	0.2489	0.2147	Ave		0.2325				5.8		30.0			
Dibromomethane	+++++ 0.4386	0.3928 0.4339	0.4472 0.5157	0.4180	0.3993	Ave		0.4351				9.4		30.0			
Bromodichloromethane	+++++ 0.8389	0.8099 0.7942	0.8834 0.8603	0.8244	0.8098	Ave		0.8316				3.8		30.0			
cis-1,3-Dichloropropene	+++++ 0.6372	0.5757 0.6070	0.6257 0.6569	0.6132	0.6102	Ave		0.6180				4.1		30.0			
methyl isobutyl ketone	+++++ 0.9489	+++++ 0.8675	1.0122 0.9033	0.9580	0.9559	Ave		0.9410				5.3		30.0			
n-Octane	+++++ 1.0343	0.9451 0.9540	1.0732 1.0191	1.0949	1.0360	Ave		1.0224				5.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.9126	0.9250 0.8855	0.9755 1.0000	0.9019	0.8467	Ave		0.9210				5.7		30.0			
trans-1,3-Dichloropropene	+++++ 0.6275	0.5530 0.5980	0.5977 0.6533	0.5976	0.5999	Ave		0.6039				5.1		30.0			
1,1,2-Trichloroethane	+++++ 0.4642	0.4849 0.4430	0.5078 0.4850	0.4737	0.4392	Ave		0.4711				5.2		30.0			
Tetrachloroethene	0.7045 0.6704	0.6858 0.6750	0.7051 0.7861	0.6380	0.6224	Ave		0.6859				7.3		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.9447	+++++ 0.8773	1.1355 0.9306	0.8974	0.9283	Ave		0.9523				9.8		30.0			
Dibromochloromethane	+++++ 0.8751	0.7817 0.8627	0.8718 0.9507	0.7929	0.8102	Ave		0.8493				7.0		30.0			
1,2-Dibromoethane	+++++ 0.7913	0.7113 0.7690	0.7648 0.8623	0.7539	0.7278	Ave		0.7686				6.4		30.0			
Chlorobenzene	+++++ 1.1268	1.1208 1.0958	1.2328 1.2051	1.0972	1.0478	Ave		1.1323				5.7		30.0			
Ethylbenzene	+++++ 1.9657	1.9181 1.8821	2.0593 1.9925	1.9599	1.8554	Ave		1.9476				3.5		30.0			
n-Nonane	+++++ 1.0176	0.9178 0.9581	1.0834 1.0499	1.0634	0.9723	Ave		1.0089				6.1		30.0			
m,p-Xylene	+++++ 0.7821	0.6584 0.7643	0.7547 0.8542	0.7533	0.7189	Ave		0.7551				7.9		30.0			
Xylene, o-	+++++ 0.7583	0.6214 0.7391	0.7131 0.8269	0.7284	0.7048	Ave		0.7274				8.5		30.0			
Styrene	+++++ 1.1984	0.8400 1.1625	1.0660 1.2983	1.1405	1.1079	Ave		1.1162				12.7		30.0			
Bromoform	+++++ 0.8587	0.6225 0.8422	0.7397 0.9183	0.6465	0.7709	Ave		0.7713				14.3		30.0			
Cumene	+++++ 2.2020	1.8197 2.1019	2.1208 2.1955	2.2178	2.0769	Ave		2.1049				6.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 1.2174	1.1742 1.1599	1.3363 1.2506	1.2601	1.1554	Ave		1.2220				5.4		30.0			
n-Propylbenzene	+++++ 2.7570	2.3872 2.6156	2.7634 2.6506	2.8081	2.6351	Ave		2.6596				5.3		30.0			
1,2,3-Trichloropropane	+++++ 0.9170	+++++ 0.8724	0.9871 0.9852	0.9357	0.8651	Ave		0.9271				5.7		30.0			
n-Decane	+++++ 1.3308	+++++ 1.2512	1.3285 1.3673	1.4066	1.2953	Ave		1.3300				4.1		30.0			
4-Ethyltoluene	+++++ 2.2526	1.7885 2.1748	2.1526 2.3186	2.1890	2.1076	Ave		2.1405				7.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.9144	1.6422 1.8430	1.9124 2.0431	1.8973	1.7967	Ave		1.8642				6.7		30.0			
1,3,5-Trimethylbenzene	+++++ 1.8556	1.5371 1.7789	1.7771 1.9087	1.8432	1.7474	Ave		1.7783				6.7		30.0			
Alpha Methyl Styrene	+++++ 0.9238	0.5907 0.9049	0.7330 1.0295	0.8338	0.8471	Ave		0.8375				16.9		30.0			
tert-Butylbenzene	+++++ 1.7585	1.4001 1.6801	1.6629 1.8131	1.7371	1.6473	Ave		1.6713				8.0		30.0			
1,2,4-Trimethylbenzene	+++++ 1.8763	1.3960 1.7826	1.7653 1.9080	1.8743	1.7697	Ave		1.7675				9.8		30.0			
sec-Butylbenzene	+++++ 2.7698	2.2299 2.5964	2.6383 2.5959	2.8334	2.6526	Ave		2.6166				7.4		30.0			
4-Isopropyltoluene	+++++ 2.2681	1.6434 2.1572	1.9977 2.2597	2.2477	2.1389	Ave		2.1018				10.6		30.0			
1,3-Dichlorobenzene	+++++ 1.2208	0.8384 1.1968	1.0731 1.3678	1.1491	1.1290	Ave		1.1393				14.2		30.0			
1,4-Dichlorobenzene	+++++ 1.1765	0.7418 1.1575	0.9625 1.3479	1.0837	1.0688	Ave		1.0770				17.6		30.0			
Benzyl chloride	+++++ 1.4483	0.8351 1.4070	1.0924 1.5954	1.3985	1.2520	Ave		1.2898				19.8		30.0			
n-Undecane	+++++ 1.5269	+++++ 1.4385	+++++ 1.5223	1.5905	1.4447	Ave		1.5046				4.2		30.0			
n-Butylbenzene	+++++ 2.3415	1.3980 2.2349	1.9619 2.2838	2.3792	2.2237	Ave		2.1176				16.3		30.0			
1,2-Dichlorobenzene	+++++ 1.1454	0.7784 1.1197	1.0340 1.2771	1.0915	1.0498	Ave		1.0708				14.2		30.0			
n-Dodecane	+++++ 1.1147	+++++ 1.0008	+++++ 1.1601	1.2049	0.9930	Ave		1.0947				8.7		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6384	+++++ 0.6457	0.3200 0.8523	0.5936	0.5600	Ave		0.6017				28.5		30.0			
Hexachlorobutadiene	+++++ 0.6901	0.5483 0.6611	0.6560 0.8717	0.6874	0.6176	Ave		0.6760				14.7		30.0			
Naphthalene	+++++ 1.2998	+++++ 1.3736	0.6325 1.7514	1.3001	1.1356	Ave		1.2488				29.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5287	+++++ 0.5385	0.3375 0.7490	0.5133	0.4521	Ave		0.5199				25.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117699/3	25526-03.d
Level 2	IC 200-117699/4	25526-04.d
Level 3	IC 200-117699/5	25526-05.d
Level 4	IC 200-117699/6	25526-06.d
Level 5	ICIS 200-117699/7	25526-07.d
Level 6	IC 200-117699/8	25526-08.d
Level 7	IC 200-117699/9	25526-09.d
Level 8	IC 200-117699/10	25526-10.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 350184	+++++ 473351	+++++ 1070431	100239	198554	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 1401029	+++++ 1925776	42299 4415996	382318	771164	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 759878	+++++ 1041715	24062 2350133	214635	422908	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 1433777	16314 1990632	43864 4570477	390984	787373	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 438599	+++++ 600512	14805 1339036	126735	247658	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 870716	+++++ 1163663	27359 2614528	245834	487590	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	1740 667217	7801 905410	19678 2020284	181545	364518	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1340 538807	5858 724657	15997 1623334	146032	300219	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 560726	6507 791088	16931 1837301	150391	297539	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 334982	+++++ 466703	10312 1064166	90905	181355	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 670207	8397 909022	20613 2026029	187646	371596	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 595343	5860 851421	16347 2012169	155345	307469	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1484375	17249 2105105	43019 4904140	396504	777464	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 1076558	+++++ 1450857	32735 3233007	302980	599635	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 380841	+++++ 732785	91951 1659745	172627	241296	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 455369	4566 632588	12745 1439211	121897	245837	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 180757	+++++ 284494	+++++ 636560	54538	111333	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1224685	14494 1748105	35930 4156772	324913	647827	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 603446	6721 856969	16822 2016903	159482	316865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 991072	+++++ 1325881	+++++ 2846975	286435	565617	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 1134066	+++++ 1521899	+++++ 3340441	342982	590803	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1731736	+++++ 2430594	50643 5483537	467626	946027	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 784358	8888 1048690	22632 2182939	230443	444544	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 480117	+++++ 643919	+++++ 1419050	143275	277140	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 742577	+++++ 992587	26228 2214409	217307	416158	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1440369	+++++ 1992489	+++++ 4455028	398259	730480	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1897853	18895 2671750	50695 6046355	495935	1008517	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 956886	10182 1320504	27760 3017359	259564	513572	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 484135	+++++ 655746	13624 1490269	132210	261185	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 1075924	11627 1475682	29868 3334729	296487	591630	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3373 1244413	14589 1714504	38122 3881497	348377	680552	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1685900	+++++ 2315456	+++++ 5217692	451164	917228	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 708713	7250 1009283	19504 2391614	180325	367656	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 371841	+++++ 522080	11026 1233525	95697	195787	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 56783	+++++ 82007	+++++ 196265	14099	29775	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 822834	+++++ 1100592	+++++ 2432571	240635	464671	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 1366962	15121 1904768	39267 4380968	366144	728287	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 956449	9103 1352346	25550 3219983	247755	502298	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 1340906	14416 1913551	37934 4582516	352471	704520	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2660 1309865	13136 1881778	34837 4465532	340100	685108	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3629049	36918 4955592	100945 10995865	1000580	1982805	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2165925	24665 3005050	65236 6806050	587912	1164845	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 847386	9221 1182533	25029 2731651	233345	457534	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1320967	15003 1790690	39360 4035746	378449	735681	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 452178	+++++ 622513	+++++ 1397845	123769	236094	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2069 913124	10336 1306383	25969 3100927	235392	483976	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 853868	9384 1183455	25026 2673689	237467	468982	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 821276	+++++ 1139836	20681 2640178	208665	434702	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 446478	+++++ 617177	+++++ 1372649	123949	220467	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 814652	7719 1193160	21705 3021988	208167	410095	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1558195	15918 2183715	42874 5041488	410523	831676	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1183664	11314 1669075	30365 3849492	305362	626639	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1762593	+++++ 2385523	49123 5293444	477043	981706	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1921229	18575 2623379	52083 5972171	545203	1063948	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1597639	16158 2270158	42194 5445072	411750	837632	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1165472	10869 1644416	29006 3828599	297589	616063	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 812575	8470 1135638	21964 2641046	216264	434493	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	2456 1173625	11979 1730511	30498 4280070	291292	615755	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1653732	+++++ 2249055	49110 5067322	409721	918379	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1531947	13655 2211637	37706 5176615	362018	801518	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1385240	12425 1971371	33077 4694992	344174	719979	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1972583	19577 2809351	53322 6561726	500922	1036563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 3441030	33505 4825160	89066 10848983	894769	1835501	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1781359	16031 2456194	46860 5716746	485477	961881	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2738087	23002 3918810	65286 9302285	687876	1422370	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1327397	10855 1894943	30844 4502511	332547	697255	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2097958	14673 2980212	46105 7069037	520688	1096082	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1503303	10873 2159204	31991 5000258	295155	762669	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3854693	31785 5388585	91728 11954443	1012534	2054662	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2131135	20511 2973548	57795 6809473	575281	1143069	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 4826348	41698 6705573	119522 14432269	1282043	2606889	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1605326	+++++ 2236576	42692 5364115	427195	855869	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2329622	+++++ 3207816	57460 7445061	642185	1281427	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3943306	31240 5575560	93105 12624779	999372	2085021	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 3351333	28686 4724937	82714 11124660	866202	1777412	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3248335	26849 4560658	76861 10392634	841524	1728674	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1617109	10318 2319756	31703 5605561	380692	837988	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3078385	24456 4307328	71922 9872155	793052	1629613	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39188-1 Analy Batch No.: 117699

SDG No.:

Instrument ID: CHW.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:42 Calibration End Date: 06/19/2017 20:48 Calibration ID: 37394

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3284627	24384 4570151	76352 10389025	855716	1750762	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 4848810	38950 6656484	114112 14134547	1293599	2624164	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3970488	28706 5530303	86404 12303850	1026206	2115991	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 2137179	14645 3068300	46415 7447783	524609	1116901	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 2059593	12957 2967556	41630 7339348	494766	1057321	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2535385	14587 3607088	47246 8686603	638479	1238563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2672949	+++++ 3687884	+++++ 8288876	726152	1429236	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4098925	24420 5729480	84856 12435408	1086238	2199868	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2005026	13596 2870647	44724 6953949	498305	1038538	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1951368	+++++ 2565655	+++++ 6316762	550101	982327	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1117586	+++++ 1655444	13841 4640694	271003	554006	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1208054	9578 1694760	28373 4746439	313822	611005	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2275427	+++++ 3521407	27356 9536200	593571	1123446	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 925571	+++++ 1380513	14598 4078239	234363	447248	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117742/4	200-25547-004.D
Level 2	IC 200-117742/5	200-25547-005.D
Level 3	IC 200-117742/6	200-25547-006.D
Level 4	IC 200-117742/7	200-25547-007.D
Level 5	ICIS 200-117742/8	200-25547-008.D
Level 6	IC 200-117742/9	200-25547-009.D
Level 7	IC 200-117742/10	200-25547-010.D
Level 8	IC 200-117742/11	200-25547-011.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5595	+++++ 0.5085	+++++ 0.5005	0.5534	0.5243	Ave		0.5293				5.0		30.0			
Dichlorodifluoromethane	+++++ 3.2775	+++++ 2.9814	3.9653 2.7321	3.4865	3.2570	Ave		3.2833				12.9		30.0			
Freon 22	+++++ 1.5506	+++++ 1.3989	1.8395 1.3464	1.5864	1.4848	Ave		1.5344				11.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.7474	3.2352 2.4934	3.3536 2.3072	2.9239	2.6936	Ave		2.8220				13.4		30.0			
Chloromethane	+++++ 0.7522	+++++ 0.6889	0.9695 0.6867	0.7644	0.7155	Ave		0.7629				13.9		30.0			
n-Butane	+++++ 1.0491	+++++ 0.9534	1.2159 0.9299	1.0384	1.0146	Ave		1.0336				9.8		30.0			
Vinyl chloride	1.1198 0.9117	0.9862 0.8374	1.0642 0.8205	0.8996	0.8760	Ave		0.9394				11.5		30.0			
1,3-Butadiene	0.7269 0.5771	0.6165 0.5264	0.6374 0.5241	0.5633	0.5542	Ave		0.5907				11.5		30.0			
Bromomethane	+++++ 1.0450	1.2176 0.9621	1.2528 0.9445	1.0865	1.0543	Ave		1.0804				10.9		30.0			
Chloroethane	+++++ 0.3493	+++++ 0.3213	0.3944 0.3232	0.3415	0.3462	Ave		0.3460				7.7		30.0			
Isopentane	+++++ 0.6153	0.7217 0.5593	0.6896 0.5557	0.6078	0.6066	Ave		0.6223				10.0		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.0304	1.2178 0.9515	1.1993 0.9336	1.0730	1.0629	Ave		1.0669				10.3		30.0			
Trichlorofluoromethane	+++++ 2.6684	3.3882 2.4629	3.4345 2.3238	2.9806	2.8734	Ave		2.8760				14.9		30.0			
n-Pentane	+++++ 0.9390	+++++ 0.8609	1.1189 0.8683	0.9208	0.9211	Ave		0.9382				10.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.2507	+++++ 0.2157	0.2578 0.1842	0.2132	0.2491	Ave		0.2284				12.6		30.0			
Ethyl ether	+++++ 0.4124	0.4269 0.3941	0.4377 0.4044	0.3619	0.3937	Ave		0.4045				6.1		30.0			
Freon TF	+++++ 2.0180	2.4405 1.8712	2.3980 1.8122	2.0632	1.9993	Ave		2.0861				11.7		30.0			
Acrolein	+++++ 0.1225	+++++ 0.1339	+++++ 0.1311	0.1237	0.1376	Ave		0.1298				5.0		30.0			
1,1-Dichloroethene	+++++ 0.8915	1.0366 0.8297	1.0411 0.8427	0.8798	0.8664	Ave		0.9125				9.7		30.0			
Acetone	+++++ 0.9525	+++++ 0.9149	+++++ 0.9177	0.8385	0.9384	Ave		0.9124				4.8		30.0			
Carbon disulfide	+++++ 2.3789	+++++ 2.1859	2.5535 2.2117	2.3005	2.2711	Ave		2.3169				5.8		30.0			
Isopropyl alcohol	+++++ 0.9522	+++++ 0.8801	+++++ 0.8882	0.8541	0.9940	Ave		0.9137				6.3		30.0			
3-Chloropropene	+++++ 0.7454	0.7665 0.6868	0.7724 0.6366	0.7204	0.7248	Ave		0.7219				6.6		30.0			
Acetonitrile	+++++ 0.3437	+++++ 0.3315	+++++ 0.3456	0.3010	0.3209	Ave		0.3285				5.6		30.0			
Methylene Chloride	+++++ 0.8426	+++++ 0.7777	1.0865 0.7695	0.8446	0.8187	Ave		0.8566				13.7		30.0			
tert-Butyl alcohol	+++++ 1.4871	+++++ 1.3323	+++++ 1.3874	1.2736	1.5333	Ave		1.4027				7.6		30.0			
Methyl tert-butyl ether	+++++ 2.1906	2.2724 2.0982	2.4252 2.1149	1.9053	2.1318	Ave		2.1626				7.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.1863	1.2802 1.0920	1.3333 1.0754	1.1745	1.1518	Ave		1.1848				7.9		30.0			
Acrylonitrile	+++++ 0.3911	+++++ 0.3747	0.3989 0.3976	0.3238	0.3545	Ave		0.3734				7.9		30.0			
n-Hexane	+++++ 0.9727	1.0366 0.8942	1.0342 0.8960	0.9090	0.9170	Ave		0.9514				6.6		30.0			
1,1-Dichloroethane	1.7577 1.6050	1.6919 1.4843	1.7739 1.4738	1.5596	1.5327	Ave		1.6099				7.4		30.0			
Vinyl acetate	+++++ 1.4660	+++++ 1.3950	+++++ 1.4207	1.2442	1.3739	Ave		1.3800				6.0		30.0			
cis-1,2-Dichloroethene	+++++ 1.1188	1.1659 1.0479	1.1768 1.0498	1.0570	1.0577	Ave		1.0963				5.2		30.0			
Methyl Ethyl Ketone	+++++ 0.3402	+++++ 0.3275	0.4155 0.3357	0.2780	0.3317	Ave		0.3381				13.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0507	+++++ 0.0486	+++++ 0.0503	0.0421	0.0486	Ave		0.0481				7.2		30.0			
Tetrahydrofuran	+++++ 0.1426	+++++ 0.1277	+++++ 0.1295	0.1218	0.1505	Ave		0.1344				8.8		30.0			
Chloroform	+++++ 2.5216	4.4447 2.3432	3.4838 2.3203	2.5142	2.4428	Ave		2.8672				28.0		30.0			
Cyclohexane	+++++ 0.2624	0.2538 0.2308	0.2790 0.2302	0.2410	0.2669	Ave		0.2520				7.4		30.0			
1,1,1-Trichloroethane	+++++ 0.5803	0.6115 0.5127	0.6683 0.5064	0.5669	0.6076	Ave		0.5791				9.9		30.0			
Carbon tetrachloride	0.5548 0.6570	0.5953 0.5797	0.6552 0.5739	0.6268	0.6772	Ave		0.6150				7.4		30.0			
2,2,4-Trimethylpentane	+++++ 0.9213	0.9002 0.8028	0.9653 0.7860	0.8446	0.9356	Ave		0.8794				7.8		30.0			
Benzene	+++++ 0.6663	0.7240 0.5854	0.7160 0.5937	0.6182	0.6428	Ave		0.6495				8.5		30.0			
1,2-Dichloroethane	+++++ 0.3842	0.3749 0.3385	0.4128 0.3405	0.3742	0.3845	Ave		0.3728				7.0		30.0			
n-Heptane	+++++ 0.3351	0.3554 0.2904	0.3616 0.2782	0.3168	0.3466	Ave		0.3263				9.9		30.0			
n-Butanol	+++++ 0.1051	+++++ 0.0905	+++++ 0.0943	0.0823	0.1154	Ave		0.0975				13.3		30.0			
Trichloroethene	0.4960 0.3902	0.3721 0.3505	0.4046 0.3598	0.3511	0.4014	Ave		0.3907				12.2		30.0			
1,2-Dichloropropane	+++++ 0.2637	0.2721 0.2377	0.2893 0.2385	0.2532	0.2670	Ave		0.2602				7.2		30.0			
Methyl methacrylate	+++++ 0.2060	+++++ 0.1912	0.1784 0.2019	0.1527	0.2069	Ave		0.1895				11.1		30.0			
1,4-Dioxane	+++++ 0.1347	+++++ 0.1178	+++++ 0.1196	0.1092	0.1508	Ave		0.1264				13.0		30.0			
Dibromomethane	+++++ 0.3748	0.3436 0.3417	0.3771 0.3571	0.3475	0.3755	Ave		0.3596				4.4		30.0			
Bromodichloromethane	+++++ 0.6773	0.5988 0.6051	0.6491 0.6169	0.6078	0.6845	Ave		0.6342				5.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.4403	0.3623 0.3980	0.4098 0.4098	0.3990	0.4355	Ave		0.4078				6.4		30.0			
methyl isobutyl ketone	+++++ 0.4340	+++++ 0.3846	0.4536 0.3941	0.3296	0.4954	Ave		0.4152				14.0		30.0			
Toluene	+++++ 0.5370	0.5534 0.5215	0.5728 0.5400	0.4879	0.5428	Ave		0.5365				5.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.4952	0.5275 0.4291	0.5545 0.3991	0.4940	0.5273	Ave		0.4895				11.5		30.0			
trans-1,3-Dichloropropene	+++++ 0.4637	0.4156 0.4217	0.4519 0.4372	0.3968	0.4642	Ave		0.4359				5.9		30.0			
1,1,2-Trichloroethane	+++++ 0.2989	0.3071 0.2865	0.3228 0.2970	0.2831	0.3072	Ave		0.3004				4.5		30.0			
Tetrachloroethene	0.5769 0.5543	0.5804 0.5347	0.5824 0.5417	0.5255	0.5664	Ave		0.5578				4.0		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4352	+++++ 0.4008	0.4313 0.4073	0.3173	0.5090	Ave		0.4168				14.9		30.0			
Dibromochloromethane	+++++ 0.7599	0.5681 0.7316	0.6375 0.7373	0.6656	0.7582	Ave		0.6940				10.5		30.0			
1,2-Dibromoethane	+++++ 0.5905	0.5212 0.5758	0.5604 0.6033	0.5502	0.5937	Ave		0.5707				5.0		30.0			
Chlorobenzene	+++++ 0.7711	0.7659 0.7533	0.7879 0.7892	0.7301	0.7855	Ave		0.7690				2.8		30.0			
Ethylbenzene	+++++ 1.1537	1.1044 1.1267	1.2047 1.1608	1.0194	1.1805	Ave		1.1357				5.4		30.0			
n-Nonane	+++++ 0.4923	0.4818 0.4666	0.5131 0.4510	0.4733	0.5267	Ave		0.4864				5.4		30.0			
m,p-Xylene	+++++ 0.4701	0.4400 0.4625	0.4655 0.4704	0.4032	0.4790	Ave		0.4558				5.7		30.0			
Xylene, o-	+++++ 0.4731	0.4316 0.4665	0.4689 0.4970	0.4047	0.4815	Ave		0.4605				6.9		30.0			
Styrene	+++++ 0.6963	0.5028 0.6950	0.5768 0.7620	0.5693	0.7009	Ave		0.6433				14.5		30.0			
Bromoform	+++++ 0.7047	0.4546 0.6756	0.5365 0.6229	0.5272	0.7241	Ave		0.6065				16.9		30.0			
Cumene	+++++ 1.3026	1.2050 1.2726	1.3096 1.3115	1.1417	1.3368	Ave		1.2685				5.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7220	0.6767 0.6966	0.7425 0.6965	0.6373	0.7594	Ave		0.7044				5.8		30.0			
n-Propylbenzene	+++++ 1.5448	1.4387 1.5089	1.5567 1.5056	1.3392	1.6071	Ave		1.5002				5.9		30.0			
1,2,3-Trichloropropane	+++++ 0.5512	+++++ 0.5328	0.5852 0.5343	0.4905	0.5842	Ave		0.5463				6.6		30.0			
n-Decane	+++++ 0.5560	+++++ 0.5137	0.6041 0.4454	0.5484	0.6207	Ave		0.5480				11.6		30.0			
4-Ethyltoluene	+++++ 1.2845	1.1193 1.2269	1.2057 1.0192	1.0947	1.3542	Ave		1.1864				9.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.1016	1.0585 1.0410	1.1493 0.8701	1.0127	1.1795	Ave		1.0589				9.6		30.0			
1,3,5-Trimethylbenzene	+++++ 1.0801	0.9500 1.0651	1.0292 1.0905	0.9014	1.1082	Ave		1.0321				7.6		30.0			
Alpha Methyl Styrene	+++++ 0.5555	0.3417 0.5578	0.4062 0.6061	0.4169	0.5555	Ave		0.4914				20.5		30.0			
tert-Butylbenzene	+++++ 1.0169	0.9371 1.0072	0.9823 1.0330	0.8495	1.0484	Ave		0.9821				7.0		30.0			
1,2,4-Trimethylbenzene	+++++ 1.0763	0.9124 1.0656	1.0113 1.0842	0.9011	1.1134	Ave		1.0235				8.3		30.0			
sec-Butylbenzene	+++++ 1.5475	1.2889 1.5171	1.4840 1.4987	1.3023	1.5974	Ave		1.4623				8.2		30.0			
4-Isopropyltoluene	+++++ 1.3241	1.0003 1.2910	1.1505 1.1721	1.0698	1.3675	Ave		1.1965				11.4		30.0			
1,3-Dichlorobenzene	+++++ 0.8404	0.6186 0.8188	0.7414 0.7431	0.7046	0.8532	Ave		0.7600				11.0		30.0			
1,4-Dichlorobenzene	+++++ 0.8222	0.5901 0.8164	0.7099 0.8215	0.6786	0.8212	Ave		0.7514				12.4		30.0			
Benzyl chloride	+++++ 0.9678	0.6015 0.9667	0.7558 1.0283	0.7840	0.9820	Ave		0.8694				18.1		30.0			
n-Butylbenzene	+++++ 1.1912	0.7864 1.1589	0.9391 1.0986	0.9889	1.2539	Ave		1.0596				15.4		30.0			
n-Undecane	+++++ 0.5981	+++++ 0.5704	+++++ 0.5297	0.5171	0.6665	Ave		0.5764				10.4		30.0			
1,2-Dichlorobenzene	+++++ 0.7595	0.5882 0.7593	0.6775 0.7779	0.6367	0.7677	Ave		0.7095				10.6		30.0			
n-Dodecane	+++++ 0.4630	+++++ 0.4249	+++++ 0.4527	0.4069	0.6406	Ave		0.4776				19.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4897	+++++ 0.5278	0.3516 0.5702	0.3565	0.5550	Ave		0.4751				20.6		30.0			
Hexachlorobutadiene	+++++ 0.4668	0.4605 0.4474	0.4188 0.3797	0.3911	0.4993	Ave		0.4376				9.9		30.0			
Naphthalene	+++++ 0.9212	+++++ 1.0428	0.6501 1.2528	0.7066	1.1110	Ave		0.9474				24.8		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4033	+++++ 0.4472	0.3294 0.5116	0.3271	0.5059	Ave		0.4207				19.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117742/4	200-25547-004.D
Level 2	IC 200-117742/5	200-25547-005.D
Level 3	IC 200-117742/6	200-25547-006.D
Level 4	IC 200-117742/7	200-25547-007.D
Level 5	ICIS 200-117742/8	200-25547-008.D
Level 6	IC 200-117742/9	200-25547-009.D
Level 7	IC 200-117742/10	200-25547-010.D
Level 8	IC 200-117742/11	200-25547-011.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 445233	+++++ 561662	+++++ 1185360	136843	265113	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 2607958	+++++ 3293124	98450 6471189	862049	1646825	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 1233863	+++++ 1545162	45670 3189092	392240	750773	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 2186117	33145 2754132	83263 5464682	722942	1361979	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 598524	+++++ 760880	24071 1626493	188998	361799	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 834817	+++++ 1053053	30189 2202515	256761	513028	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	2277 725464	10104 924960	26422 1943486	222426	442918	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1478 459197	6316 581435	15826 1241294	139289	280239	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 831507	12474 1062684	31104 2237010	268634	533099	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 277940	+++++ 354845	9792 765554	84445	175053	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 489618	7394 617821	17121 1316267	150277	306701	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 819937	12477 1051002	29775 2211369	265293	537425	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 2123248	34712 2720424	85271 5504096	736970	1452859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 747158	+++++ 950957	27779 2056616	227671	465729	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 266521	+++++ 476488	64096 1090645	105498	189005	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 328180	4374 435311	10866 957882	89483	199083	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1605724	25003 2066857	59536 4292221	510149	1010913	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97476	+++++ 147880	+++++ 310567	30582	69554	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 709345	10620 916431	25848 1996085	217542	438083	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 757879	+++++ 1010503	+++++ 2173695	207324	474484	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1892933	+++++ 2414480	63397 5238570	568807	1148316	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 757679	+++++ 972136	+++++ 2103785	211193	502588	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 593138	7853 758618	19178 1507832	178125	366475	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 273513	+++++ 366106	+++++ 818642	74430	162239	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 670444	+++++ 859027	26975 1822488	208829	413978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1183309	+++++ 1471642	+++++ 3286048	314903	775290	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1743048	23281 2317545	60212 5009333	471108	1077928	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 943918	13116 1206128	33102 2547091	290401	582411	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 311218	+++++ 413836	9905 941818	80069	179242	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 774026	10620 987722	25677 2122307	224767	463684	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3574 1277089	17334 1639501	44041 3490864	385613	774970	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1166506	+++++ 1540894	+++++ 3364955	307630	694712	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 890225	11945 1157421	29216 2486493	261351	534831	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 270675	+++++ 361689	10316 795107	68742	167716	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 40363	+++++ 53707	+++++ 119201	10416	24577	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 536642	+++++ 706150	+++++ 1545322	143496	332017	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 2006479	45536 2588192	86495 5495606	621644	1235155	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 987385	12331 1275925	32036 2747759	283991	588802	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 2183596	29706 2834279	76743 6044787	667936	1340327	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	5467 2472216	28923 3204387	75240 6849881	738568	1494019	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3467108	43732 4437785	110845 9381014	995133	2063883	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2507496	35172 3236247	82221 7085821	728420	1418032	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1445868	18215 1871228	47401 4063967	440855	848128	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1261135	17265 1605387	41524 3320567	373257	764557	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 395423	+++++ 500388	+++++ 1125699	96917	254513	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	4887 1468539	18078 1937305	46458 4294119	413670	885580	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 992303	13221 1313699	33224 2846642	298283	589013	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 775263	+++++ 1057100	20489 2410324	179881	456392	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 506756	+++++ 651251	+++++ 1427963	128712	332679	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1410343	16691 1888687	43297 4261650	409468	828441	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 2548580	29089 3345103	74537 7363295	716184	1509956	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1656781	17601 2199925	47059 4891603	470125	960707	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1633361	+++++ 2126285	52084 4704391	388364	1092864	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1969513	24345 2650482	62017 6009236	531157	1138400	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1863500	25627 2371985	63668 4762940	582116	1163263	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1744981	20189 2330902	51891 5218381	467582	1024014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 1096028	13512 1456169	34953 3305110	308188	644225	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	5279 2032941	25531 2717836	63054 6028468	572115	1187918	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1596089	+++++ 2037382	46700 4533175	345430	1067510	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2786909	24990 3718684	69028 8205238	724633	1590060	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 2165464	22929 2926753	60678 6713729	599002	1245189	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2827839	33693 3829004	85313 8782835	794871	1647398	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 4231255	48585 5726634	130437 12917838	1109730	2475865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1805598	21197 2371618	55558 5019385	515286	1104660	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 3448245	38712 4701168	100808 10468857	877966	2009169	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1734889	18988 2370953	50767 5531330	440555	1009806	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2553491	22118 3532798	62457 8480380	619753	1470019	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 2584324	19999 3433968	58090 6932515	573948	1518594	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 4777121	53010 6468169	141795 14595520	1242906	2803577	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2647926	29768 3540635	80398 7750826	693773	1592598	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 5665480	63289 7669430	168554 16755666	1457974	3370604	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 2021472	+++++ 2708063	63358 5945733	533986	1225149	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2038913	+++++ 2610804	65411 4956940	596996	1301796	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 4710745	49238 6236047	130548 11342674	1191785	2840074	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 4039848	46564 5291112	124438 9682885	1102531	2473642	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3961026	41791 5413674	111439 12135589	981280	2324219	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 2037384	15034 2834994	43983 6745330	453835	1164940	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3729344	41226 5119452	106356 11496326	924793	2198760	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39208-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3947292	40138 5416079	109500 12065603	981013	2335014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 5675484	56701 7711106	160682 16678027	1417755	3350133	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 4856157	44005 6562105	124572 13044017	1164615	2868070	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 3081996	27213 4161711	80274 8269289	767052	1789386	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 3015393	25959 4149459	76858 9142560	738715	1722291	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 3549258	26460 4913749	81837 11444111	853487	2059423	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4368521	34595 5890630	101676 12225620	1076529	2629709	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2193634	+++++ 2899287	+++++ 5894829	562920	1397812	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2785465	25874 3859410	73353 8656894	693202	1610156	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1697970	+++++ 2159522	+++++ 5037970	443029	1343575	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1795942	+++++ 2682922	38067 6346002	388126	1163931	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1711853	20260 2273852	45340 4225349	425723	1047102	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 3378310	+++++ 5300271	70387 13941524	769294	2330053	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1478983	+++++ 2272842	35661 5693788	356060	1061067	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117742/4	200-25547-004.D
Level 2	IC 200-117742/5	200-25547-005.D
Level 3	IC 200-117742/6	200-25547-006.D
Level 4	IC 200-117742/7	200-25547-007.D
Level 5	ICIS 200-117742/8	200-25547-008.D
Level 6	IC 200-117742/9	200-25547-009.D
Level 7	IC 200-117742/10	200-25547-010.D
Level 8	IC 200-117742/11	200-25547-011.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5595	+++++ 0.5085	+++++ 0.5005	0.5534	0.5243	Ave		0.5293				5.0		30.0			
Dichlorodifluoromethane	+++++ 3.2775	+++++ 2.9814	3.9653 2.7321	3.4865	3.2570	Ave		3.2833				12.9		30.0			
Freon 22	+++++ 1.5506	+++++ 1.3989	1.8395 1.3464	1.5864	1.4848	Ave		1.5344				11.4		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.7474	3.2352 2.4934	3.3536 2.3072	2.9239	2.6936	Ave		2.8220				13.4		30.0			
Chloromethane	+++++ 0.7522	+++++ 0.6889	0.9695 0.6867	0.7644	0.7155	Ave		0.7629				13.9		30.0			
n-Butane	+++++ 1.0491	+++++ 0.9534	1.2159 0.9299	1.0384	1.0146	Ave		1.0336				9.8		30.0			
Vinyl chloride	1.1198 0.9117	0.9862 0.8374	1.0642 0.8205	0.8996	0.8760	Ave		0.9394				11.5		30.0			
1,3-Butadiene	0.7269 0.5771	0.6165 0.5264	0.6374 0.5241	0.5633	0.5542	Ave		0.5907				11.5		30.0			
Bromomethane	+++++ 1.0450	1.2176 0.9621	1.2528 0.9445	1.0865	1.0543	Ave		1.0804				10.9		30.0			
Chloroethane	+++++ 0.3493	+++++ 0.3213	0.3944 0.3232	0.3415	0.3462	Ave		0.3460				7.7		30.0			
Isopentane	+++++ 0.6153	0.7217 0.5593	0.6896 0.5557	0.6078	0.6066	Ave		0.6223				10.0		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.0304	1.2178 0.9515	1.1993 0.9336	1.0730	1.0629	Ave		1.0669				10.3		30.0			
Trichlorofluoromethane	+++++ 2.6684	3.3882 2.4629	3.4345 2.3238	2.9806	2.8734	Ave		2.8760				14.9		30.0			
n-Pentane	+++++ 0.9390	+++++ 0.8609	1.1189 0.8683	0.9208	0.9211	Ave		0.9382				10.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.2507	+++++ 0.2157	0.2578 0.1842	0.2132	0.2491	Ave		0.2284				12.6		30.0			
Ethyl ether	+++++ 0.4124	0.4269 0.3941	0.4377 0.4044	0.3619	0.3937	Ave		0.4045				6.1		30.0			
Freon TF	+++++ 2.0180	2.4405 1.8712	2.3980 1.8122	2.0632	1.9993	Ave		2.0861				11.7		30.0			
Acrolein	+++++ 0.1225	+++++ 0.1339	+++++ 0.1311	0.1237	0.1376	Ave		0.1298				5.0		30.0			
1,1-Dichloroethene	+++++ 0.8915	1.0366 0.8297	1.0411 0.8427	0.8798	0.8664	Ave		0.9125				9.7		30.0			
Acetone	+++++ 0.9525	+++++ 0.9149	+++++ 0.9177	0.8385	0.9384	Ave		0.9124				4.8		30.0			
Carbon disulfide	+++++ 2.3789	+++++ 2.1859	2.5535 2.2117	2.3005	2.2711	Ave		2.3169				5.8		30.0			
Isopropyl alcohol	+++++ 0.9522	+++++ 0.8801	+++++ 0.8882	0.8541	0.9940	Ave		0.9137				6.3		30.0			
3-Chloropropene	+++++ 0.7454	0.7665 0.6868	0.7724 0.6366	0.7204	0.7248	Ave		0.7219				6.6		30.0			
Acetonitrile	+++++ 0.3437	+++++ 0.3315	+++++ 0.3456	0.3010	0.3209	Ave		0.3285				5.6		30.0			
Methylene Chloride	+++++ 0.8426	+++++ 0.7777	1.0865 0.7695	0.8446	0.8187	Ave		0.8566				13.7		30.0			
tert-Butyl alcohol	+++++ 1.4871	+++++ 1.3323	+++++ 1.3874	1.2736	1.5333	Ave		1.4027				7.6		30.0			
Methyl tert-butyl ether	+++++ 2.1906	2.2724 2.0982	2.4252 2.1149	1.9053	2.1318	Ave		2.1626				7.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.1863	1.2802 1.0920	1.3333 1.0754	1.1745	1.1518	Ave		1.1848				7.9		30.0			
Acrylonitrile	+++++ 0.3911	+++++ 0.3747	0.3989 0.3976	0.3238	0.3545	Ave		0.3734				7.9		30.0			
n-Hexane	+++++ 0.9727	1.0366 0.8942	1.0342 0.8960	0.9090	0.9170	Ave		0.9514				6.6		30.0			
1,1-Dichloroethane	1.7577 1.6050	1.6919 1.4843	1.7739 1.4738	1.5596	1.5327	Ave		1.6099				7.4		30.0			
Vinyl acetate	+++++ 1.4660	+++++ 1.3950	+++++ 1.4207	1.2442	1.3739	Ave		1.3800				6.0		30.0			
cis-1,2-Dichloroethene	+++++ 1.1188	1.1659 1.0479	1.1768 1.0498	1.0570	1.0577	Ave		1.0963				5.2		30.0			
Methyl Ethyl Ketone	+++++ 0.3402	+++++ 0.3275	0.4155 0.3357	0.2780	0.3317	Ave		0.3381				13.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.0507	+++++ 0.0486	+++++ 0.0503	0.0421	0.0486	Ave		0.0481				7.2		30.0			
Tetrahydrofuran	+++++ 0.1426	+++++ 0.1277	+++++ 0.1295	0.1218	0.1505	Ave		0.1344				8.8		30.0			
Chloroform	+++++ 2.5216	4.4447 2.3432	3.4838 2.3203	2.5142	2.4428	Ave		2.8672				28.0		30.0			
Cyclohexane	+++++ 0.2624	0.2538 0.2308	0.2790 0.2302	0.2410	0.2669	Ave		0.2520				7.4		30.0			
1,1,1-Trichloroethane	+++++ 0.5803	0.6115 0.5127	0.6683 0.5064	0.5669	0.6076	Ave		0.5791				9.9		30.0			
Carbon tetrachloride	0.5548 0.6570	0.5953 0.5797	0.6552 0.5739	0.6268	0.6772	Ave		0.6150				7.4		30.0			
2,2,4-Trimethylpentane	+++++ 0.9213	0.9002 0.8028	0.9653 0.7860	0.8446	0.9356	Ave		0.8794				7.8		30.0			
Benzene	+++++ 0.6663	0.7240 0.5854	0.7160 0.5937	0.6182	0.6428	Ave		0.6495				8.5		30.0			
1,2-Dichloroethane	+++++ 0.3842	0.3749 0.3385	0.4128 0.3405	0.3742	0.3845	Ave		0.3728				7.0		30.0			
n-Heptane	+++++ 0.3351	0.3554 0.2904	0.3616 0.2782	0.3168	0.3466	Ave		0.3263				9.9		30.0			
n-Butanol	+++++ 0.1051	+++++ 0.0905	+++++ 0.0943	0.0823	0.1154	Ave		0.0975				13.3		30.0			
Trichloroethene	0.4960 0.3902	0.3721 0.3505	0.4046 0.3598	0.3511	0.4014	Ave		0.3907				12.2		30.0			
1,2-Dichloropropane	+++++ 0.2637	0.2721 0.2377	0.2893 0.2385	0.2532	0.2670	Ave		0.2602				7.2		30.0			
Methyl methacrylate	+++++ 0.2060	+++++ 0.1912	0.1784 0.2019	0.1527	0.2069	Ave		0.1895				11.1		30.0			
1,4-Dioxane	+++++ 0.1347	+++++ 0.1178	+++++ 0.1196	0.1092	0.1508	Ave		0.1264				13.0		30.0			
Dibromomethane	+++++ 0.3748	0.3436 0.3417	0.3771 0.3571	0.3475	0.3755	Ave		0.3596				4.4		30.0			
Bromodichloromethane	+++++ 0.6773	0.5988 0.6051	0.6491 0.6169	0.6078	0.6845	Ave		0.6342				5.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.4403	0.3623 0.3980	0.4098 0.4098	0.3990	0.4355	Ave		0.4078				6.4		30.0			
methyl isobutyl ketone	+++++ 0.4340	+++++ 0.3846	0.4536 0.3941	0.3296	0.4954	Ave		0.4152				14.0		30.0			
Toluene	+++++ 0.5370	0.5534 0.5215	0.5728 0.5400	0.4879	0.5428	Ave		0.5365				5.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
n-Octane	+++++ 0.4952	0.5275 0.4291	0.5545 0.3991	0.4940	0.5273	Ave		0.4895				11.5		30.0			
trans-1,3-Dichloropropene	+++++ 0.4637	0.4156 0.4217	0.4519 0.4372	0.3968	0.4642	Ave		0.4359				5.9		30.0			
1,1,2-Trichloroethane	+++++ 0.2989	0.3071 0.2865	0.3228 0.2970	0.2831	0.3072	Ave		0.3004				4.5		30.0			
Tetrachloroethene	0.5769 0.5543	0.5804 0.5347	0.5824 0.5417	0.5255	0.5664	Ave		0.5578				4.0		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.4352	+++++ 0.4008	0.4313 0.4073	0.3173	0.5090	Ave		0.4168				14.9		30.0			
Dibromochloromethane	+++++ 0.7599	0.5681 0.7316	0.6375 0.7373	0.6656	0.7582	Ave		0.6940				10.5		30.0			
1,2-Dibromoethane	+++++ 0.5905	0.5212 0.5758	0.5604 0.6033	0.5502	0.5937	Ave		0.5707				5.0		30.0			
Chlorobenzene	+++++ 0.7711	0.7659 0.7533	0.7879 0.7892	0.7301	0.7855	Ave		0.7690				2.8		30.0			
Ethylbenzene	+++++ 1.1537	1.1044 1.1267	1.2047 1.1608	1.0194	1.1805	Ave		1.1357				5.4		30.0			
n-Nonane	+++++ 0.4923	0.4818 0.4666	0.5131 0.4510	0.4733	0.5267	Ave		0.4864				5.4		30.0			
m,p-Xylene	+++++ 0.4701	0.4400 0.4625	0.4655 0.4704	0.4032	0.4790	Ave		0.4558				5.7		30.0			
Xylene, o-	+++++ 0.4731	0.4316 0.4665	0.4689 0.4970	0.4047	0.4815	Ave		0.4605				6.9		30.0			
Styrene	+++++ 0.6963	0.5028 0.6950	0.5768 0.7620	0.5693	0.7009	Ave		0.6433				14.5		30.0			
Bromoform	+++++ 0.7047	0.4546 0.6756	0.5365 0.6229	0.5272	0.7241	Ave		0.6065				16.9		30.0			
Cumene	+++++ 1.3026	1.2050 1.2726	1.3096 1.3115	1.1417	1.3368	Ave		1.2685				5.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.7220	0.6767 0.6966	0.7425 0.6965	0.6373	0.7594	Ave		0.7044				5.8		30.0			
n-Propylbenzene	+++++ 1.5448	1.4387 1.5089	1.5567 1.5056	1.3392	1.6071	Ave		1.5002				5.9		30.0			
1,2,3-Trichloropropane	+++++ 0.5512	+++++ 0.5328	0.5852 0.5343	0.4905	0.5842	Ave		0.5463				6.6		30.0			
n-Decane	+++++ 0.5560	+++++ 0.5137	0.6041 0.4454	0.5484	0.6207	Ave		0.5480				11.6		30.0			
4-Ethyltoluene	+++++ 1.2845	1.1193 1.2269	1.2057 1.0192	1.0947	1.3542	Ave		1.1864				9.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.1016	1.0585 1.0410	1.1493 0.8701	1.0127	1.1795	Ave		1.0589				9.6		30.0			
1,3,5-Trimethylbenzene	+++++ 1.0801	0.9500 1.0651	1.0292 1.0905	0.9014	1.1082	Ave		1.0321				7.6		30.0			
Alpha Methyl Styrene	+++++ 0.5555	0.3417 0.5578	0.4062 0.6061	0.4169	0.5555	Ave		0.4914				20.5		30.0			
tert-Butylbenzene	+++++ 1.0169	0.9371 1.0072	0.9823 1.0330	0.8495	1.0484	Ave		0.9821				7.0		30.0			
1,2,4-Trimethylbenzene	+++++ 1.0763	0.9124 1.0656	1.0113 1.0842	0.9011	1.1134	Ave		1.0235				8.3		30.0			
sec-Butylbenzene	+++++ 1.5475	1.2889 1.5171	1.4840 1.4987	1.3023	1.5974	Ave		1.4623				8.2		30.0			
4-Isopropyltoluene	+++++ 1.3241	1.0003 1.2910	1.1505 1.1721	1.0698	1.3675	Ave		1.1965				11.4		30.0			
1,3-Dichlorobenzene	+++++ 0.8404	0.6186 0.8188	0.7414 0.7431	0.7046	0.8532	Ave		0.7600				11.0		30.0			
1,4-Dichlorobenzene	+++++ 0.8222	0.5901 0.8164	0.7099 0.8215	0.6786	0.8212	Ave		0.7514				12.4		30.0			
Benzyl chloride	+++++ 0.9678	0.6015 0.9667	0.7558 1.0283	0.7840	0.9820	Ave		0.8694				18.1		30.0			
n-Butylbenzene	+++++ 1.1912	0.7864 1.1589	0.9391 1.0986	0.9889	1.2539	Ave		1.0596				15.4		30.0			
n-Undecane	+++++ 0.5981	+++++ 0.5704	+++++ 0.5297	0.5171	0.6665	Ave		0.5764				10.4		30.0			
1,2-Dichlorobenzene	+++++ 0.7595	0.5882 0.7593	0.6775 0.7779	0.6367	0.7677	Ave		0.7095				10.6		30.0			
n-Dodecane	+++++ 0.4630	+++++ 0.4249	+++++ 0.4527	0.4069	0.6406	Ave		0.4776				19.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4897	+++++ 0.5278	0.3516 0.5702	0.3565	0.5550	Ave		0.4751				20.6		30.0			
Hexachlorobutadiene	+++++ 0.4668	0.4605 0.4474	0.4188 0.3797	0.3911	0.4993	Ave		0.4376				9.9		30.0			
Naphthalene	+++++ 0.9212	+++++ 1.0428	0.6501 1.2528	0.7066	1.1110	Ave		0.9474				24.8		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4033	+++++ 0.4472	0.3294 0.5116	0.3271	0.5059	Ave		0.4207				19.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117742/4	200-25547-004.D
Level 2	IC 200-117742/5	200-25547-005.D
Level 3	IC 200-117742/6	200-25547-006.D
Level 4	IC 200-117742/7	200-25547-007.D
Level 5	ICIS 200-117742/8	200-25547-008.D
Level 6	IC 200-117742/9	200-25547-009.D
Level 7	IC 200-117742/10	200-25547-010.D
Level 8	IC 200-117742/11	200-25547-011.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 445233	+++++ 561662	+++++ 1185360	136843	265113	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 2607958	+++++ 3293124	98450 6471189	862049	1646825	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 1233863	+++++ 1545162	45670 3189092	392240	750773	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 2186117	33145 2754132	83263 5464682	722942	1361979	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 598524	+++++ 760880	24071 1626493	188998	361799	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 834817	+++++ 1053053	30189 2202515	256761	513028	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	2277 725464	10104 924960	26422 1943486	222426	442918	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	1478 459197	6316 581435	15826 1241294	139289	280239	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 831507	12474 1062684	31104 2237010	268634	533099	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 277940	+++++ 354845	9792 765554	84445	175053	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 489618	7394 617821	17121 1316267	150277	306701	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 819937	12477 1051002	29775 2211369	265293	537425	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 2123248	34712 2720424	85271 5504096	736970	1452859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 747158	+++++ 950957	27779 2056616	227671	465729	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 266521	+++++ 476488	64096 1090645	105498	189005	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 328180	4374 435311	10866 957882	89483	199083	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 1605724	25003 2066857	59536 4292221	510149	1010913	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 97476	+++++ 147880	+++++ 310567	30582	69554	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 709345	10620 916431	25848 1996085	217542	438083	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 757879	+++++ 1010503	+++++ 2173695	207324	474484	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1892933	+++++ 2414480	63397 5238570	568807	1148316	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 757679	+++++ 972136	+++++ 2103785	211193	502588	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 593138	7853 758618	19178 1507832	178125	366475	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 273513	+++++ 366106	+++++ 818642	74430	162239	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 670444	+++++ 859027	26975 1822488	208829	413978	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 1183309	+++++ 1471642	+++++ 3286048	314903	775290	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1743048	23281 2317545	60212 5009333	471108	1077928	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 943918	13116 1206128	33102 2547091	290401	582411	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 311218	+++++ 413836	9905 941818	80069	179242	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 774026	10620 987722	25677 2122307	224767	463684	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	3574 1277089	17334 1639501	44041 3490864	385613	774970	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 1166506	+++++ 1540894	+++++ 3364955	307630	694712	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 890225	11945 1157421	29216 2486493	261351	534831	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 270675	+++++ 361689	10316 795107	68742	167716	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 40363	+++++ 53707	+++++ 119201	10416	24577	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 536642	+++++ 706150	+++++ 1545322	143496	332017	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 2006479	45536 2588192	86495 5495606	621644	1235155	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 987385	12331 1275925	32036 2747759	283991	588802	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 2183596	29706 2834279	76743 6044787	667936	1340327	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	5467 2472216	28923 3204387	75240 6849881	738568	1494019	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 3467108	43732 4437785	110845 9381014	995133	2063883	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 2507496	35172 3236247	82221 7085821	728420	1418032	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 1445868	18215 1871228	47401 4063967	440855	848128	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 1261135	17265 1605387	41524 3320567	373257	764557	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 395423	+++++ 500388	+++++ 1125699	96917	254513	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	4887 1468539	18078 1937305	46458 4294119	413670	885580	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 992303	13221 1313699	33224 2846642	298283	589013	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 775263	+++++ 1057100	20489 2410324	179881	456392	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 506756	+++++ 651251	+++++ 1427963	128712	332679	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 1410343	16691 1888687	43297 4261650	409468	828441	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 2548580	29089 3345103	74537 7363295	716184	1509956	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 1656781	17601 2199925	47059 4891603	470125	960707	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1633361	+++++ 2126285	52084 4704391	388364	1092864	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1969513	24345 2650482	62017 6009236	531157	1138400	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1863500	25627 2371985	63668 4762940	582116	1163263	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 1744981	20189 2330902	51891 5218381	467582	1024014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 1096028	13512 1456169	34953 3305110	308188	644225	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	5279 2032941	25531 2717836	63054 6028468	572115	1187918	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 1596089	+++++ 2037382	46700 4533175	345430	1067510	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 2786909	24990 3718684	69028 8205238	724633	1590060	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 2165464	22929 2926753	60678 6713729	599002	1245189	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 2827839	33693 3829004	85313 8782835	794871	1647398	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 4231255	48585 5726634	130437 12917838	1109730	2475865	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1805598	21197 2371618	55558 5019385	515286	1104660	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 3448245	38712 4701168	100808 10468857	877966	2009169	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1734889	18988 2370953	50767 5531330	440555	1009806	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 2553491	22118 3532798	62457 8480380	619753	1470019	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 2584324	19999 3433968	58090 6932515	573948	1518594	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 4777121	53010 6468169	141795 14595520	1242906	2803577	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 2647926	29768 3540635	80398 7750826	693773	1592598	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 5665480	63289 7669430	168554 16755666	1457974	3370604	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 2021472	+++++ 2708063	63358 5945733	533986	1225149	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 2038913	+++++ 2610804	65411 4956940	596996	1301796	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 4710745	49238 6236047	130548 11342674	1191785	2840074	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 4039848	46564 5291112	124438 9682885	1102531	2473642	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 3961026	41791 5413674	111439 12135589	981280	2324219	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 2037384	15034 2834994	43983 6745330	453835	1164940	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 3729344	41226 5119452	106356 11496326	924793	2198760	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39219-1 Analy Batch No.: 117742

SDG No.:

Instrument ID: CHG.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/20/2017 18:11 Calibration End Date: 06/21/2017 00:04 Calibration ID: 37395

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 3947292	40138 5416079	109500 12065603	981013	2335014	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 5675484	56701 7711106	160682 16678027	1417755	3350133	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 4856157	44005 6562105	124572 13044017	1164615	2868070	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 3081996	27213 4161711	80274 8269289	767052	1789386	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 3015393	25959 4149459	76858 9142560	738715	1722291	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 3549258	26460 4913749	81837 11444111	853487	2059423	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 4368521	34595 5890630	101676 12225620	1076529	2629709	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 2193634	+++++ 2899287	+++++ 5894829	562920	1397812	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 2785465	25874 3859410	73353 8656894	693202	1610156	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1697970	+++++ 2159522	+++++ 5037970	443029	1343575	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1795942	+++++ 2682922	38067 6346002	388126	1163931	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1711853	20260 2273852	45340 4225349	425723	1047102	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 3378310	+++++ 5300271	70387 13941524	769294	2330053	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1478983	+++++ 2272842	35661 5693788	356060	1061067	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117412/3	25406-03.D
Level 2	IC 200-117412/4	25406-04.D
Level 3	IC 200-117412/5	25406-05.D
Level 4	IC 200-117412/6	25406-06.D
Level 5	ICIS 200-117412/7	25406-07.D
Level 6	IC 200-117412/8	25406-08.D
Level 7	IC 200-117412/9	25406-09.D
Level 8	IC 200-117412/17	25406-17.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Propylene	+++++ 0.5029	+++++ 0.4838	+++++ 0.5145	0.5249	0.5124	Ave		0.5077				3.1		30.0			
Dichlorodifluoromethane	+++++ 2.2469	+++++ 2.1217	2.6462 2.1894	2.3547	2.3349	Ave		2.3156				7.9		30.0			
Freon 22	+++++ 1.1076	+++++ 1.0628	1.2863 1.1061	1.1467	1.1382	Ave		1.1413				6.7		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.2077	2.3673 2.0948	2.5511 2.1823	2.2644	2.2661	Ave		2.2762				6.5		30.0			
Chloromethane	+++++ 0.6399	+++++ 0.6174	0.7584 0.6549	0.6390	0.6480	Ave		0.6596				7.6		30.0			
n-Butane	+++++ 1.0504	+++++ 1.0167	1.2277 1.0803	1.0617	1.0730	Ave		1.0850				6.8		30.0			
Vinyl chloride	0.9223 0.8621	0.9114 0.8247	0.9500 0.8803	0.8749	0.8805	Ave		0.8883				4.4		30.0			
1,3-Butadiene	0.8122 0.6151	0.6218 0.5916	0.7014 0.6334	0.6127	0.6215	Ave		0.6512				11.1		30.0			
Bromomethane	+++++ 1.1284	1.1744 1.0869	1.2628 1.1468	1.1190	1.1292	Ave		1.1496				4.9		30.0			
Chloroethane	+++++ 0.5773	+++++ 0.5662	0.6437 0.5939	0.5593	0.5678	Ave		0.5847				5.3		30.0			
Isopentane	+++++ 0.9777	0.9855 0.9608	1.0610 0.9984	0.9395	0.9575	Ave		0.9829				4.0		30.0			
Bromoethene(Vinyl Bromide)	+++++ 1.2792	1.2628 1.2401	1.4121 1.2884	1.2398	1.2735	Ave		1.2851				4.6		30.0			
Trichlorofluoromethane	+++++ 2.6656	2.8617 2.5374	3.0033 2.6114	2.6999	2.7349	Ave		2.7306				5.8		30.0			
n-Pentane	+++++ 1.5123	+++++ 1.4855	1.6459 1.5265	1.4439	1.4773	Ave		1.5153				4.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.4268	+++++ 0.3912	0.4884 0.3249	0.4341	0.4354	Ave		0.4168				13.1		30.0			
Ethyl ether	+++++ 0.7137	0.6977 0.6997	0.7789 0.7076	0.6978	0.7007	Ave		0.7137				4.1		30.0			
Acrolein	+++++ 0.2926	+++++ 0.3245	+++++ 0.3170	0.3198	0.3214	Ave		0.3150				4.1		30.0			
Freon TF	+++++ 2.3523	2.5788 2.2706	2.6137 2.3092	2.3494	2.3595	Ave		2.4048				5.6		30.0			
1,1-Dichloroethene	+++++ 1.2048	1.1920 1.1667	1.3233 1.1971	1.1919	1.1993	Ave		1.2107				4.2		30.0			
Acetone	+++++ 1.2818	+++++ 1.2390	+++++ 1.2162	1.2840	1.2888	Ave		1.2620				2.6		30.0			
Isopropyl alcohol	+++++ 1.5582	+++++ 1.4978	+++++ 1.5012	1.6060	1.5911	Ave		1.5509				3.2		30.0			
Carbon disulfide	+++++ 3.0695	+++++ 2.9906	3.3454 3.0315	3.0347	3.0407	Ave		3.0854				4.2		30.0			
3-Chloropropene	+++++ 1.1076	1.0796 1.0713	1.1616 1.0322	1.0971	1.0875	Ave		1.0910				3.6		30.0			
Acetonitrile	+++++ 0.6727	0.8359 0.6239	0.8187 0.6630	0.6494	0.6708	Ave		0.7049				12.1		30.0			
Methylene Chloride	+++++ 1.0041	+++++ 0.9843	1.3350 0.9836	1.0168	1.0043	Ave		1.0547				13.1		30.0			
tert-Butyl alcohol	+++++ 2.3211	+++++ 2.2132	+++++ 2.2120	2.3460	2.3492	Ave		2.2883				3.1		30.0			
Methyl tert-butyl ether	+++++ 3.2278	3.1981 3.1209	3.4309 3.1425	3.2074	3.2172	Ave		3.2207				3.1		30.0			
trans-1,2-Dichloroethene	+++++ 1.4722	1.5042 1.4371	1.6423 1.4548	1.4857	1.4580	Ave		1.4935				4.6		30.0			
Acrylonitrile	+++++ 0.7424	+++++ 0.7334	0.7774 0.7443	0.7152	0.7273	Ave		0.7400				2.9		30.0			
n-Hexane	+++++ 1.6206	1.5919 1.5825	1.7986 1.5917	1.5957	1.5818	Ave		1.6233				4.8		30.0			
1,1-Dichloroethane	2.4480 1.9130	1.9627 1.8569	2.1886 1.8534	1.9267	1.9102	Ave		2.0074				10.3		30.0			
Vinyl acetate	+++++ 2.3327	+++++ 2.2755	+++++ 2.2477	2.2761	2.2938	Ave		2.2851				1.4		30.0			
Methyl Ethyl Ketone	+++++ 0.6132	+++++ 0.5959	0.7174 0.5892	0.6024	0.6110	Ave		0.6215				7.7		30.0			
cis-1,2-Dichloroethene	+++++ 1.3884	1.4406 1.3329	1.5135 1.3293	1.3891	1.3884	Ave		1.3975				4.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethyl acetate	+++++ 0.1114	+++++ 0.1082	+++++ 0.1089	0.1106	0.1091	Ave		0.1096				1.2		30.0			
Tetrahydrofuran	+++++ 0.2215	+++++ 0.2161	+++++ 0.2262	0.2222	0.2181	Ave		0.2208				1.8		30.0			
Chloroform	+++++ 2.3491	2.4043 2.2493	2.6221 2.2654	2.3806	2.3478	Ave		2.3741				5.2		30.0			
1,1,1-Trichloroethane	+++++ 0.4865	0.4994 0.4625	0.5501 0.4797	0.5016	0.4920	Ave		0.4960				5.5		30.0			
Cyclohexane	+++++ 0.3663	0.3757 0.3527	0.3952 0.3662	0.3657	0.3627	Ave		0.3692				3.6		30.0			
Carbon tetrachloride	0.5430 0.5097	0.5009 0.4836	0.5600 0.5028	0.5209	0.5145	Ave		0.5169				4.7		30.0			
2,2,4-Trimethylpentane	+++++ 1.1472	1.1216 1.1152	1.2262 1.1544	1.1326	1.1256	Ave		1.1461				3.3		30.0			
Benzene	+++++ 0.8084	0.8227 0.7838	0.8950 0.8199	0.8095	0.8035	Ave		0.8204				4.3		30.0			
1,2-Dichloroethane	+++++ 0.2663	0.2648 0.2544	0.2896 0.2628	0.2744	0.2719	Ave		0.2692				4.1		30.0			
n-Heptane	+++++ 0.3747	0.3940 0.3658	0.4116 0.3791	0.3742	0.3688	Ave		0.3812				4.3		30.0			
n-Butanol	+++++ 0.1593	+++++ 0.1533	+++++ 0.1610	0.1553	0.1603	Ave		0.1578				2.1		30.0			
Trichloroethene	0.4191 0.3628	0.3691 0.3486	0.3864 0.3665	0.3664	0.3625	Ave		0.3727				5.8		30.0			
1,2-Dichloropropane	+++++ 0.2789	0.2721 0.2712	0.3079 0.2801	0.2761	0.2763	Ave		0.2804				4.5		30.0			
Methyl methacrylate	+++++ 0.2848	+++++ 0.2762	0.2868 0.2901	0.2761	0.2814	Ave		0.2826				2.0		30.0			
1,4-Dioxane	+++++ 0.1841	+++++ 0.1726	+++++ 0.1801	0.1911	0.1948	Ave		0.1845				4.8		30.0			
Dibromomethane	+++++ 0.4091	0.4265 0.3923	0.4511 0.4170	0.4243	0.4171	Ave		0.4196				4.3		30.0			
Bromodichloromethane	+++++ 0.5469	0.5327 0.5248	0.5969 0.5435	0.5558	0.5489	Ave		0.5499				4.2		30.0			
cis-1,3-Dichloropropene	+++++ 0.4424	0.4339 0.4288	0.4607 0.4461	0.4380	0.4361	Ave		0.4409				2.4		30.0			
methyl isobutyl ketone	+++++ 0.4938	+++++ 0.4801	0.5128 0.4931	0.4740	0.4804	Ave		0.4890				2.9		30.0			
n-Octane	+++++ 0.5303	0.5251 0.5108	0.5726 0.5088	0.5340	0.5256	Ave		0.5296				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Toluene	+++++ 0.7014	0.7597 0.6718	0.8133 0.6750	0.6969	0.7017	Ave		0.7171				7.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4338	0.4068 0.4185	0.4440 0.4357	0.4323	0.4301	Ave		0.4288				2.9		30.0			
1,1,2-Trichloroethane	+++++ 0.3333	0.3314 0.3215	0.3640 0.3305	0.3300	0.3313	Ave		0.3346				4.0		30.0			
Tetrachloroethene	0.7748 0.6671	0.6825 0.6340	0.7491 0.6455	0.6636	0.6697	Ave		0.6858				7.3		30.0			
Methyl Butyl Ketone (2-Hexanone)	+++++ 0.5338	+++++ 0.5167	0.6330 0.5275	0.4785	0.5218	Ave		0.5352				9.7		30.0			
Dibromochloromethane	+++++ 0.7372	0.6907 0.6948	0.7772 0.7022	0.7098	0.7356	Ave		0.7211				4.3		30.0			
1,2-Dibromoethane	+++++ 0.6572	0.6256 0.6304	0.7031 0.6432	0.6414	0.6552	Ave		0.6509				4.0		30.0			
Chlorobenzene	+++++ 1.0170	1.0185 0.9701	1.1098 0.9872	1.0006	1.0086	Ave		1.0160				4.4		30.0			
Ethylbenzene	+++++ 1.5280	1.5614 1.4552	1.7044 1.4354	1.5208	1.5347	Ave		1.5343				5.7		30.0			
n-Nonane	+++++ 0.6376	0.6318 0.6139	0.6893 0.5981	0.6302	0.6293	Ave		0.6329				4.5		30.0			
m,p-Xylene	+++++ 0.6372	0.6426 0.6031	0.7124 0.5865	0.6368	0.6425	Ave		0.6373				6.2		30.0			
Xylene, o-	+++++ 0.6354	0.6472 0.6058	0.6977 0.5955	0.6397	0.6374	Ave		0.6369				5.2		30.0			
Styrene	+++++ 1.0112	0.8943 0.9646	1.0398 0.9644	0.9814	1.0093	Ave		0.9807				4.8		30.0			
Bromoform	+++++ 0.7609	0.6655 0.7112	0.7663 0.6800	0.6807	0.7589	Ave		0.7176				6.1		30.0			
Cumene	+++++ 1.8316	1.8138 1.7405	2.0072 1.6867	1.8363	1.8351	Ave		1.8216				5.5		30.0			
1,1,2,2-Tetrachloroethane	+++++ 0.8859	0.8716 0.8386	0.9511 0.8085	0.8863	0.8874	Ave		0.8756				5.1		30.0			
n-Propylbenzene	+++++ 2.0852	2.0783 1.9402	2.3055 1.8268	2.1146	2.1211	Ave		2.0674				7.3		30.0			
1,2,3-Trichloropropane	+++++ 0.6286	+++++ 0.5922	0.7018 0.5616	0.6318	0.6364	Ave		0.6254				7.6		30.0			
n-Decane	+++++ 0.7795	+++++ 0.7574	0.8963 0.7615	0.8090	0.7787	Ave		0.7971				6.5		30.0			
4-Ethyltoluene	+++++ 1.7838	1.8012 1.6699	1.9571 1.6687	1.8310	1.8429	Ave		1.7935				5.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chlorotoluene	+++++ 1.4106	1.3770 1.3425	1.5411 1.3189	1.4017	1.4243	Ave		1.4023				5.1		30.0			
1,3,5-Trimethylbenzene	+++++ 1.4081	1.5302 1.3319	1.6204 1.4278	1.5047	1.5005	Ave		1.4748				6.4		30.0			
Alpha Methyl Styrene	+++++ 0.7730	0.6929 0.7446	0.7962 0.7768	0.7834	0.8043	Ave		0.7673				4.9		30.0			
tert-Butylbenzene	+++++ 1.4145	1.5062 1.3388	1.6532 1.3781	1.5077	1.4716	Ave		1.4671				7.1		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4291	1.4499 1.3805	1.6441 1.4437	1.5234	1.4777	Ave		1.4784				5.8		30.0			
sec-Butylbenzene	+++++ 2.1449	2.2636 2.0606	2.5239 2.0860	2.2869	2.1936	Ave		2.2228				7.1		30.0			
4-Isopropyltoluene	+++++ 1.8227	1.8537 1.7727	2.1153 1.7975	1.9325	1.8073	Ave		1.8717				6.4		30.0			
1,3-Dichlorobenzene	+++++ 1.0575	1.0169 1.0224	1.1680 1.0737	1.1140	1.1034	Ave		1.0794				5.0		30.0			
1,4-Dichlorobenzene	+++++ 1.0413	0.9515 1.0166	1.1111 1.0719	1.0914	1.0730	Ave		1.0510				5.1		30.0			
Benzyl chloride	+++++ 1.1548	1.0304 1.1568	1.1773 1.2313	1.1977	1.1509	Ave		1.1570				5.4		30.0			
n-Undecane	+++++ 0.8894	+++++ 0.8596	+++++ 0.8181	0.8365	0.8682	Ave		0.8544				3.3		30.0			
n-Butylbenzene	+++++ 1.6029	1.4895 1.5598	1.7498 1.5588	1.6508	1.5362	Ave		1.5925				5.4		30.0			
1,2-Dichlorobenzene	+++++ 0.9962	0.9752 0.9801	1.1313 1.0224	1.0539	1.0045	Ave		1.0234				5.3		30.0			
n-Dodecane	+++++ 0.6529	+++++ 0.6434	+++++ 0.5800	0.6210	0.6363	Ave		0.6267				4.6		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6911	+++++ 0.7059	0.3640 0.7165	0.5797	0.6805	Ave		0.6230				21.8		30.0			
Hexachlorobutadiene	+++++ 0.7084	0.6928 0.6614	0.8016 0.6318	0.7082	0.7203	Ave		0.7035				7.6		30.0			
Naphthalene	+++++ 1.4785	+++++ 1.5670	0.7651 1.6107	1.2827	1.4454	Ave		1.3582				23.0		30.0			
1,2,3-Trichlorobenzene	+++++ 0.5639	+++++ 0.5809	0.2992 0.5463	0.4785	0.5564	Ave		0.5042				21.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-117412/3	25406-03.D
Level 2	IC 200-117412/4	25406-04.D
Level 3	IC 200-117412/5	25406-05.D
Level 4	IC 200-117412/6	25406-06.D
Level 5	ICIS 200-117412/7	25406-07.D
Level 6	IC 200-117412/8	25406-08.D
Level 7	IC 200-117412/9	25406-09.D
Level 8	IC 200-117412/17	25406-17.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Propylene	BCM	Ave	+++++ 210990	+++++ 285855	+++++ 678761	65282	136327	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dichlorodifluoromethane	BCM	Ave	+++++ 942728	+++++ 1253673	33878 2888317	292865	621158	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Freon 22	BCM	Ave	+++++ 464728	+++++ 627968	16468 1459149	142627	302794	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorotetrafluoroethane	BCM	Ave	+++++ 926287	12484 1237754	32660 2878946	281641	602863	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloromethane	BCM	Ave	+++++ 268506	+++++ 364802	9709 864002	79478	172389	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Butane	BCM	Ave	+++++ 440737	+++++ 600735	15718 1425143	132056	285466	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Vinyl chloride	BCM	Ave	980 361713	4806 487274	12162 1161300	108821	234231	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Butadiene	BCM	Ave	863 258072	3279 349538	8980 835544	76207	165342	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromomethane	BCM	Ave	+++++ 473439	6193 642242	16167 1512926	139177	300407	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chloroethane	BCM	Ave	+++++ 242220	+++++ 334551	8241 783496	69570	151059	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Isopentane	BCM	Ave	+++++ 410235	5197 567729	13583 1317167	116858	254717	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoethene(Vinyl Bromide)	BCM	Ave	+++++ 536716	6659 732723	18078 1699627	154202	338791	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Trichlorofluoromethane	BCM	Ave	+++++ 1118418	15091 1499320	38450 3444979	335808	727563	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Pentane	BCM	Ave	+++++ 634545	+++++ 877745	21072 2013850	179588	393021	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Ethanol	BCM	Ave	+++++ 239269	+++++ 462371	62602 1071650	108054	173815	+++++ 20.0	+++++ 40.0	5.01 100.0	9.99	15.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl ether	BCM	Ave	+++++ 299467	3679 413419	9972 933452	86788	186420	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrolein	BCM	Ave	+++++ 122780	+++++ 191716	+++++ 418162	39772	85498	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Freon TF	BCM	Ave	+++++ 986985	13599 1341623	33462 3046406	292210	627704	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethene	BCM	Ave	+++++ 505485	6286 689396	16942 1579209	148245	319059	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetone	BCM	Ave	+++++ 537832	+++++ 732087	+++++ 1604491	159703	342857	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Isopropyl alcohol	BCM	Ave	+++++ 653795	+++++ 885035	+++++ 1980369	199755	423293	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Carbon disulfide	BCM	Ave	+++++ 1287870	+++++ 1767110	42830 3999233	377446	808929	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
3-Chloropropene	BCM	Ave	+++++ 464727	5693 633025	14871 1361741	136458	289308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acetonitrile	BCM	Ave	+++++ 282244	4408 368655	10482 874669	80769	178445	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methylene Chloride	BCM	Ave	+++++ 421304	+++++ 581582	17092 1297540	126472	267173	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
tert-Butyl alcohol	BCM	Ave	+++++ 973880	+++++ 1307736	+++++ 2918058	291792	624975	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl tert-butyl ether	BCM	Ave	+++++ 1354314	16865 1844089	43924 4145664	398928	855881	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,2-Dichloroethene	BCM	Ave	+++++ 617704	7932 849161	21026 1919206	184785	387871	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Acrylonitrile	BCM	Ave	+++++ 311481	+++++ 433343	9953 981875	88952	193481	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Hexane	BCM	Ave	+++++ 679984	8395 935038	23026 2099861	198470	420815	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1-Dichloroethane	BCM	Ave	2601 802639	10350 1097218	28019 2445011	239634	508178	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Vinyl acetate	BCM	Ave	+++++ 978745	+++++ 1344518	+++++ 2965169	283097	610224	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Methyl Ethyl Ketone	BCM	Ave	+++++ 257284	+++++ 352080	9185 777234	74923	162541	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
cis-1,2-Dichloroethene	BCM	Ave	+++++ 582521	7597 787587	19377 1753614	172773	369363	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethyl acetate	BCM	Ave	+++++ 46723	+++++ 63914	+++++ 143705	13753	29021	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Tetrahydrofuran	DFBZ	Ave	+++++ 450729	+++++ 619561	+++++ 1392761	133147	281732	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chloroform	BCM	Ave	+++++ 985605	12679 1329094	33569 2988542	296095	624600	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,1-Trichloroethane	DFBZ	Ave	+++++ 989869	12894 1326158	34500 2953753	300579	635646	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cyclohexane	DFBZ	Ave	+++++ 745386	9700 1011386	24786 2254709	219142	468618	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Carbon tetrachloride	DFBZ	Ave	2774 1037111	12933 1386699	35120 3095960	312096	664681	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 2334305	28962 3197982	76901 7107621	678649	1454187	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzene	DFBZ	Ave	+++++ 1644992	21244 2247515	56128 5048033	485046	1038012	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloroethane	DFBZ	Ave	+++++ 541780	6838 729576	18163 1618260	164424	351308	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Heptane	DFBZ	Ave	+++++ 762452	10174 1048930	25815 2333823	224245	476398	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Butanol	DFBZ	Ave	+++++ 324081	+++++ 439623	+++++ 991145	93080	207134	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Trichloroethene	DFBZ	Ave	2141 738212	9531 999583	24231 2256311	219577	468298	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichloropropane	DFBZ	Ave	+++++ 567466	7027 777621	19310 1724789	165424	356916	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl methacrylate	DFBZ	Ave	+++++ 579511	+++++ 791974	17985 1786122	165457	363580	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,4-Dioxane	DFBZ	Ave	+++++ 374678	+++++ 494914	+++++ 1108719	114498	251695	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
Dibromomethane	DFBZ	Ave	+++++ 832505	11012 1124812	28294 2567728	254246	538843	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromodichloromethane	DFBZ	Ave	+++++ 1112872	13754 1504858	37432 3346527	333029	709193	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 900291	11204 1229712	28895 2746619	262424	563364	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
methyl isobutyl ketone	DFBZ	Ave	+++++ 1004806	+++++ 1376741	32158 3035705	284026	620576	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Octane	DFBZ	Ave	+++++ 1079095	13558 1464685	35913 3132573	319981	678976	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Toluene	CBNZ d5	Ave	+++++ 1277296	17283 1729121	44439 3775773	381354	814042	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
trans-1,3-Dichloropropene	DFBZ	Ave	+++++ 882808	10505 1200089	27847 2682431	259025	555707	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2-Trichloroethane	CBNZ d5	Ave	+++++ 606971	7538 827409	19891 1848586	180581	384293	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	CBNZ d5	Ave	3544 1214722	15527 1631781	40933 3611022	363113	776951	0.0401 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Methyl Butyl Ketone (2-Hexanone)	CBNZ d5	Ave	+++++ 972045	+++++ 1329951	34587 2950528	261819	605307	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Dibromochloromethane	CBNZ d5	Ave	+++++ 1342341	15713 1788240	42467 3928219	388389	853364	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 1196670	14232 1622513	38420 3597765	350983	760098	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Chlorobenzene	CBNZ d5	Ave	+++++ 1852015	23170 2496779	60641 5522031	547505	1170108	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Ethylbenzene	CBNZ d5	Ave	+++++ 2782511	35521 3745237	93128 8029176	832162	1780457	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Nonane	CBNZ d5	Ave	+++++ 1161061	14372 1580020	37663 3345521	344818	730065	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
m,p-Xylene	CBNZ d5	Ave	+++++ 2320534	29239 3104207	77846 6562001	696919	1490804	+++++ 30.0	0.401 40.0	1.00 80.0	9.99	20.0
Xylene, o-	CBNZ d5	Ave	+++++ 1157045	14722 1559037	38123 3331127	350034	739444	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Styrene	CBNZ d5	Ave	+++++ 1841423	20344 2482613	56816 5394551	537012	1170859	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Bromoform	CBNZ d5	Ave	+++++ 1385539	15139 1830410	41872 3803648	372459	880380	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Cumene	CBNZ d5	Ave	+++++ 3335308	41262 4479589	109675 9434910	1004765	2128904	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 1613143	19827 2158409	51966 4522485	484955	1029521	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Propylbenzene	CBNZ d5	Ave	+++++ 3797080	47280 4993516	125974 10218912	1157084	2460718	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichloropropane	CBNZ d5	Ave	+++++ 1144651	+++++ 1524148	38346 3141599	345723	738287	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
n-Decane	CBNZ d5	Ave	+++++ 1419463	+++++ 1949374	48973 4259872	442687	903393	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
4-Ethyltoluene	CBNZ d5	Ave	+++++ 3248202	40976 4297720	106936 9334577	1001878	2137929	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
2-Chlorotoluene	CBNZ d5	Ave	+++++ 2568660	31325 3455068	84206 7377890	766985	1652384	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3,5-Trimethylbenzene	CBNZ d5	Ave	+++++ 2564053	34811 3427877	88540 7986620	823358	1740818	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Alpha Methyl Styrene	CBNZ d5	Ave	+++++ 1407572	15762 1916421	43506 4345529	428670	933114	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
tert-Butylbenzene	CBNZ d5	Ave	+++++ 2575773	34265 3445528	90329 7708676	824961	1707270	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-39253-1 Analy Batch No.: 117412

SDG No.:

Instrument ID: CHB.i GC Column: RTX-624 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/08/2017 16:56 Calibration End Date: 06/09/2017 10:03 Calibration ID: 37388

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trimethylbenzene	CBNZ d5	Ave	+++++ 2602400	32983 3552915	89833 8075820	833598	1714347	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
sec-Butylbenzene	CBNZ d5	Ave	+++++ 3905882	51494 5303245	137905 11668571	1251324	2544869	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
4-Isopropyltoluene	CBNZ d5	Ave	+++++ 3319141	42169 4562286	115582 10055074	1057401	2096703	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,3-Dichlorobenzene	CBNZ d5	Ave	+++++ 1925637	23133 2631344	63821 6006040	609565	1280053	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,4-Dichlorobenzene	CBNZ d5	Ave	+++++ 1896170	21646 2616537	60709 5995773	597178	1244806	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Benzyl chloride	CBNZ d5	Ave	+++++ 2102793	23441 2977156	64326 6887681	655364	1335135	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Undecane	CBNZ d5	Ave	+++++ 1619643	+++++ 2212449	+++++ 4576023	457712	1007234	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
n-Butylbenzene	CBNZ d5	Ave	+++++ 2918761	33885 4014428	95610 8719587	903273	1782122	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
1,2-Dichlorobenzene	CBNZ d5	Ave	+++++ 1814021	22184 2522582	61815 5719127	576667	1165286	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
n-Dodecane	CBNZ d5	Ave	+++++ 1188830	+++++ 1655933	+++++ 3244209	339794	738177	+++++ 15.0	+++++ 20.0	+++++ 40.0	4.99	10.00
1,2,4-Trichlorobenzene	CBNZ d5	Ave	+++++ 1258423	+++++ 1816811	19890 4008050	317188	789506	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
Hexachlorobutadiene	CBNZ d5	Ave	+++++ 1290009	15761 1702309	43802 3534406	387495	835618	+++++ 15.0	0.200 20.0	0.500 40.0	4.99	10.00
Naphthalene	CBNZ d5	Ave	+++++ 2692354	+++++ 4032881	41803 9010043	701877	1676835	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00
1,2,3-Trichlorobenzene	CBNZ d5	Ave	+++++ 1026769	+++++ 1494985	16347 3055611	261808	645454	+++++ 15.0	+++++ 20.0	0.500 40.0	4.99	10.00

Curve Type Legend:
Ave = Average ISTD

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	0.7663		8.39	10.0	-16.1	30.0
Dichlorodifluoromethane	Ave	3.765	3.365		8.93	10.0	-10.6	30.0
Freon 22	Ave	2.071	1.790		8.64	10.0	-13.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	3.879		9.89	10.0	-1.1	30.0
Chloromethane	Ave	1.217	1.002		8.23	10.0	-17.6	30.0
n-Butane	Ave	2.353	1.973		8.38	10.0	-16.2	30.0
Vinyl chloride	Ave	1.853	1.545		8.34	10.0	-16.6	30.0
1,3-Butadiene	Ave	1.474	1.190		8.07	10.0	-19.2	30.0
Bromomethane	Ave	1.533	1.409		9.19	10.0	-8.1	30.0
Chloroethane	Ave	0.9032	0.8032		8.89	10.0	-11.1	30.0
Isopentane	Ave	1.856	1.743		9.39	10.0	-6.1	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.496		9.58	10.0	-4.2	30.0
Trichlorofluoromethane	Ave	4.030	3.749		9.30	10.0	-7.0	30.0
n-Pentane	Ave	2.889	2.830		9.79	10.0	-2.0	30.0
Ethanol	Ave	0.7560	0.6839		13.6	15.0	-9.5	30.0
Ethyl ether	Ave	1.198	1.229		10.3	10.0	2.6	30.0
Acrolein	Ave	0.5128	0.6311		12.3	10.0	23.1	30.0
Freon TF	Ave	3.358	3.158		9.40	10.0	-6.0	30.0
1,1-Dichloroethene	Ave	1.618	1.532		9.47	10.0	-5.3	30.0
Acetone	Ave	2.561	2.369		9.25	10.0	-7.5	30.0
Isopropyl alcohol	Ave	2.921	2.536		8.68	10.0	-13.2	30.0
Carbon disulfide	Ave	4.629	5.043		10.9	10.0	9.0	30.0
3-Chloropropene	Ave	2.113	1.869		8.85	10.0	-11.5	30.0
Acetonitrile	Ave	1.260	1.268		10.1	10.0	0.7	30.0
Methylene Chloride	Ave	2.069	1.799		8.70	10.0	-13.0	30.0
tert-Butyl alcohol	Ave	3.668	3.391		9.24	10.0	-7.5	30.0
Methyl tert-butyl ether	Ave	4.936	4.759		9.64	10.0	-3.6	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.498		9.78	10.0	-2.1	30.0
Acrylonitrile	Ave	1.272	1.236		9.71	10.0	-2.9	30.0
n-Hexane	Ave	2.865	2.927		10.2	10.0	2.2	30.0
1,1-Dichloroethane	Ave	3.526	3.162		8.96	10.0	-10.3	30.0
Vinyl acetate	Ave	4.318	4.210		9.75	10.0	-2.5	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.752		9.40	10.0	-6.0	30.0
Methyl Ethyl Ketone	Ave	0.9898	0.9074		9.17	10.0	-8.3	30.0
Ethyl acetate	Ave	0.1467	0.1503		10.2	10.0	2.5	30.0
Tetrahydrofuran	Ave	0.4388	0.4047		9.22	10.0	-7.8	30.0
Chloroform	Ave	3.665	3.478		9.49	10.0	-5.1	30.0
Cyclohexane	Ave	0.5046	0.4956		9.82	10.0	-1.8	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.6918		9.48	10.0	-5.2	30.0
Carbon tetrachloride	Ave	0.6942	0.6906		9.95	10.0	-0.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	1.826		9.44	10.0	-5.6	30.0
Benzene	Ave	1.191	1.112		9.34	10.0	-6.6	30.0
1,2-Dichloroethane	Ave	0.4645	0.4346		9.35	10.0	-6.4	30.0
n-Heptane	Ave	0.7288	0.6423		8.81	10.0	-11.9	30.0
n-Butanol	Ave	0.2374	0.2372		9.99	10.0	-0.0	30.0
Trichloroethene	Ave	0.5023	0.4737		9.43	10.0	-5.7	30.0
1,2-Dichloropropane	Ave	0.4676	0.4191		8.96	10.0	-10.4	30.0
Methyl methacrylate	Ave	0.4293	0.4135		9.63	10.0	-3.7	30.0
1,4-Dioxane	Ave	0.2325	0.2173		9.34	10.0	-6.6	30.0
Dibromomethane	Ave	0.4351	0.4123		9.47	10.0	-5.2	30.0
Bromodichloromethane	Ave	0.8316	0.7806		9.38	10.0	-6.1	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.5961		9.64	10.0	-3.5	30.0
methyl isobutyl ketone	Ave	0.9410	0.8147		8.66	10.0	-13.4	30.0
n-Octane	Ave	1.022	0.9226		9.02	10.0	-9.8	30.0
Toluene	Ave	0.9210	0.8810		9.56	10.0	-4.4	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.5782		9.57	10.0	-4.2	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.4492		9.53	10.0	-4.7	30.0
Tetrachloroethene	Ave	0.6859	0.6719		9.79	10.0	-2.0	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	0.8123		8.53	10.0	-14.7	30.0
Dibromochloromethane	Ave	0.8493	0.8223		9.68	10.0	-3.2	30.0
1,2-Dibromoethane	Ave	0.7686	0.7520		9.78	10.0	-2.2	30.0
Chlorobenzene	Ave	1.132	1.069		9.44	10.0	-5.6	30.0
Ethylbenzene	Ave	1.948	1.877		9.63	10.0	-3.6	30.0
n-Nonane	Ave	1.009	0.9479		9.39	10.0	-6.0	30.0
m,p-Xylene	Ave	0.7551	0.7324		19.4	20.0	-3.0	30.0
Xylene, o-	Ave	0.7274	0.7045		9.68	10.0	-3.2	30.0
Styrene	Ave	1.116	1.089		9.75	10.0	-2.5	30.0
Bromoform	Ave	0.7713	0.7900		10.2	10.0	2.4	30.0
Cumene	Ave	2.105	2.064		9.80	10.0	-2.0	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.153		9.43	10.0	-5.7	30.0
n-Propylbenzene	Ave	2.660	2.541		9.55	10.0	-4.5	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.8332		8.99	10.0	-10.1	30.0
n-Decane	Ave	1.330	1.198		9.01	10.0	-9.9	30.0
4-Ethyltoluene	Ave	2.141	2.102		9.82	10.0	-1.8	30.0
2-Chlorotoluene	Ave	1.864	1.755		9.41	10.0	-5.9	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.707		9.60	10.0	-4.0	30.0
Alpha Methyl Styrene	Ave	0.8375	0.8156		9.74	10.0	-2.6	30.0
tert-Butylbenzene	Ave	1.671	1.605		9.60	10.0	-4.0	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.704		9.64	10.0	-3.6	30.0
sec-Butylbenzene	Ave	2.617	2.529		9.66	10.0	-3.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab Sample ID: ICV 200-117699/13 Calibration Date: 06/19/2017 23:25

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25526-13.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.050		9.75	10.0	-2.5	30.0
1,3-Dichlorobenzene	Ave	1.139	1.064		9.34	10.0	-6.6	30.0
1,4-Dichlorobenzene	Ave	1.077	0.9940		9.23	10.0	-7.7	30.0
Benzyl chloride	Ave	1.290	1.199		9.29	10.0	-7.0	30.0
n-Undecane	Ave	1.505	1.355		9.01	10.0	-9.9	30.0
n-Butylbenzene	Ave	2.118	2.063		9.74	10.0	-2.6	30.0
1,2-Dichlorobenzene	Ave	1.071	1.010		9.43	10.0	-5.7	30.0
n-Dodecane	Ave	1.095	0.9872		9.02	10.0	-9.8	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.5113		8.50	10.0	-15.0	30.0
Hexachlorobutadiene	Ave	0.6760	0.6194		9.16	10.0	-8.4	30.0
Naphthalene	Ave	1.249	0.9481		7.59	10.0	-24.1	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.4199		8.08	10.0	-19.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab Sample ID: CCVIS 200-118269/2 Calibration Date: 07/06/2017 10:56

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25782-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.9133	0.7313		8.01	10.0	-19.9	30.0
Dichlorodifluoromethane	Ave	3.765	3.298		8.76	10.0	-12.4	30.0
Freon 22	Ave	2.071	1.762		8.51	10.0	-14.9	30.0
1,2-Dichlorotetrafluoroethane	Ave	3.923	3.463		8.83	10.0	-11.7	30.0
Chloromethane	Ave	1.217	0.9831		8.08	10.0	-19.2	30.0
n-Butane	Ave	2.353	1.981		8.42	10.0	-15.8	30.0
Vinyl chloride	Ave	1.853	1.586		8.55	10.0	-14.4	30.0
1,3-Butadiene	Ave	1.474	1.309		8.88	10.0	-11.2	30.0
Bromomethane	Ave	1.533	1.450		9.46	10.0	-5.4	30.0
Chloroethane	Ave	0.9032	0.8205		9.08	10.0	-9.2	30.0
Isopentane	Ave	1.856	1.523		8.20	10.0	-17.9	30.0
Bromoethene(Vinyl Bromide)	Ave	1.562	1.573		10.1	10.0	0.7	30.0
Trichlorofluoromethane	Ave	4.030	4.023		9.98	10.0	-0.2	30.0
n-Pentane	Ave	2.889	2.504		8.66	10.0	-13.4	30.0
Ethanol	Ave	0.7560	0.7123		14.1	15.0	-5.8	30.0
Ethyl ether	Ave	1.198	1.141		9.52	10.0	-4.7	30.0
Acrolein	Ave	0.5128	0.5299		10.3	10.0	3.3	30.0
Freon TF	Ave	3.358	3.390		10.1	10.0	1.0	30.0
1,1-Dichloroethene	Ave	1.618	1.639		10.1	10.0	1.3	30.0
Acetone	Ave	2.561	2.577		10.1	10.0	0.6	30.0
Carbon disulfide	Ave	4.629	4.696		10.1	10.0	1.5	30.0
Isopropyl alcohol	Ave	2.921	2.956		10.1	10.0	1.2	30.0
3-Chloropropene	Ave	2.113	2.040		9.66	10.0	-3.4	30.0
Acetonitrile	Ave	1.260	1.216		9.66	10.0	-3.4	30.0
Methylene Chloride	Ave	2.069	1.938		9.37	10.0	-6.3	30.0
tert-Butyl alcohol	Ave	3.668	3.990		10.9	10.0	8.8	30.0
Methyl tert-butyl ether	Ave	4.936	5.350		10.8	10.0	8.4	30.0
trans-1,2-Dichloroethene	Ave	2.553	2.631		10.3	10.0	3.1	30.0
Acrylonitrile	Ave	1.272	1.258		9.89	10.0	-1.1	30.0
n-Hexane	Ave	2.865	2.881		10.1	10.0	0.6	30.0
1,1-Dichloroethane	Ave	3.526	3.406		9.66	10.0	-3.4	30.0
Vinyl acetate	Ave	4.318	4.323		10.0	10.0	0.1	30.0
cis-1,2-Dichloroethene	Ave	1.863	1.990		10.7	10.0	6.8	30.0
Methyl Ethyl Ketone	Ave	0.9898	1.005		10.1	10.0	1.5	30.0
Ethyl acetate	Ave	0.1467	0.1585		10.8	10.0	8.0	30.0
Tetrahydrofuran	Ave	0.4388	0.4299		9.79	10.0	-2.0	30.0
Chloroform	Ave	3.665	3.846		10.5	10.0	5.0	30.0
Cyclohexane	Ave	0.5046	0.5532		11.0	10.0	9.6	30.0
1,1,1-Trichloroethane	Ave	0.7298	0.8032		11.0	10.0	10.1	30.0
Carbon tetrachloride	Ave	0.6942	0.7857		11.3	10.0	13.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab Sample ID: CCVIS 200-118269/2 Calibration Date: 07/06/2017 10:56

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25782-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.933	1.995		10.3	10.0	3.2	30.0
Benzene	Ave	1.191	1.230		10.3	10.0	3.3	30.0
1,2-Dichloroethane	Ave	0.4645	0.5037		10.8	10.0	8.4	30.0
n-Heptane	Ave	0.7288	0.7057		9.68	10.0	-3.2	30.0
n-Butanol	Ave	0.2374	0.2450		10.3	10.0	3.2	30.0
Trichloroethene	Ave	0.5023	0.5338		10.6	10.0	6.3	30.0
1,2-Dichloropropane	Ave	0.4676	0.4723		10.1	10.0	1.0	30.0
Methyl methacrylate	Ave	0.4293	0.4538		10.6	10.0	5.7	30.0
1,4-Dioxane	Ave	0.2325	0.2536		10.9	10.0	9.1	30.0
Dibromomethane	Ave	0.4351	0.4791		11.0	10.0	10.1	30.0
Bromodichloromethane	Ave	0.8316	0.8985		10.8	10.0	8.0	30.0
cis-1,3-Dichloropropene	Ave	0.6180	0.6656		10.8	10.0	7.7	30.0
methyl isobutyl ketone	Ave	0.9410	0.9188		9.76	10.0	-2.4	30.0
n-Octane	Ave	1.022	1.003		9.81	10.0	-1.9	30.0
Toluene	Ave	0.9210	0.9789		10.6	10.0	6.3	30.0
trans-1,3-Dichloropropene	Ave	0.6039	0.6543		10.8	10.0	8.4	30.0
1,1,2-Trichloroethane	Ave	0.4711	0.4882		10.4	10.0	3.6	30.0
Tetrachloroethene	Ave	0.6859	0.7496		10.9	10.0	9.3	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.9523	0.9311		9.78	10.0	-2.2	30.0
Dibromochloromethane	Ave	0.8493	0.9538		11.2	10.0	12.3	30.0
1,2-Dibromoethane	Ave	0.7686	0.8402		10.9	10.0	9.3	30.0
Chlorobenzene	Ave	1.132	1.201		10.6	10.0	6.0	30.0
Ethylbenzene	Ave	1.948	2.091		10.7	10.0	7.4	30.0
n-Nonane	Ave	1.009	1.046		10.4	10.0	3.7	30.0
m,p-Xylene	Ave	0.7551	0.8270		21.9	20.0	9.5	30.0
Xylene, o-	Ave	0.7274	0.7943		10.9	10.0	9.2	30.0
Styrene	Ave	1.116	1.244		11.1	10.0	11.4	30.0
Bromoform	Ave	0.7713	0.8905		11.5	10.0	15.5	30.0
Cumene	Ave	2.105	2.299		10.9	10.0	9.2	30.0
1,1,2,2-Tetrachloroethane	Ave	1.222	1.220		9.98	10.0	-0.2	30.0
n-Propylbenzene	Ave	2.660	2.825		10.6	10.0	6.2	30.0
1,2,3-Trichloropropane	Ave	0.9271	0.9130		9.85	10.0	-1.5	30.0
n-Decane	Ave	1.330	1.306		9.82	10.0	-1.8	30.0
4-Ethyltoluene	Ave	2.141	2.303		10.8	10.0	7.6	30.0
2-Chlorotoluene	Ave	1.864	1.954		10.5	10.0	4.8	30.0
1,3,5-Trimethylbenzene	Ave	1.778	1.893		10.6	10.0	6.5	30.0
Alpha Methyl Styrene	Ave	0.8375	0.9146		10.9	10.0	9.2	30.0
tert-Butylbenzene	Ave	1.671	1.764		10.6	10.0	5.6	30.0
1,2,4-Trimethylbenzene	Ave	1.767	1.883		10.7	10.0	6.6	30.0
sec-Butylbenzene	Ave	2.617	2.773		10.6	10.0	6.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Lab Sample ID: CCVIS 200-118269/2 Calibration Date: 07/06/2017 10:56

Instrument ID: CHW.i Calib Start Date: 06/19/2017 14:42

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/19/2017 20:48

Lab File ID: 25782-02.d Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	2.102	2.253		10.7	10.0	7.2	30.0
1,3-Dichlorobenzene	Ave	1.139	1.199		10.5	10.0	5.2	30.0
1,4-Dichlorobenzene	Ave	1.077	1.153		10.7	10.0	7.0	30.0
Benzyl chloride	Ave	1.290	1.405		10.9	10.0	8.9	30.0
n-Undecane	Ave	1.505	1.457		9.68	10.0	-3.1	30.0
n-Butylbenzene	Ave	2.118	2.362		11.2	10.0	11.5	30.0
1,2-Dichlorobenzene	Ave	1.071	1.115		10.4	10.0	4.1	30.0
n-Dodecane	Ave	1.095	0.9621		8.79	10.0	-12.1	30.0
1,2,4-Trichlorobenzene	Ave	0.6017	0.6730		11.2	10.0	11.9	30.0
Hexachlorobutadiene	Ave	0.6760	0.6882		10.2	10.0	1.8	30.0
Naphthalene	Ave	1.249	1.371		11.0	10.0	9.8	30.0
1,2,3-Trichlorobenzene	Ave	0.5199	0.5270		10.1	10.0	1.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab Sample ID: ICV 200-117742/14 Calibration Date: 06/21/2017 02:35

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25547-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5293	0.5372		10.1	10.0	1.5	30.0
Dichlorodifluoromethane	Ave	3.283	3.390		10.3	10.0	3.3	30.0
Freon 22	Ave	1.534	1.565		10.2	10.0	2.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.822	3.184		11.3	10.0	12.8	30.0
Chloromethane	Ave	0.7629	0.7396		9.69	10.0	-3.0	30.0
n-Butane	Ave	1.034	1.047		10.1	10.0	1.3	30.0
Vinyl chloride	Ave	0.9394	0.9002		9.58	10.0	-4.2	30.0
1,3-Butadiene	Ave	0.5907	0.5590		9.46	10.0	-5.4	30.0
Bromomethane	Ave	1.080	1.080		10.0	10.0	-0.0	30.0
Chloroethane	Ave	0.3460	0.3477		10.0	10.0	0.5	30.0
Isopentane	Ave	0.6223	0.6846		11.0	10.0	10.0	30.0
Bromoethene(Vinyl Bromide)	Ave	1.067	1.067		10.0	10.0	-0.0	30.0
Trichlorofluoromethane	Ave	2.876	2.858		9.93	10.0	-0.6	30.0
n-Pentane	Ave	0.9382	1.056		11.3	10.0	12.6	30.0
Ethanol	Ave	0.2284	0.2141		14.1	15.0	-6.3	30.0
Ethyl ether	Ave	0.4045	0.4572		11.3	10.0	13.0	30.0
Freon TF	Ave	2.086	2.117		10.1	10.0	1.5	30.0
Acrolein	Ave	0.1298	0.1739		13.4	10.0	34.0*	30.0
1,1-Dichloroethene	Ave	0.9125	0.9053		9.92	10.0	-0.8	30.0
Acetone	Ave	0.9124	1.016		11.1	10.0	11.4	30.0
Carbon disulfide	Ave	2.317	2.738		11.8	10.0	18.2	30.0
Isopropyl alcohol	Ave	0.9137	0.8477		9.28	10.0	-7.2	30.0
3-Chloropropene	Ave	0.7219	0.7190		9.96	10.0	-0.4	30.0
Acetonitrile	Ave	0.3285	0.3729		11.3	10.0	13.5	30.0
Methylene Chloride	Ave	0.8566	0.8665		10.1	10.0	1.2	30.0
tert-Butyl alcohol	Ave	1.403	1.420		10.1	10.0	1.2	30.0
Methyl tert-butyl ether	Ave	2.163	2.206		10.2	10.0	2.0	30.0
trans-1,2-Dichloroethene	Ave	1.185	1.282		10.8	10.0	8.2	30.0
Acrylonitrile	Ave	0.3734	0.4007		10.7	10.0	7.3	30.0
n-Hexane	Ave	0.9514	1.070		11.2	10.0	12.5	30.0
1,1-Dichloroethane	Ave	1.610	1.639		10.2	10.0	1.8	30.0
Vinyl acetate	Ave	1.380	1.506		10.9	10.0	9.2	30.0
cis-1,2-Dichloroethene	Ave	1.096	1.118		10.2	10.0	2.0	30.0
Methyl Ethyl Ketone	Ave	0.3381	0.3407		10.1	10.0	0.8	30.0
Ethyl acetate	Ave	0.0481	0.0544		11.3	10.0	13.2	30.0
Tetrahydrofuran	Ave	0.1344	0.1550		11.5	10.0	15.3	30.0
Chloroform	Ave	2.867	2.613		9.11	10.0	-8.9	30.0
Cyclohexane	Ave	0.2520	0.2841		11.3	10.0	12.7	30.0
1,1,1-Trichloroethane	Ave	0.5791	0.6326		10.9	10.0	9.2	30.0
Carbon tetrachloride	Ave	0.6150	0.7084		11.5	10.0	15.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab Sample ID: ICV 200-117742/14 Calibration Date: 06/21/2017 02:35

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25547-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8794	0.9901		11.3	10.0	12.6	30.0
Benzene	Ave	0.6495	0.6927		10.7	10.0	6.7	30.0
1,2-Dichloroethane	Ave	0.3728	0.4021		10.8	10.0	7.9	30.0
n-Heptane	Ave	0.3263	0.3639		11.1	10.0	11.5	30.0
n-Butanol	Ave	0.0975	0.1212		12.4	10.0	24.3	30.0
Trichloroethene	Ave	0.3907	0.4229		10.8	10.0	8.2	30.0
1,2-Dichloropropane	Ave	0.2602	0.2791		10.7	10.0	7.3	30.0
Methyl methacrylate	Ave	0.1895	0.2218		11.7	10.0	17.0	30.0
1,4-Dioxane	Ave	0.1264	0.1341		10.6	10.0	6.0	30.0
Dibromomethane	Ave	0.3596	0.3996		11.1	10.0	11.1	30.0
Bromodichloromethane	Ave	0.6342	0.7079		11.2	10.0	11.6	30.0
cis-1,3-Dichloropropene	Ave	0.4078	0.4656		11.4	10.0	14.2	30.0
methyl isobutyl ketone	Ave	0.4152	0.4748		11.4	10.0	14.3	30.0
Toluene	Ave	0.5365	0.5730		10.7	10.0	6.8	30.0
n-Octane	Ave	0.4895	0.5473		11.2	10.0	11.8	30.0
trans-1,3-Dichloropropene	Ave	0.4359	0.4966		11.4	10.0	13.9	30.0
1,1,2-Trichloroethane	Ave	0.3004	0.3202		10.7	10.0	6.6	30.0
Tetrachloroethene	Ave	0.5578	0.5917		10.6	10.0	6.1	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4168	0.4886		11.7	10.0	17.2	30.0
Dibromochloromethane	Ave	0.6940	0.7408		10.7	10.0	6.7	30.0
1,2-Dibromoethane	Ave	0.5707	0.6201		10.9	10.0	8.7	30.0
Chlorobenzene	Ave	0.7690	0.8189		10.6	10.0	6.5	30.0
Ethylbenzene	Ave	1.136	1.218		10.7	10.0	7.3	30.0
n-Nonane	Ave	0.4864	0.5331		11.0	10.0	9.6	30.0
m,p-Xylene	Ave	0.4558	0.4924		21.6	20.0	8.0	30.0
Xylene, o-	Ave	0.4605	0.4906		10.7	10.0	6.5	30.0
Styrene	Ave	0.6433	0.7084		11.0	10.0	10.1	30.0
Bromoform	Ave	0.6065	0.6560		10.8	10.0	8.2	30.0
Cumene	Ave	1.269	1.345		10.6	10.0	6.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7044	0.7715		10.9	10.0	9.5	30.0
n-Propylbenzene	Ave	1.500	1.601		10.7	10.0	6.7	30.0
1,2,3-Trichloropropane	Ave	0.5463	0.5766		10.6	10.0	5.5	30.0
n-Decane	Ave	0.5480	0.6050		11.0	10.0	10.4	30.0
2-Chlorotoluene	Ave	1.059	1.175		11.1	10.0	11.0	30.0
4-Ethyltoluene	Ave	1.186	1.381		11.6	10.0	16.4	30.0
1,3,5-Trimethylbenzene	Ave	1.032	1.114		10.8	10.0	8.0	30.0
Alpha Methyl Styrene	Ave	0.4914	0.5737		11.7	10.0	16.7	30.0
tert-Butylbenzene	Ave	0.9821	1.042		10.6	10.0	6.1	30.0
1,2,4-Trimethylbenzene	Ave	1.023	1.107		10.8	10.0	8.2	30.0
sec-Butylbenzene	Ave	1.462	1.586		10.8	10.0	8.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab Sample ID: ICV 200-117742/14 Calibration Date: 06/21/2017 02:35

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25547-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.196	1.344		11.2	10.0	12.3	30.0
1,3-Dichlorobenzene	Ave	0.7600	0.8736		11.5	10.0	14.9	30.0
1,4-Dichlorobenzene	Ave	0.7514	0.8496		11.3	10.0	13.1	30.0
Benzyl chloride	Ave	0.8694	0.9802		11.3	10.0	12.7	30.0
n-Butylbenzene	Ave	1.060	1.209		11.4	10.0	14.1	30.0
n-Undecane	Ave	0.5764	0.6110		10.6	10.0	6.0	30.0
1,2-Dichlorobenzene	Ave	0.7095	0.7821		11.0	10.0	10.2	30.0
n-Dodecane	Ave	0.4776	0.5483		11.5	10.0	14.8	30.0
1,2,4-Trichlorobenzene	Ave	0.4751	0.4599		9.68	10.0	-3.2	30.0
Hexachlorobutadiene	Ave	0.4376	0.4449		10.2	10.0	1.7	30.0
Naphthalene	Ave	0.9474	0.8342		8.80	10.0	-11.9	30.0
1,2,3-Trichlorobenzene	Ave	0.4207	0.3971		9.44	10.0	-5.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab Sample ID: CCVIS 200-118357/3 Calibration Date: 07/10/2017 11:49

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25826-003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5293	0.6787		12.8	10.0	28.2	30.0
Dichlorodifluoromethane	Ave	3.283	3.721		11.3	10.0	13.3	30.0
Freon 22	Ave	1.534	1.858		12.1	10.0	21.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.822	3.459		12.3	10.0	22.6	30.0
Chloromethane	Ave	0.7629	0.8924		11.7	10.0	17.0	30.0
n-Butane	Ave	1.034	1.300		12.6	10.0	25.8	30.0
Vinyl chloride	Ave	0.9394	1.040		11.1	10.0	10.7	30.0
1,3-Butadiene	Ave	0.5907	0.6569		11.1	10.0	11.2	30.0
Bromomethane	Ave	1.080	1.142		10.6	10.0	5.7	30.0
Chloroethane	Ave	0.3460	0.4023		11.6	10.0	16.3	30.0
Isopentane	Ave	0.6223	0.8479		13.6	10.0	36.3*	30.0
Bromoethene(Vinyl Bromide)	Ave	1.067	1.081		10.1	10.0	1.4	30.0
Trichlorofluoromethane	Ave	2.876	2.937		10.2	10.0	2.1	30.0
n-Pentane	Ave	0.9382	1.292		13.8	10.0	37.7*	30.0
Ethanol	Ave	0.2284	0.2957		19.4	15.0	29.4	30.0
Ethyl ether	Ave	0.4045	0.4912		12.1	10.0	21.4	30.0
Freon TF	Ave	2.086	2.162		10.4	10.0	3.7	30.0
Acrolein	Ave	0.1298	0.1858		14.3	10.0	43.2*	30.0
1,1-Dichloroethene	Ave	0.9125	0.9395		10.3	10.0	2.9	30.0
Acetone	Ave	0.9124	1.091		12.0	10.0	19.6	30.0
Carbon disulfide	Ave	2.317	3.076		13.3	10.0	32.8*	30.0
Isopropyl alcohol	Ave	0.9137	1.107		12.1	10.0	21.1	30.0
3-Chloropropene	Ave	0.7219	0.9054		12.5	10.0	25.4	30.0
Acetonitrile	Ave	0.3285	0.4058		12.4	10.0	23.5	30.0
Methylene Chloride	Ave	0.8566	1.024		11.9	10.0	19.5	30.0
tert-Butyl alcohol	Ave	1.403	1.718		12.2	10.0	22.5	30.0
Methyl tert-butyl ether	Ave	2.163	2.307		10.7	10.0	6.7	30.0
trans-1,2-Dichloroethene	Ave	1.185	1.470		12.4	10.0	24.1	30.0
Acrylonitrile	Ave	0.3734	0.4152		11.1	10.0	11.2	30.0
n-Hexane	Ave	0.9514	1.244		13.1	10.0	30.8*	30.0
1,1-Dichloroethane	Ave	1.610	1.863		11.6	10.0	15.7	30.0
Vinyl acetate	Ave	1.380	1.636		11.8	10.0	18.5	30.0
cis-1,2-Dichloroethene	Ave	1.096	1.172		10.7	10.0	6.9	30.0
Methyl Ethyl Ketone	Ave	0.3381	0.3615		10.7	10.0	6.9	30.0
Ethyl acetate	Ave	0.0481	0.0538		11.2	10.0	11.9	30.0
Tetrahydrofuran	Ave	0.1344	0.1764		13.1	10.0	31.2*	30.0
Chloroform	Ave	2.867	2.797		9.75	10.0	-2.4	30.0
Cyclohexane	Ave	0.2520	0.3112		12.3	10.0	23.5	30.0
1,1,1-Trichloroethane	Ave	0.5791	0.6769		11.7	10.0	16.9	30.0
Carbon tetrachloride	Ave	0.6150	0.7436		12.1	10.0	20.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab Sample ID: CCVIS 200-118357/3 Calibration Date: 07/10/2017 11:49

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25826-003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8794	1.129		12.8	10.0	28.4	30.0
Benzene	Ave	0.6495	0.7354		11.3	10.0	13.2	30.0
1,2-Dichloroethane	Ave	0.3728	0.4452		11.9	10.0	19.4	30.0
n-Heptane	Ave	0.3263	0.4274		13.1	10.0	31.0*	30.0
n-Butanol	Ave	0.0975	0.1401		14.4	10.0	43.7*	30.0
Trichloroethene	Ave	0.3907	0.4553		11.7	10.0	16.5	30.0
1,2-Dichloropropane	Ave	0.2602	0.2899		11.1	10.0	11.4	30.0
Methyl methacrylate	Ave	0.1895	0.2247		11.9	10.0	18.5	30.0
1,4-Dioxane	Ave	0.1264	0.1474		11.7	10.0	16.6	30.0
Dibromomethane	Ave	0.3596	0.3692		10.3	10.0	2.7	30.0
Bromodichloromethane	Ave	0.6342	0.7688		12.1	10.0	21.2	30.0
cis-1,3-Dichloropropene	Ave	0.4078	0.4805		11.8	10.0	17.8	30.0
methyl isobutyl ketone	Ave	0.4152	0.5330		12.8	10.0	28.4	30.0
Toluene	Ave	0.5365	0.5604		10.4	10.0	4.5	30.0
n-Octane	Ave	0.4895	0.6439		13.2	10.0	31.5*	30.0
trans-1,3-Dichloropropene	Ave	0.4359	0.4982		11.4	10.0	14.3	30.0
1,1,2-Trichloroethane	Ave	0.3004	0.3220		10.7	10.0	7.2	30.0
Tetrachloroethene	Ave	0.5578	0.5566		9.98	10.0	-0.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4168	0.5027		12.1	10.0	20.6	30.0
Dibromochloromethane	Ave	0.6940	0.7437		10.7	10.0	7.2	30.0
1,2-Dibromoethane	Ave	0.5707	0.5946		10.4	10.0	4.2	30.0
Chlorobenzene	Ave	0.7690	0.7814		10.2	10.0	1.6	30.0
Ethylbenzene	Ave	1.136	1.171		10.3	10.0	3.1	30.0
n-Nonane	Ave	0.4864	0.5657		11.6	10.0	16.3	30.0
m,p-Xylene	Ave	0.4558	0.4520		19.8	20.0	-0.8	30.0
Xylene, o-	Ave	0.4605	0.4577		9.94	10.0	-0.6	30.0
Styrene	Ave	0.6433	0.6465		10.0	10.0	0.5	30.0
Bromoform	Ave	0.6065	0.6407		10.6	10.0	5.6	30.0
Cumene	Ave	1.269	1.281		10.1	10.0	1.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7044	0.7596		10.8	10.0	7.8	30.0
n-Propylbenzene	Ave	1.500	1.519		10.1	10.0	1.3	30.0
1,2,3-Trichloropropane	Ave	0.5463	0.5685		10.4	10.0	4.1	30.0
n-Decane	Ave	0.5480	0.6327		11.5	10.0	15.4	30.0
4-Ethyltoluene	Ave	1.186	1.276		10.8	10.0	7.6	30.0
2-Chlorotoluene	Ave	1.059	1.131		10.7	10.0	6.8	30.0
1,3,5-Trimethylbenzene	Ave	1.032	1.027		9.95	10.0	-0.5	30.0
Alpha Methyl Styrene	Ave	0.4914	0.4869		9.91	10.0	-0.9	30.0
tert-Butylbenzene	Ave	0.9821	0.9589		9.76	10.0	-2.4	30.0
1,2,4-Trimethylbenzene	Ave	1.023	1.026		10.0	10.0	0.3	30.0
sec-Butylbenzene	Ave	1.462	1.472		10.1	10.0	0.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Lab Sample ID: CCVIS 200-118357/3 Calibration Date: 07/10/2017 11:49

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25826-003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.196	1.230		10.3	10.0	2.8	30.0
1,3-Dichlorobenzene	Ave	0.7600	0.7157		9.42	10.0	-5.8	30.0
1,4-Dichlorobenzene	Ave	0.7514	0.6746		8.98	10.0	-10.2	30.0
Benzyl chloride	Ave	0.8694	0.8517		9.79	10.0	-2.0	30.0
n-Butylbenzene	Ave	1.060	1.143		10.8	10.0	7.9	30.0
n-Undecane	Ave	0.5764	0.6733		11.7	10.0	16.8	30.0
1,2-Dichlorobenzene	Ave	0.7095	0.6604		9.31	10.0	-6.9	30.0
n-Dodecane	Ave	0.4776	0.6286		13.2	10.0	31.6*	30.0
1,2,4-Trichlorobenzene	Ave	0.4751	0.3745		7.88	10.0	-21.2	30.0
Hexachlorobutadiene	Ave	0.4376	0.3866		8.83	10.0	-11.7	30.0
Naphthalene	Ave	0.9474	0.7036		7.42	10.0	-25.7	30.0
1,2,3-Trichlorobenzene	Ave	0.4207	0.3467		8.24	10.0	-17.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab Sample ID: ICV 200-117742/14 Calibration Date: 06/21/2017 02:35

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25547-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5293	0.5372		10.1	10.0	1.5	30.0
Dichlorodifluoromethane	Ave	3.283	3.390		10.3	10.0	3.3	30.0
Freon 22	Ave	1.534	1.565		10.2	10.0	2.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.822	3.184		11.3	10.0	12.8	30.0
Chloromethane	Ave	0.7629	0.7396		9.69	10.0	-3.0	30.0
n-Butane	Ave	1.034	1.047		10.1	10.0	1.3	30.0
Vinyl chloride	Ave	0.9394	0.9002		9.58	10.0	-4.2	30.0
1,3-Butadiene	Ave	0.5907	0.5590		9.46	10.0	-5.4	30.0
Bromomethane	Ave	1.080	1.080		10.0	10.0	-0.0	30.0
Chloroethane	Ave	0.3460	0.3477		10.0	10.0	0.5	30.0
Isopentane	Ave	0.6223	0.6846		11.0	10.0	10.0	30.0
Bromoethene(Vinyl Bromide)	Ave	1.067	1.067		10.0	10.0	-0.0	30.0
Trichlorofluoromethane	Ave	2.876	2.858		9.93	10.0	-0.6	30.0
n-Pentane	Ave	0.9382	1.056		11.3	10.0	12.6	30.0
Ethanol	Ave	0.2284	0.2141		14.1	15.0	-6.3	30.0
Ethyl ether	Ave	0.4045	0.4572		11.3	10.0	13.0	30.0
Freon TF	Ave	2.086	2.117		10.1	10.0	1.5	30.0
Acrolein	Ave	0.1298	0.1739		13.4	10.0	34.0*	30.0
1,1-Dichloroethene	Ave	0.9125	0.9053		9.92	10.0	-0.8	30.0
Acetone	Ave	0.9124	1.016		11.1	10.0	11.4	30.0
Carbon disulfide	Ave	2.317	2.738		11.8	10.0	18.2	30.0
Isopropyl alcohol	Ave	0.9137	0.8477		9.28	10.0	-7.2	30.0
3-Chloropropene	Ave	0.7219	0.7190		9.96	10.0	-0.4	30.0
Acetonitrile	Ave	0.3285	0.3729		11.3	10.0	13.5	30.0
Methylene Chloride	Ave	0.8566	0.8665		10.1	10.0	1.2	30.0
tert-Butyl alcohol	Ave	1.403	1.420		10.1	10.0	1.2	30.0
Methyl tert-butyl ether	Ave	2.163	2.206		10.2	10.0	2.0	30.0
trans-1,2-Dichloroethene	Ave	1.185	1.282		10.8	10.0	8.2	30.0
Acrylonitrile	Ave	0.3734	0.4007		10.7	10.0	7.3	30.0
n-Hexane	Ave	0.9514	1.070		11.2	10.0	12.5	30.0
1,1-Dichloroethane	Ave	1.610	1.639		10.2	10.0	1.8	30.0
Vinyl acetate	Ave	1.380	1.506		10.9	10.0	9.2	30.0
cis-1,2-Dichloroethene	Ave	1.096	1.118		10.2	10.0	2.0	30.0
Methyl Ethyl Ketone	Ave	0.3381	0.3407		10.1	10.0	0.8	30.0
Ethyl acetate	Ave	0.0481	0.0544		11.3	10.0	13.2	30.0
Tetrahydrofuran	Ave	0.1344	0.1550		11.5	10.0	15.3	30.0
Chloroform	Ave	2.867	2.613		9.11	10.0	-8.9	30.0
Cyclohexane	Ave	0.2520	0.2841		11.3	10.0	12.7	30.0
1,1,1-Trichloroethane	Ave	0.5791	0.6326		10.9	10.0	9.2	30.0
Carbon tetrachloride	Ave	0.6150	0.7084		11.5	10.0	15.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab Sample ID: ICV 200-117742/14 Calibration Date: 06/21/2017 02:35

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25547-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8794	0.9901		11.3	10.0	12.6	30.0
Benzene	Ave	0.6495	0.6927		10.7	10.0	6.7	30.0
1,2-Dichloroethane	Ave	0.3728	0.4021		10.8	10.0	7.9	30.0
n-Heptane	Ave	0.3263	0.3639		11.1	10.0	11.5	30.0
n-Butanol	Ave	0.0975	0.1212		12.4	10.0	24.3	30.0
Trichloroethene	Ave	0.3907	0.4229		10.8	10.0	8.2	30.0
1,2-Dichloropropane	Ave	0.2602	0.2791		10.7	10.0	7.3	30.0
Methyl methacrylate	Ave	0.1895	0.2218		11.7	10.0	17.0	30.0
1,4-Dioxane	Ave	0.1264	0.1341		10.6	10.0	6.0	30.0
Dibromomethane	Ave	0.3596	0.3996		11.1	10.0	11.1	30.0
Bromodichloromethane	Ave	0.6342	0.7079		11.2	10.0	11.6	30.0
cis-1,3-Dichloropropene	Ave	0.4078	0.4656		11.4	10.0	14.2	30.0
methyl isobutyl ketone	Ave	0.4152	0.4748		11.4	10.0	14.3	30.0
Toluene	Ave	0.5365	0.5730		10.7	10.0	6.8	30.0
n-Octane	Ave	0.4895	0.5473		11.2	10.0	11.8	30.0
trans-1,3-Dichloropropene	Ave	0.4359	0.4966		11.4	10.0	13.9	30.0
1,1,2-Trichloroethane	Ave	0.3004	0.3202		10.7	10.0	6.6	30.0
Tetrachloroethene	Ave	0.5578	0.5917		10.6	10.0	6.1	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4168	0.4886		11.7	10.0	17.2	30.0
Dibromochloromethane	Ave	0.6940	0.7408		10.7	10.0	6.7	30.0
1,2-Dibromoethane	Ave	0.5707	0.6201		10.9	10.0	8.7	30.0
Chlorobenzene	Ave	0.7690	0.8189		10.6	10.0	6.5	30.0
Ethylbenzene	Ave	1.136	1.218		10.7	10.0	7.3	30.0
n-Nonane	Ave	0.4864	0.5331		11.0	10.0	9.6	30.0
m,p-Xylene	Ave	0.4558	0.4924		21.6	20.0	8.0	30.0
Xylene, o-	Ave	0.4605	0.4906		10.7	10.0	6.5	30.0
Styrene	Ave	0.6433	0.7084		11.0	10.0	10.1	30.0
Bromoform	Ave	0.6065	0.6560		10.8	10.0	8.2	30.0
Cumene	Ave	1.269	1.345		10.6	10.0	6.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7044	0.7715		10.9	10.0	9.5	30.0
n-Propylbenzene	Ave	1.500	1.601		10.7	10.0	6.7	30.0
1,2,3-Trichloropropane	Ave	0.5463	0.5766		10.6	10.0	5.5	30.0
n-Decane	Ave	0.5480	0.6050		11.0	10.0	10.4	30.0
2-Chlorotoluene	Ave	1.059	1.175		11.1	10.0	11.0	30.0
4-Ethyltoluene	Ave	1.186	1.381		11.6	10.0	16.4	30.0
1,3,5-Trimethylbenzene	Ave	1.032	1.114		10.8	10.0	8.0	30.0
Alpha Methyl Styrene	Ave	0.4914	0.5737		11.7	10.0	16.7	30.0
tert-Butylbenzene	Ave	0.9821	1.042		10.6	10.0	6.1	30.0
1,2,4-Trimethylbenzene	Ave	1.023	1.107		10.8	10.0	8.2	30.0
sec-Butylbenzene	Ave	1.462	1.586		10.8	10.0	8.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab Sample ID: ICV 200-117742/14 Calibration Date: 06/21/2017 02:35

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25547-014.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.196	1.344		11.2	10.0	12.3	30.0
1,3-Dichlorobenzene	Ave	0.7600	0.8736		11.5	10.0	14.9	30.0
1,4-Dichlorobenzene	Ave	0.7514	0.8496		11.3	10.0	13.1	30.0
Benzyl chloride	Ave	0.8694	0.9802		11.3	10.0	12.7	30.0
n-Butylbenzene	Ave	1.060	1.209		11.4	10.0	14.1	30.0
n-Undecane	Ave	0.5764	0.6110		10.6	10.0	6.0	30.0
1,2-Dichlorobenzene	Ave	0.7095	0.7821		11.0	10.0	10.2	30.0
n-Dodecane	Ave	0.4776	0.5483		11.5	10.0	14.8	30.0
1,2,4-Trichlorobenzene	Ave	0.4751	0.4599		9.68	10.0	-3.2	30.0
Hexachlorobutadiene	Ave	0.4376	0.4449		10.2	10.0	1.7	30.0
Naphthalene	Ave	0.9474	0.8342		8.80	10.0	-11.9	30.0
1,2,3-Trichlorobenzene	Ave	0.4207	0.3971		9.44	10.0	-5.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab Sample ID: CCVIS 200-118357/3 Calibration Date: 07/10/2017 11:49

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25826-003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5293	0.6787		12.8	10.0	28.2	30.0
Dichlorodifluoromethane	Ave	3.283	3.721		11.3	10.0	13.3	30.0
Freon 22	Ave	1.534	1.858		12.1	10.0	21.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.822	3.459		12.3	10.0	22.6	30.0
Chloromethane	Ave	0.7629	0.8924		11.7	10.0	17.0	30.0
n-Butane	Ave	1.034	1.300		12.6	10.0	25.8	30.0
Vinyl chloride	Ave	0.9394	1.040		11.1	10.0	10.7	30.0
1,3-Butadiene	Ave	0.5907	0.6569		11.1	10.0	11.2	30.0
Bromomethane	Ave	1.080	1.142		10.6	10.0	5.7	30.0
Chloroethane	Ave	0.3460	0.4023		11.6	10.0	16.3	30.0
Isopentane	Ave	0.6223	0.8479		13.6	10.0	36.3*	30.0
Bromoethene(Vinyl Bromide)	Ave	1.067	1.081		10.1	10.0	1.4	30.0
Trichlorofluoromethane	Ave	2.876	2.937		10.2	10.0	2.1	30.0
n-Pentane	Ave	0.9382	1.292		13.8	10.0	37.7*	30.0
Ethanol	Ave	0.2284	0.2957		19.4	15.0	29.4	30.0
Ethyl ether	Ave	0.4045	0.4912		12.1	10.0	21.4	30.0
Freon TF	Ave	2.086	2.162		10.4	10.0	3.7	30.0
Acrolein	Ave	0.1298	0.1858		14.3	10.0	43.2*	30.0
1,1-Dichloroethene	Ave	0.9125	0.9395		10.3	10.0	2.9	30.0
Acetone	Ave	0.9124	1.091		12.0	10.0	19.6	30.0
Carbon disulfide	Ave	2.317	3.076		13.3	10.0	32.8*	30.0
Isopropyl alcohol	Ave	0.9137	1.107		12.1	10.0	21.1	30.0
3-Chloropropene	Ave	0.7219	0.9054		12.5	10.0	25.4	30.0
Acetonitrile	Ave	0.3285	0.4058		12.4	10.0	23.5	30.0
Methylene Chloride	Ave	0.8566	1.024		11.9	10.0	19.5	30.0
tert-Butyl alcohol	Ave	1.403	1.718		12.2	10.0	22.5	30.0
Methyl tert-butyl ether	Ave	2.163	2.307		10.7	10.0	6.7	30.0
trans-1,2-Dichloroethene	Ave	1.185	1.470		12.4	10.0	24.1	30.0
Acrylonitrile	Ave	0.3734	0.4152		11.1	10.0	11.2	30.0
n-Hexane	Ave	0.9514	1.244		13.1	10.0	30.8*	30.0
1,1-Dichloroethane	Ave	1.610	1.863		11.6	10.0	15.7	30.0
Vinyl acetate	Ave	1.380	1.636		11.8	10.0	18.5	30.0
cis-1,2-Dichloroethene	Ave	1.096	1.172		10.7	10.0	6.9	30.0
Methyl Ethyl Ketone	Ave	0.3381	0.3615		10.7	10.0	6.9	30.0
Ethyl acetate	Ave	0.0481	0.0538		11.2	10.0	11.9	30.0
Tetrahydrofuran	Ave	0.1344	0.1764		13.1	10.0	31.2*	30.0
Chloroform	Ave	2.867	2.797		9.75	10.0	-2.4	30.0
Cyclohexane	Ave	0.2520	0.3112		12.3	10.0	23.5	30.0
1,1,1-Trichloroethane	Ave	0.5791	0.6769		11.7	10.0	16.9	30.0
Carbon tetrachloride	Ave	0.6150	0.7436		12.1	10.0	20.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab Sample ID: CCVIS 200-118357/3 Calibration Date: 07/10/2017 11:49

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25826-003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	0.8794	1.129		12.8	10.0	28.4	30.0
Benzene	Ave	0.6495	0.7354		11.3	10.0	13.2	30.0
1,2-Dichloroethane	Ave	0.3728	0.4452		11.9	10.0	19.4	30.0
n-Heptane	Ave	0.3263	0.4274		13.1	10.0	31.0*	30.0
n-Butanol	Ave	0.0975	0.1401		14.4	10.0	43.7*	30.0
Trichloroethene	Ave	0.3907	0.4553		11.7	10.0	16.5	30.0
1,2-Dichloropropane	Ave	0.2602	0.2899		11.1	10.0	11.4	30.0
Methyl methacrylate	Ave	0.1895	0.2247		11.9	10.0	18.5	30.0
1,4-Dioxane	Ave	0.1264	0.1474		11.7	10.0	16.6	30.0
Dibromomethane	Ave	0.3596	0.3692		10.3	10.0	2.7	30.0
Bromodichloromethane	Ave	0.6342	0.7688		12.1	10.0	21.2	30.0
cis-1,3-Dichloropropene	Ave	0.4078	0.4805		11.8	10.0	17.8	30.0
methyl isobutyl ketone	Ave	0.4152	0.5330		12.8	10.0	28.4	30.0
Toluene	Ave	0.5365	0.5604		10.4	10.0	4.5	30.0
n-Octane	Ave	0.4895	0.6439		13.2	10.0	31.5*	30.0
trans-1,3-Dichloropropene	Ave	0.4359	0.4982		11.4	10.0	14.3	30.0
1,1,2-Trichloroethane	Ave	0.3004	0.3220		10.7	10.0	7.2	30.0
Tetrachloroethene	Ave	0.5578	0.5566		9.98	10.0	-0.2	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.4168	0.5027		12.1	10.0	20.6	30.0
Dibromochloromethane	Ave	0.6940	0.7437		10.7	10.0	7.2	30.0
1,2-Dibromoethane	Ave	0.5707	0.5946		10.4	10.0	4.2	30.0
Chlorobenzene	Ave	0.7690	0.7814		10.2	10.0	1.6	30.0
Ethylbenzene	Ave	1.136	1.171		10.3	10.0	3.1	30.0
n-Nonane	Ave	0.4864	0.5657		11.6	10.0	16.3	30.0
m,p-Xylene	Ave	0.4558	0.4520		19.8	20.0	-0.8	30.0
Xylene, o-	Ave	0.4605	0.4577		9.94	10.0	-0.6	30.0
Styrene	Ave	0.6433	0.6465		10.0	10.0	0.5	30.0
Bromoform	Ave	0.6065	0.6407		10.6	10.0	5.6	30.0
Cumene	Ave	1.269	1.281		10.1	10.0	1.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7044	0.7596		10.8	10.0	7.8	30.0
n-Propylbenzene	Ave	1.500	1.519		10.1	10.0	1.3	30.0
1,2,3-Trichloropropane	Ave	0.5463	0.5685		10.4	10.0	4.1	30.0
n-Decane	Ave	0.5480	0.6327		11.5	10.0	15.4	30.0
4-Ethyltoluene	Ave	1.186	1.276		10.8	10.0	7.6	30.0
2-Chlorotoluene	Ave	1.059	1.131		10.7	10.0	6.8	30.0
1,3,5-Trimethylbenzene	Ave	1.032	1.027		9.95	10.0	-0.5	30.0
Alpha Methyl Styrene	Ave	0.4914	0.4869		9.91	10.0	-0.9	30.0
tert-Butylbenzene	Ave	0.9821	0.9589		9.76	10.0	-2.4	30.0
1,2,4-Trimethylbenzene	Ave	1.023	1.026		10.0	10.0	0.3	30.0
sec-Butylbenzene	Ave	1.462	1.472		10.1	10.0	0.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Lab Sample ID: CCVIS 200-118357/3 Calibration Date: 07/10/2017 11:49

Instrument ID: CHG.i Calib Start Date: 06/20/2017 18:11

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/21/2017 00:04

Lab File ID: 200-25826-003.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.196	1.230		10.3	10.0	2.8	30.0
1,3-Dichlorobenzene	Ave	0.7600	0.7157		9.42	10.0	-5.8	30.0
1,4-Dichlorobenzene	Ave	0.7514	0.6746		8.98	10.0	-10.2	30.0
Benzyl chloride	Ave	0.8694	0.8517		9.79	10.0	-2.0	30.0
n-Butylbenzene	Ave	1.060	1.143		10.8	10.0	7.9	30.0
n-Undecane	Ave	0.5764	0.6733		11.7	10.0	16.8	30.0
1,2-Dichlorobenzene	Ave	0.7095	0.6604		9.31	10.0	-6.9	30.0
n-Dodecane	Ave	0.4776	0.6286		13.2	10.0	31.6*	30.0
1,2,4-Trichlorobenzene	Ave	0.4751	0.3745		7.88	10.0	-21.2	30.0
Hexachlorobutadiene	Ave	0.4376	0.3866		8.83	10.0	-11.7	30.0
Naphthalene	Ave	0.9474	0.7036		7.42	10.0	-25.7	30.0
1,2,3-Trichlorobenzene	Ave	0.4207	0.3467		8.24	10.0	-17.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab Sample ID: ICV 200-117412/19 Calibration Date: 06/09/2017 12:24

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25406-19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5077	0.5072		9.99	10.0	-0.1	30.0
Dichlorodifluoromethane	Ave	2.316	2.196		9.48	10.0	-5.1	30.0
Freon 22	Ave	1.141	1.114		9.76	10.0	-2.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.276	2.475		10.9	10.0	8.8	30.0
Chloromethane	Ave	0.6596	0.6433		9.75	10.0	-2.5	30.0
n-Butane	Ave	1.085	1.092		10.1	10.0	0.7	30.0
Vinyl chloride	Ave	0.8883	0.8694		9.79	10.0	-2.1	30.0
1,3-Butadiene	Ave	0.6512	0.6185		9.50	10.0	-5.0	30.0
Bromomethane	Ave	1.150	1.152		10.0	10.0	0.2	30.0
Chloroethane	Ave	0.5847	0.5931		10.1	10.0	1.4	30.0
Isopentane	Ave	0.9829	1.125		11.4	10.0	14.4	30.0
Bromoethene(Vinyl Bromide)	Ave	1.285	1.305		10.2	10.0	1.6	30.0
Trichlorofluoromethane	Ave	2.731	2.606		9.54	10.0	-4.6	30.0
n-Pentane	Ave	1.515	1.779		11.7	10.0	17.4	30.0
Ethanol	Ave	0.4168	0.4460		16.1	15.0	7.0	30.0
Ethyl ether	Ave	0.7137	0.8452		11.8	10.0	18.4	30.0
Acrolein	Ave	0.3150	0.4290		13.6	10.0	36.2*	30.0
Freon TF	Ave	2.405	2.470		10.3	10.0	2.7	30.0
1,1-Dichloroethene	Ave	1.211	1.251		10.3	10.0	3.3	30.0
Acetone	Ave	1.262	1.399		11.1	10.0	10.8	30.0
Isopropyl alcohol	Ave	1.551	1.536		9.90	10.0	-1.0	30.0
Carbon disulfide	Ave	3.085	3.747		12.1	10.0	21.5	30.0
3-Chloropropene	Ave	1.091	1.144		10.5	10.0	4.9	30.0
Acetonitrile	Ave	0.7049	0.7882		11.2	10.0	11.8	30.0
Methylene Chloride	Ave	1.055	1.071		10.2	10.0	1.6	30.0
tert-Butyl alcohol	Ave	2.288	2.304		10.1	10.0	0.7	30.0
Methyl tert-butyl ether	Ave	3.221	3.350		10.4	10.0	4.0	30.0
trans-1,2-Dichloroethene	Ave	1.493	1.646		11.0	10.0	10.2	30.0
Acrylonitrile	Ave	0.7400	0.8463		11.4	10.0	14.4	30.0
n-Hexane	Ave	1.623	1.876		11.6	10.0	15.6	30.0
1,1-Dichloroethane	Ave	2.007	2.027		10.1	10.0	1.0	30.0
Vinyl acetate	Ave	2.285	2.574		11.3	10.0	12.6	30.0
Methyl Ethyl Ketone	Ave	0.6215	0.6679		10.7	10.0	7.5	30.0
cis-1,2-Dichloroethene	Ave	1.397	1.430		10.2	10.0	2.3	30.0
Ethyl acetate	Ave	0.1096	0.1272		11.6	10.0	16.0	30.0
Tetrahydrofuran	Ave	0.2208	0.2392		10.8	10.0	8.3	30.0
Chloroform	Ave	2.374	2.399		10.1	10.0	1.0	30.0
1,1,1-Trichloroethane	Ave	0.4960	0.4832		9.74	10.0	-2.6	30.0
Cyclohexane	Ave	0.3692	0.3867		10.5	10.0	4.7	30.0
Carbon tetrachloride	Ave	0.5169	0.4987		9.65	10.0	-3.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab Sample ID: ICV 200-117412/19 Calibration Date: 06/09/2017 12:24

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25406-19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.146	1.209		10.5	10.0	5.5	30.0
Benzene	Ave	0.8204	0.8482		10.3	10.0	3.4	30.0
1,2-Dichloroethane	Ave	0.2692	0.2653		9.85	10.0	-1.4	30.0
n-Heptane	Ave	0.3812	0.3929		10.3	10.0	3.1	30.0
n-Butanol	Ave	0.1578	0.1784		11.3	10.0	13.1	30.0
Trichloroethene	Ave	0.3727	0.3745		10.0	10.0	0.5	30.0
1,2-Dichloropropane	Ave	0.2804	0.2889		10.3	10.0	3.1	30.0
Methyl methacrylate	Ave	0.2826	0.3013		10.7	10.0	6.6	30.0
1,4-Dioxane	Ave	0.1845	0.1853		10.0	10.0	0.4	30.0
Dibromomethane	Ave	0.4196	0.4100		9.77	10.0	-2.3	30.0
Bromodichloromethane	Ave	0.5499	0.5389		9.80	10.0	-2.0	30.0
cis-1,3-Dichloropropene	Ave	0.4409	0.4549		10.3	10.0	3.2	30.0
methyl isobutyl ketone	Ave	0.4890	0.4959		10.1	10.0	1.4	30.0
n-Octane	Ave	0.5296	0.5487		10.4	10.0	3.6	30.0
Toluene	Ave	0.7171	0.7314		10.2	10.0	2.0	30.0
trans-1,3-Dichloropropene	Ave	0.4288	0.4405		10.3	10.0	2.7	30.0
1,1,2-Trichloroethane	Ave	0.3346	0.3500		10.5	10.0	4.6	30.0
Tetrachloroethene	Ave	0.6858	0.6751		9.84	10.0	-1.6	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5352	0.5435		10.2	10.0	1.5	30.0
Dibromochloromethane	Ave	0.7211	0.6997		9.70	10.0	-3.0	30.0
1,2-Dibromoethane	Ave	0.6509	0.6698		10.3	10.0	2.9	30.0
Chlorobenzene	Ave	1.016	1.025		10.1	10.0	0.9	30.0
Ethylbenzene	Ave	1.534	1.554		10.1	10.0	1.3	30.0
n-Nonane	Ave	0.6329	0.6608		10.4	10.0	4.4	30.0
m,p-Xylene	Ave	0.6373	0.6424		20.2	20.0	0.8	30.0
Xylene, o-	Ave	0.6369	0.6303		9.89	10.0	-1.0	30.0
Styrene	Ave	0.9807	1.001		10.2	10.0	2.0	30.0
Bromoform	Ave	0.7176	0.6926		9.65	10.0	-3.5	30.0
Cumene	Ave	1.822	1.800		9.88	10.0	-1.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8756	0.9111		10.4	10.0	4.1	30.0
n-Propylbenzene	Ave	2.067	2.077		10.0	10.0	0.5	30.0
1,2,3-Trichloropropane	Ave	0.6254	0.6265		10.0	10.0	0.2	30.0
n-Decane	Ave	0.7971	0.8109		10.2	10.0	1.7	30.0
4-Ethyltoluene	Ave	1.794	1.848		10.3	10.0	3.0	30.0
2-Chlorotoluene	Ave	1.402	1.395		9.95	10.0	-0.5	30.0
1,3,5-Trimethylbenzene	Ave	1.475	1.484		10.1	10.0	0.6	30.0
Alpha Methyl Styrene	Ave	0.7673	0.8013		10.4	10.0	4.4	30.0
tert-Butylbenzene	Ave	1.467	1.444		9.84	10.0	-1.6	30.0
1,2,4-Trimethylbenzene	Ave	1.478	1.453		9.83	10.0	-1.7	30.0
sec-Butylbenzene	Ave	2.223	2.150		9.67	10.0	-3.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab Sample ID: ICV 200-117412/19 Calibration Date: 06/09/2017 12:24

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25406-19.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.872	1.745		9.32	10.0	-6.8	30.0
1,3-Dichlorobenzene	Ave	1.079	1.073		9.94	10.0	-0.6	30.0
1,4-Dichlorobenzene	Ave	1.051	1.043		9.92	10.0	-0.8	30.0
Benzyl chloride	Ave	1.157	1.093		9.45	10.0	-5.5	30.0
n-Undecane	Ave	0.8544	0.8822		10.3	10.0	3.3	30.0
n-Butylbenzene	Ave	1.593	1.471		9.23	10.0	-7.7	30.0
1,2-Dichlorobenzene	Ave	1.023	0.9883		9.66	10.0	-3.4	30.0
n-Dodecane	Ave	0.6267	0.6036		9.63	10.0	-3.7	30.0
1,2,4-Trichlorobenzene	Ave	0.6230	0.5903		9.47	10.0	-5.2	30.0
Hexachlorobutadiene	Ave	0.7035	0.6500		9.24	10.0	-7.6	30.0
Naphthalene	Ave	1.358	1.149		8.46	10.0	-15.4	30.0
1,2,3-Trichlorobenzene	Ave	0.5042	0.4458		8.84	10.0	-11.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab Sample ID: CCVIS 200-118448/2 Calibration Date: 07/12/2017 10:30

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25870-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propylene	Ave	0.5077	0.4864		9.58	10.0	-4.2	30.0
Dichlorodifluoromethane	Ave	2.316	1.998		8.63	10.0	-13.7	30.0
Freon 22	Ave	1.141	1.016		8.90	10.0	-11.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.276	1.947		8.55	10.0	-14.5	30.0
Chloromethane	Ave	0.6596	0.6019		9.12	10.0	-8.7	30.0
n-Butane	Ave	1.085	1.004		9.25	10.0	-7.5	30.0
Vinyl chloride	Ave	0.8883	0.8128		9.15	10.0	-8.5	30.0
1,3-Butadiene	Ave	0.6512	0.5832		8.95	10.0	-10.5	30.0
Bromomethane	Ave	1.150	1.059		9.21	10.0	-7.9	30.0
Chloroethane	Ave	0.5847	0.5756		9.84	10.0	-1.6	30.0
Isopentane	Ave	0.9829	1.000		10.2	10.0	1.7	30.0
Bromoethene(Vinyl Bromide)	Ave	1.285	1.194		9.29	10.0	-7.1	30.0
Trichlorofluoromethane	Ave	2.731	2.460		9.01	10.0	-9.9	30.0
n-Pentane	Ave	1.515	1.564		10.3	10.0	3.2	30.0
Ethanol	Ave	0.4168	0.4812		17.3	15.0	15.5	30.0
Ethyl ether	Ave	0.7137	0.7109		9.96	10.0	-0.4	30.0
Acrolein	Ave	0.3150	0.2695		8.55	10.0	-14.5	30.0
Freon TF	Ave	2.405	2.193		9.12	10.0	-8.8	30.0
1,1-Dichloroethene	Ave	1.211	1.133		9.35	10.0	-6.4	30.0
Acetone	Ave	1.262	1.396		11.1	10.0	10.6	30.0
Isopropyl alcohol	Ave	1.551	1.605		10.3	10.0	3.5	30.0
Carbon disulfide	Ave	3.085	2.986		9.67	10.0	-3.2	30.0
3-Chloropropene	Ave	1.091	1.108		10.2	10.0	1.6	30.0
Acetonitrile	Ave	0.7049	0.7203		10.2	10.0	2.2	30.0
Methylene Chloride	Ave	1.055	1.039		9.85	10.0	-1.5	30.0
tert-Butyl alcohol	Ave	2.288	2.252		9.84	10.0	-1.6	30.0
Methyl tert-butyl ether	Ave	3.221	3.084		9.57	10.0	-4.3	30.0
trans-1,2-Dichloroethene	Ave	1.493	1.456		9.75	10.0	-2.5	30.0
Acrylonitrile	Ave	0.7400	0.7520		10.2	10.0	1.6	30.0
n-Hexane	Ave	1.623	1.613		9.94	10.0	-0.6	30.0
1,1-Dichloroethane	Ave	2.007	1.887		9.40	10.0	-6.0	30.0
Vinyl acetate	Ave	2.285	2.346		10.3	10.0	2.6	30.0
Methyl Ethyl Ketone	Ave	0.6215	0.6109		9.83	10.0	-1.7	30.0
cis-1,2-Dichloroethene	Ave	1.397	1.308		9.36	10.0	-6.4	30.0
Ethyl acetate	Ave	0.1096	0.1067		9.73	10.0	-2.6	30.0
Tetrahydrofuran	Ave	0.2208	0.2264		10.3	10.0	2.5	30.0
Chloroform	Ave	2.374	2.216		9.33	10.0	-6.7	30.0
1,1,1-Trichloroethane	Ave	0.4960	0.4407		8.88	10.0	-11.1	30.0
Cyclohexane	Ave	0.3692	0.3388		9.17	10.0	-8.3	30.0
Carbon tetrachloride	Ave	0.5169	0.4244		8.21	10.0	-17.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab Sample ID: CCVIS 200-118448/2 Calibration Date: 07/12/2017 10:30

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25870-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,2,4-Trimethylpentane	Ave	1.146	1.121		9.78	10.0	-2.2	30.0
Benzene	Ave	0.8204	0.7632		9.30	10.0	-7.0	30.0
1,2-Dichloroethane	Ave	0.2692	0.2473		9.19	10.0	-8.1	30.0
n-Heptane	Ave	0.3812	0.3832		10.1	10.0	0.5	30.0
n-Butanol	Ave	0.1578	0.1597		10.1	10.0	1.2	30.0
Trichloroethene	Ave	0.3727	0.3359		9.01	10.0	-9.9	30.0
1,2-Dichloropropane	Ave	0.2804	0.2773		9.89	10.0	-1.1	30.0
Methyl methacrylate	Ave	0.2826	0.2704		9.57	10.0	-4.3	30.0
1,4-Dioxane	Ave	0.1845	0.1765		9.56	10.0	-4.4	30.0
Dibromomethane	Ave	0.4196	0.3417		8.14	10.0	-18.6	30.0
Bromodichloromethane	Ave	0.5499	0.5060		9.20	10.0	-8.0	30.0
cis-1,3-Dichloropropene	Ave	0.4409	0.4115		9.33	10.0	-6.7	30.0
methyl isobutyl ketone	Ave	0.4890	0.5012		10.2	10.0	2.5	30.0
n-Octane	Ave	0.5296	0.5467		10.3	10.0	3.2	30.0
Toluene	Ave	0.7171	0.6295		8.78	10.0	-12.2	30.0
trans-1,3-Dichloropropene	Ave	0.4288	0.3954		9.22	10.0	-7.8	30.0
1,1,2-Trichloroethane	Ave	0.3346	0.3069		9.17	10.0	-8.3	30.0
Tetrachloroethene	Ave	0.6858	0.5442		7.93	10.0	-20.7	30.0
Methyl Butyl Ketone (2-Hexanone)	Ave	0.5352	0.5350		9.99	10.0	-0.0	30.0
Dibromochloromethane	Ave	0.7211	0.6226		8.63	10.0	-13.7	30.0
1,2-Dibromoethane	Ave	0.6509	0.5749		8.83	10.0	-11.7	30.0
Chlorobenzene	Ave	1.016	0.8736		8.60	10.0	-14.0	30.0
Ethylbenzene	Ave	1.534	1.367		8.91	10.0	-10.9	30.0
n-Nonane	Ave	0.6329	0.6191		9.78	10.0	-2.2	30.0
m,p-Xylene	Ave	0.6373	0.5603		17.6	20.0	-12.1	30.0
Xylene, o-	Ave	0.6369	0.5570		8.74	10.0	-12.5	30.0
Styrene	Ave	0.9807	0.8720		8.89	10.0	-11.1	30.0
Bromoform	Ave	0.7176	0.5990		8.34	10.0	-16.5	30.0
Cumene	Ave	1.822	1.588		8.71	10.0	-12.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8756	0.7762		8.86	10.0	-11.3	30.0
n-Propylbenzene	Ave	2.067	1.794		8.68	10.0	-13.2	30.0
1,2,3-Trichloropropane	Ave	0.6254	0.5571		8.91	10.0	-10.9	30.0
n-Decane	Ave	0.7971	0.7776		9.75	10.0	-2.4	30.0
4-Ethyltoluene	Ave	1.794	1.510		8.42	10.0	-15.8	30.0
2-Chlorotoluene	Ave	1.402	1.236		8.81	10.0	-11.9	30.0
1,3,5-Trimethylbenzene	Ave	1.475	1.233		8.36	10.0	-16.4	30.0
Alpha Methyl Styrene	Ave	0.7673	0.6442		8.39	10.0	-16.0	30.0
tert-Butylbenzene	Ave	1.467	1.230		8.38	10.0	-16.2	30.0
1,2,4-Trimethylbenzene	Ave	1.478	1.281		8.67	10.0	-13.3	30.0
sec-Butylbenzene	Ave	2.223	1.922		8.65	10.0	-13.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Lab Sample ID: CCVIS 200-118448/2 Calibration Date: 07/12/2017 10:30

Instrument ID: CHB.i Calib Start Date: 06/08/2017 16:56

GC Column: RTX-624 ID: 0.32(mm) Calib End Date: 06/09/2017 10:03

Lab File ID: 25870-02.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Isopropyltoluene	Ave	1.872	1.631		8.71	10.0	-12.9	30.0
1,3-Dichlorobenzene	Ave	1.079	0.8828		8.18	10.0	-18.2	30.0
1,4-Dichlorobenzene	Ave	1.051	0.8735		8.31	10.0	-16.9	30.0
Benzyl chloride	Ave	1.157	0.9666		8.35	10.0	-16.5	30.0
n-Undecane	Ave	0.8544	0.8603		10.1	10.0	0.7	30.0
n-Butylbenzene	Ave	1.593	1.481		9.30	10.0	-7.0	30.0
1,2-Dichlorobenzene	Ave	1.023	0.8511		8.32	10.0	-16.8	30.0
n-Dodecane	Ave	0.6267	0.4674		7.46	10.0	-25.4	30.0
1,2,4-Trichlorobenzene	Ave	0.6230	0.5175		8.31	10.0	-16.9	30.0
Hexachlorobutadiene	Ave	0.7035	0.5271		7.49	10.0	-25.1	30.0
Naphthalene	Ave	1.358	1.205		8.87	10.0	-11.3	30.0
1,2,3-Trichlorobenzene	Ave	0.5042	0.4149		8.23	10.0	-17.7	30.0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Instrument ID: CHW.i Start Date: 06/19/2017 12:59

Analysis Batch Number: 117699 End Date: 06/20/2017 02:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117699/1		06/19/2017 12:59	1	25526-01.d	RTX-624 0.32(mm)
VIBLK 200-117699/2		06/19/2017 13:52	1		RTX-624 0.32(mm)
IC 200-117699/3		06/19/2017 14:42	1	25526-03.d	RTX-624 0.32(mm)
IC 200-117699/4		06/19/2017 15:34	1	25526-04.d	RTX-624 0.32(mm)
IC 200-117699/5		06/19/2017 16:26	1	25526-05.d	RTX-624 0.32(mm)
IC 200-117699/6		06/19/2017 17:19	1	25526-06.d	RTX-624 0.32(mm)
ICIS 200-117699/7		06/19/2017 18:11	1	25526-07.d	RTX-624 0.32(mm)
IC 200-117699/8		06/19/2017 19:04	1	25526-08.d	RTX-624 0.32(mm)
IC 200-117699/9		06/19/2017 19:56	1	25526-09.d	RTX-624 0.32(mm)
IC 200-117699/10		06/19/2017 20:48	1	25526-10.d	RTX-624 0.32(mm)
VIBLK 200-117699/11		06/19/2017 21:40	1		RTX-624 0.32(mm)
VIBLK 200-117699/12		06/19/2017 22:33	1		RTX-624 0.32(mm)
ICV 200-117699/13		06/19/2017 23:25	1	25526-13.d	RTX-624 0.32(mm)
ZZZZZ		06/20/2017 00:18	1		RTX-624 0.32(mm)
ZZZZZ		06/20/2017 01:11	1		RTX-624 0.32(mm)
VIBLK 200-117699/16		06/20/2017 02:04	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39188-1

SDG No.:

Instrument ID: CHW.i Start Date: 07/06/2017 10:01

Analysis Batch Number: 118269 End Date: 07/07/2017 08:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118269/1		07/06/2017 10:01	1	25782-01.d	RTX-624 0.32(mm)
CCVIS 200-118269/2		07/06/2017 10:56	1	25782-02.d	RTX-624 0.32(mm)
LCS 200-118269/3		07/06/2017 11:49	1	25782-03.d	RTX-624 0.32(mm)
MB 200-118269/4		07/06/2017 12:41	1	25782-04.d	RTX-624 0.32(mm)
VIBLK 200-118269/5		07/06/2017 14:34	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2017 16:38	2		RTX-624 0.32(mm)
ZZZZZ		07/06/2017 17:31	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2017 18:24	1		RTX-624 0.32(mm)
ZZZZZ		07/06/2017 19:34	0.2		RTX-624 0.32(mm)
200-39188-1		07/06/2017 20:44	0.2	25782-11.d	RTX-624 0.32(mm)
ZZZZZ		07/06/2017 21:55	0.2		RTX-624 0.32(mm)
ZZZZZ		07/06/2017 22:45	1600		RTX-624 0.32(mm)
ZZZZZ		07/06/2017 23:35	10		RTX-624 0.32(mm)
ZZZZZ		07/07/2017 00:26	10		RTX-624 0.32(mm)
ZZZZZ		07/07/2017 01:16	10		RTX-624 0.32(mm)
ZZZZZ		07/07/2017 08:51	160		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Instrument ID: CHG.i Start Date: 06/20/2017 15:41

Analysis Batch Number: 117742 End Date: 06/21/2017 05:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117742/1		06/20/2017 15:41	1	200-25547-001.D	RTX-624 0.32(mm)
VIBLK 200-117742/2		06/20/2017 16:29	1		RTX-624 0.32(mm)
VIBLK 200-117742/3		06/20/2017 17:20	1		RTX-624 0.32(mm)
IC 200-117742/4		06/20/2017 18:11	1	200-25547-004.D	RTX-624 0.32(mm)
IC 200-117742/5		06/20/2017 19:01	1	200-25547-005.D	RTX-624 0.32(mm)
IC 200-117742/6		06/20/2017 19:52	1	200-25547-006.D	RTX-624 0.32(mm)
IC 200-117742/7		06/20/2017 20:43	1	200-25547-007.D	RTX-624 0.32(mm)
ICIS 200-117742/8		06/20/2017 21:33	1	200-25547-008.D	RTX-624 0.32(mm)
IC 200-117742/9		06/20/2017 22:24	1	200-25547-009.D	RTX-624 0.32(mm)
IC 200-117742/10		06/20/2017 23:14	1	200-25547-010.D	RTX-624 0.32(mm)
IC 200-117742/11		06/21/2017 00:04	1	200-25547-011.D	RTX-624 0.32(mm)
VIBLK 200-117742/12		06/21/2017 00:54	1		RTX-624 0.32(mm)
VIBLK 200-117742/13		06/21/2017 01:45	1		RTX-624 0.32(mm)
ICV 200-117742/14		06/21/2017 02:35	1	200-25547-014.D	RTX-624 0.32(mm)
ZZZZZ		06/21/2017 03:25	1		RTX-624 0.32(mm)
ZZZZZ		06/21/2017 04:16	1		RTX-624 0.32(mm)
VIBLK 200-117742/17		06/21/2017 05:07	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39208-1

SDG No.:

Instrument ID: CHG.i Start Date: 07/10/2017 10:00

Analysis Batch Number: 118357 End Date: 07/11/2017 01:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118357/1		07/10/2017 10:00	1	200-25826-001.D	RTX-624 0.32(mm)
CCVIS 200-118357/2		07/10/2017 10:58	1		RTX-624 0.32(mm)
CCVIS 200-118357/3		07/10/2017 11:49	1	200-25826-003.D	RTX-624 0.32(mm)
LCS 200-118357/4		07/10/2017 12:40	1	200-25826-004.D	RTX-624 0.32(mm)
MB 200-118357/5		07/10/2017 13:30	1	200-25826-005.D	RTX-624 0.32(mm)
ZZZZZ		07/10/2017 17:50	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 18:41	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 19:31	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 20:21	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 21:12	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 22:02	1		RTX-624 0.32(mm)
200-39208-1		07/10/2017 22:53	0.2	200-25826-012.D	RTX-624 0.32(mm)
ZZZZZ		07/10/2017 23:43	0.2		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 00:34	0.2		RTX-624 0.32(mm)
ZZZZZ		07/11/2017 01:25	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Instrument ID: CHG.i Start Date: 06/20/2017 15:41

Analysis Batch Number: 117742 End Date: 06/21/2017 05:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117742/1		06/20/2017 15:41	1	200-25547-001.D	RTX-624 0.32(mm)
VIBLK 200-117742/2		06/20/2017 16:29	1		RTX-624 0.32(mm)
VIBLK 200-117742/3		06/20/2017 17:20	1		RTX-624 0.32(mm)
IC 200-117742/4		06/20/2017 18:11	1	200-25547-004.D	RTX-624 0.32(mm)
IC 200-117742/5		06/20/2017 19:01	1	200-25547-005.D	RTX-624 0.32(mm)
IC 200-117742/6		06/20/2017 19:52	1	200-25547-006.D	RTX-624 0.32(mm)
IC 200-117742/7		06/20/2017 20:43	1	200-25547-007.D	RTX-624 0.32(mm)
ICIS 200-117742/8		06/20/2017 21:33	1	200-25547-008.D	RTX-624 0.32(mm)
IC 200-117742/9		06/20/2017 22:24	1	200-25547-009.D	RTX-624 0.32(mm)
IC 200-117742/10		06/20/2017 23:14	1	200-25547-010.D	RTX-624 0.32(mm)
IC 200-117742/11		06/21/2017 00:04	1	200-25547-011.D	RTX-624 0.32(mm)
VIBLK 200-117742/12		06/21/2017 00:54	1		RTX-624 0.32(mm)
VIBLK 200-117742/13		06/21/2017 01:45	1		RTX-624 0.32(mm)
ICV 200-117742/14		06/21/2017 02:35	1	200-25547-014.D	RTX-624 0.32(mm)
ZZZZZ		06/21/2017 03:25	1		RTX-624 0.32(mm)
ZZZZZ		06/21/2017 04:16	1		RTX-624 0.32(mm)
VIBLK 200-117742/17		06/21/2017 05:07	1		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39219-1

SDG No.:

Instrument ID: CHG.i Start Date: 07/10/2017 10:00

Analysis Batch Number: 118357 End Date: 07/11/2017 01:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118357/1		07/10/2017 10:00	1	200-25826-001.D	RTX-624 0.32(mm)
CCVIS 200-118357/2		07/10/2017 10:58	1		RTX-624 0.32(mm)
CCVIS 200-118357/3		07/10/2017 11:49	1	200-25826-003.D	RTX-624 0.32(mm)
LCS 200-118357/4		07/10/2017 12:40	1	200-25826-004.D	RTX-624 0.32(mm)
MB 200-118357/5		07/10/2017 13:30	1	200-25826-005.D	RTX-624 0.32(mm)
ZZZZZ		07/10/2017 17:50	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 18:41	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 19:31	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 20:21	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 21:12	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 22:02	1		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 22:53	0.2		RTX-624 0.32(mm)
ZZZZZ		07/10/2017 23:43	0.2		RTX-624 0.32(mm)
200-39219-1		07/11/2017 00:34	0.2	200-25826-014.D	RTX-624 0.32(mm)
ZZZZZ		07/11/2017 01:25	0.2		RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Instrument ID: CHB.i Start Date: 06/08/2017 15:13

Analysis Batch Number: 117412 End Date: 06/09/2017 12:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-117412/1		06/08/2017 15:13	1	25406-01.D	RTX-624 0.32(mm)
VIBLK 200-117412/2		06/08/2017 16:03	1		RTX-624 0.32(mm)
IC 200-117412/3		06/08/2017 16:56	1	25406-03.D	RTX-624 0.32(mm)
IC 200-117412/4		06/08/2017 17:49	1	25406-04.D	RTX-624 0.32(mm)
IC 200-117412/5		06/08/2017 18:41	1	25406-05.D	RTX-624 0.32(mm)
IC 200-117412/6		06/08/2017 19:34	1	25406-06.D	RTX-624 0.32(mm)
ICIS 200-117412/7		06/08/2017 20:27	1	25406-07.D	RTX-624 0.32(mm)
IC 200-117412/8		06/08/2017 21:20	1	25406-08.D	RTX-624 0.32(mm)
IC 200-117412/9		06/08/2017 22:13	1	25406-09.D	RTX-624 0.32(mm)
ZZZZZ		06/08/2017 23:06	1		RTX-624 0.32(mm)
VIBLK 200-117412/11		06/08/2017 23:59	1		RTX-624 0.32(mm)
VIBLK 200-117412/12		06/09/2017 00:52	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 01:45	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 02:37	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 03:30	1		RTX-624 0.32(mm)
ZZZZZ		06/09/2017 04:23	1		RTX-624 0.32(mm)
IC 200-117412/17		06/09/2017 10:03	1	25406-17.D	RTX-624 0.32(mm)
ZZZZZ		06/09/2017 10:56	1		RTX-624 0.32(mm)
ICV 200-117412/19		06/09/2017 12:24	1	25406-19.D	RTX-624 0.32(mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-39253-1

SDG No.:

Instrument ID: CHB.i Start Date: 07/12/2017 09:40

Analysis Batch Number: 118448 End Date: 07/13/2017 03:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-118448/1		07/12/2017 09:40	1	25870-01.D	RTX-624 0.32(mm)
CCVIS 200-118448/2		07/12/2017 10:30	1	25870-02.D	RTX-624 0.32(mm)
LCS 200-118448/3		07/12/2017 11:23	1	25870-03.D	RTX-624 0.32(mm)
MB 200-118448/4		07/12/2017 12:16	1	25870-04.D	RTX-624 0.32(mm)
ZZZZZ		07/12/2017 13:09	1		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 14:02	1		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 14:55	9.09		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 15:48	50.6		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 16:41	39.8		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 17:34	1		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 18:27	10		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 19:19	10		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 20:12	9.93		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 21:05	10.2		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 21:58	10		RTX-624 0.32(mm)
ZZZZZ		07/12/2017 22:51	1		RTX-624 0.32(mm)
200-39253-12		07/12/2017 23:54	0.2	25870-17.D	RTX-624 0.32(mm)
ZZZZZ		07/13/2017 00:57	0.2		RTX-624 0.32(mm)
ZZZZZ		07/13/2017 02:01	0.2		RTX-624 0.32(mm)
ZZZZZ		07/13/2017 03:04	0.2		RTX-624 0.32(mm)

Shipping and Receiving Documents

220-Shelton

777 New Durham Road
Edison, New Jersey 08817
Phone (732) 549-3900 Fax (732) 549-3679

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Robert Wick	Sampler's Name (Printed) Josh Mevlew	Site/Project Identification St John Villa Phase II	
Company AMRF LLC	P.O.# 89215	State (Location of Site) NJ: ☐ NY: ☒ Other:	
		Regulatory Program: DKQP: ☐	
Address 470 Portland	Analysis Turnaround Time: Standard ☒		
City NY State NY	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		
Phone 914-922-2362 Fax			

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC	LAB USE ONLY Project No: / Job No: / Sample Numbers
SV-1	8/3/17	1000	Air	1	X	
SV-2	↓	1025	↓	↓	X	
SV-3		1045			X	
SV-4		1100			X	
SV-5	↓	1130	↓	↓	X	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____ Soil: Water:

200-29612 Chain of Custody

Special Instructions TO-15

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) Robert Wick	AMRF	8/4/17 1140	1) Albert Grandy	TAEC
2) Albert Grandy	TAEC	8/4/17 1510	2)	TA Burl 8/5/17 0930
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TA_0016107141

Login Sample Receipt Checklist

Client: AKRF Inc

Job Number: 200-39613-1
SDG Number: 200-39613-1

Login Number: 39613
List Number: 1
Creator: Johnson, Eleanor E

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	264128; 264129
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	JM
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	Method requires headspace.
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Appendix E
Soil Vapor Assessment Documentation

OSR - 3

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Mark Jepsen Date/Time Prepared 11/10/17 11:30

Preparer's Affiliation AKRF, Inc. Phone No. 646-388-9567

Purpose of Investigation IAQ + SV Survey

1. OCCUPANT:

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location ____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential (School) Commercial/Multi-use
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 4 + basement + Partial Sub-basement Building age_____

Is the building insulated? (Y) / N How air tight? Tight (Average) / Not Tight

4. AIRFLOW (Boiler Room area only)

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

One Staircase on Northern end of building and one Staircase on Southern end of building

Airflow near source

Outdoor air infiltration

3 separate building entrances plus entrance to sub-basement (Boiler

Infiltration into air ducts

No visible ducts

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	(stone)	(brick)
b. Basement type:	(full)	crawlspace	slab	other _____
c. Basement floor:	(concrete)	dirt	stone	other _____
d. Basement floor:	uncovered	covered	(covered with Terra zzo)	
e. Concrete floor:	unsealed	(sealed)	sealed with _____	
f. Foundation walls:	poured	block	(stone)	(other Brick)
g. Foundation walls:	unsealed	(sealed)	sealed with _____	
h. The basement is:	wet	damp	(dry)	moldy
i. The basement is:	(finished)	unfinished	partially finished	
j. Sump present?	(Y) N			
k. Water in sump?	Y (N) not applicable			

Basement/Lowest level depth below grade: slab on grade (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Boiler Rm/Sub-basement drain near boiler and open sump pump pit. Cracking of flooring observed in doorway to cafeteria/Auditorium.

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard
Space Heaters	(Steam radiation)	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler

Other _____

The primary type of fuel used is:

Natural Gas	(Fuel Oil)	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in: (Basement) Outdoors Main Floor Other_____

Air conditioning: Central Air (Window units) (Open Windows) None

Are there air distribution ducts present? Y (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

_____

7. OCCUPANCY

Is basement/lowest level occupied? (Full-time) Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Kitchen / Cafeteria / Auditorium
1st Floor	Classrooms
2nd Floor	Classrooms
3rd Floor	Classrooms
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N (NA) Please specify_____

d. Has the building ever had a fire? Y (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y (N) Where?_____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type?_____

g. Is there smoking in the building? Y (N) How frequently?_____

h. Have cleaning products been used recently? Y (N) When & Type?_____

i. Have cosmetic products been used recently? Y (N) When & Type?_____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y (N) If yes, where vented? _____

o. **Is there a clothes dryer?** (Y) N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y (N) When & Type? _____

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? (Y) N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service
Unknown

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

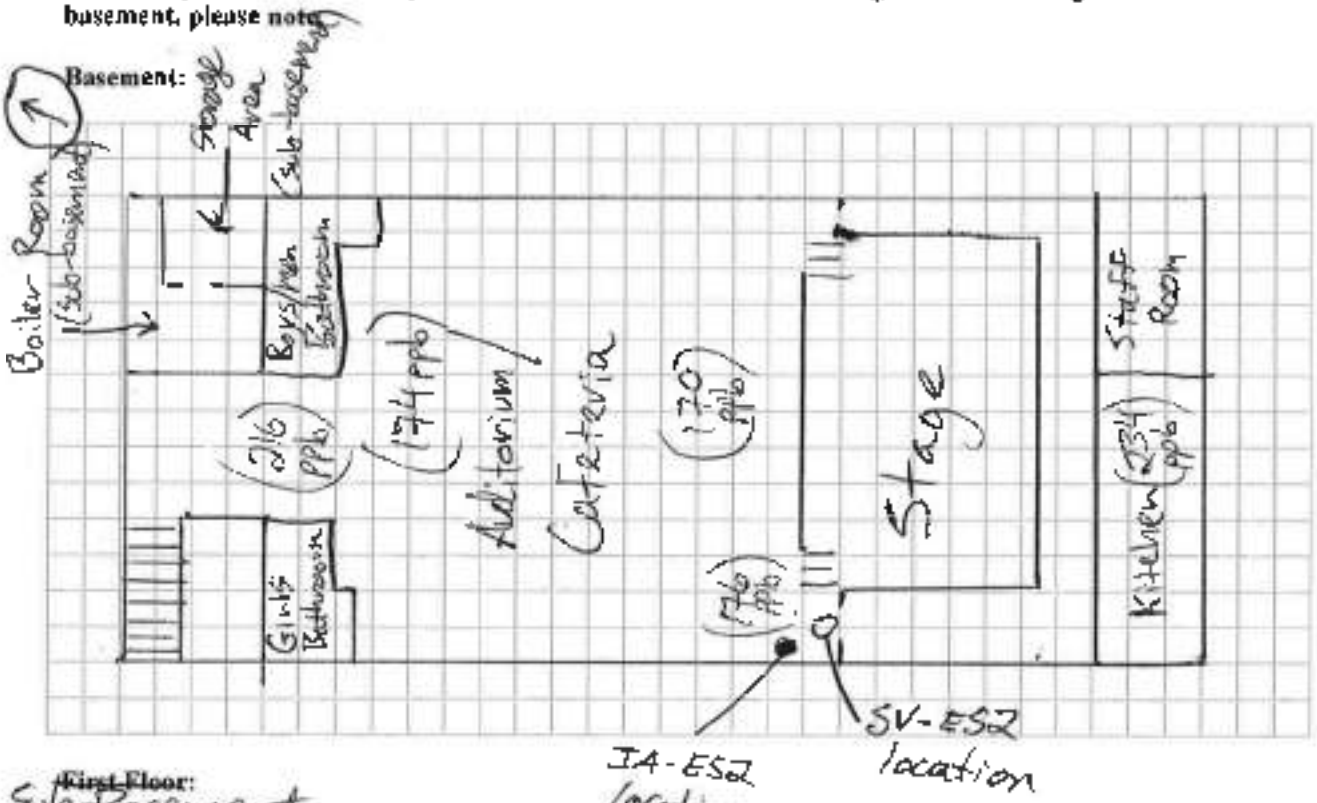
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

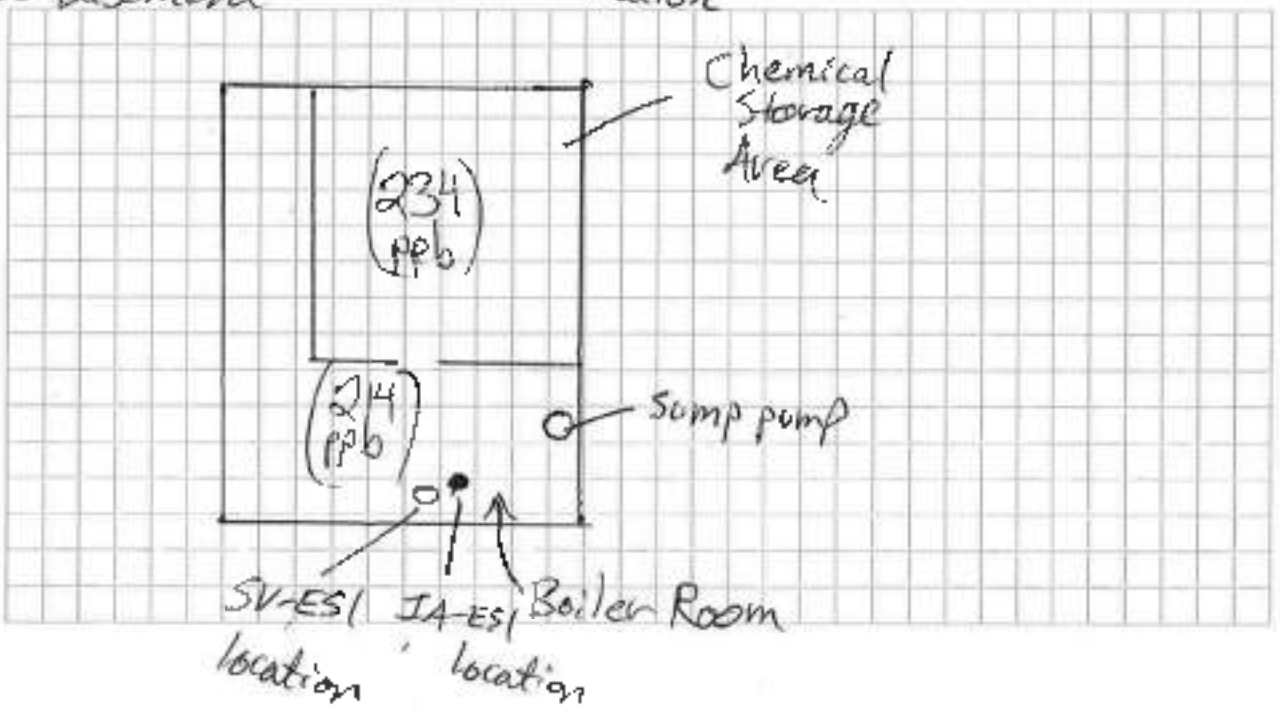
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



~~First Floor:~~
Sub-Basement



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppbRAE 7340 on 11/10/2017

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Men's Bathroom	Clean on the Go® NABC® Concentrate Bathroom Cleaner	32 Oz.	U	Alkyl dimethyl benzyl ammonium chlorides	269 ppb	Y
Men's Bathroom	Clean on the Go® Clean by Peroxy	32 Oz.	U	None	265 ppb	Y
Men's Bathroom	Diversy™ Spitfire® RTU Power Cleaner	32 Oz.	U	See Photo	274 ppb	Y
Men's Bathroom	Diversy™ Glance® RTU Glass & Multi-Surface Cleaner	32 Oz.	U	2-butoxyethanol	293 ppb	Y
Men's Bathroom	Tribase® Multi Purpose Cleaner	2 L	U	See Photo	316 ppb	Y
Auditorium	Enviro-Chem™ Hospital Disinfectant Deodorant	16 Oz.	U	Ethanol, 2-phenylphenol, 4-tert-amylphenol	266 ppb	Y
Janitor Closet	AJAX Oxygen Bleach Cleanser	21 Oz.	U	See Photo	264 ppb	Y
Kitchen	Austin's A-1® Bleach	1 Gal.	U	Sodium Hypochlorite	267 ppb	Y
Kitchen	Windex®	1 Qt.	U	Ammonium Hydroxide	282 ppb	Y
Kitchen	Fabuloso® Multi-Purpose Cleaner	22 Oz.	U	None	282 ppb	Y
Kitchen	Dawn® Manual Pot and Pan Detergent	5 Gal.	U/D	See Photo	295 ppb	Y
Chemical Storage Roor	Steriphene II Disinfectant Deodorant	15 Oz.	UO	Ethyl Alcohol, Ortho-benzyl-para-chlorophenol, ortho-phenylphenol	136 ppb	Y
Chemical Storage Roor	Fantastik® All-Purpose Cleaner	1 Qt.	U	See Photo	127 ppb	Y
Chemical Storage Roor	Diversy™ Spitfire® RTU Power Cleaner	32 Oz.	UO	See Photo	121 ppb	Y
Chemical Storage Roor	Enviro-Chem™ Stai-Brite Stainless Steel Cleaner	18 Oz.	UO	See Photo	117 ppb	Y
Chemical Storage Roor	Diversy™ Glance® RTU Glass & Multi-Surface Cleaner	32 Oz.	UO	2-butoxyethanol	116 ppb	Y
Chemical Storage Roor	Diversy™ Crew® Non-Acid Disinfectant Cleaner	1 Qt.	UO	See Photo	114 ppb	Y
Chemical Storage Roor	Total Solutions Foaming Lemon Scented Cleaner/Disinf	19 Oz.	UO	Alkyl dimethyl benzyl ammonium chlorides	114 ppb	Y
Chemical Storage Roor	Kew Forest Maintenance Supply Liquid Marble Enhance	1 Qt.	U	Polyethylene emulsion, Magnesium Hexafluorosilicate, Oxalic acid, dihydra	110 ppb	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppbRAE 7340 on 11/10/2017

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Chemical Storage Room	Spartan® Tough Duty® Industrial Strength Cleaner/Degreaser	1 Qt.	U	Alcohol ethoxylate	107 ppb	Y
Chemical Storage Room	Kew Forest Maintenance Supply Spray 'N Shine	1 Gal.	U	See Photo	116 ppb	Y
Chemical Storage Room	San-Aid Sea Foam Rug Shampoo	1 Gal.	U/D	See Photo	495 ppb	Y
Chemical Storage Room	NACA Pin Oil Disinfectant™	1 Gal.	U	Pine Oil	103 ppb	Y
Chemical Storage Room	Clean on the Go® Glass Cleaner	2 L	U	See Photo	113 ppb	Y
Chemical Storage Room	Gunk Brake Parts Cleaner - Chlorinated	19 Oz.	U	Perchlororthylene, methylene chloride, carbon dioxide	101 ppb	Y
Boiler Room	WD-40	18 Oz.	U	Aliphatic hydrocarbons, petroleum based oil, LVP aliphatic hydrocarbon	96 ppb	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Spitfire RTU

CLEAN
GO
TRIBASE
17

TRIBASE
17

AJAX

AJAX

DAWN

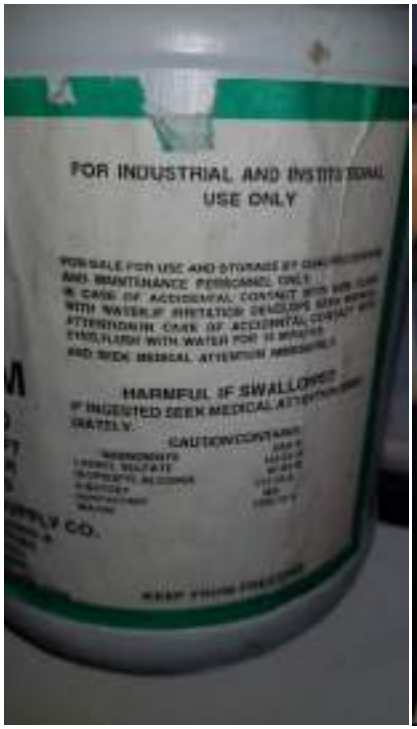
fantastik

STAI-BRITE
Stainless Steel
Cleaner

CAUTION
U.S. QT. / 946 mL

ENHANCER

SEA FOAM


FOR INDUSTRIAL AND INSTITUTIONAL
USE ONLY
HARMFUL IF SWALLOWED

CLEAN AS YOU GO.
18
Glass
Cleaner

18
Glass Cleaner

GUNK
Brake
Parts Cleaner
CHLORINATED
NET WT 19 OZ (538 g)
CLEAN + PROTECT
WARNING
NOT FOR SALE OR USE IN
RSC

Appendix F
Recommended Remediation and Cost Estimates

APPENDIX F
RECOMMENDED REMEDIATION AND COST ESTIMATES
St. John Villa Campus, Staten Island, NY

Due to elevated concentrations of TCE and PCE detected in sub-slab vapor (above NYSDOH AGVs) beneath the elementary school boiler room, HVAC modifications should be made as necessary to ensure that the boiler room/sub-basement is separately ventilated.

Geophysical anomalies indicative of a potential abandoned UST were identified during the Phase II ESI. Plans for site acquisition should include provisions for investigation and potential removal of the tank and associated contaminated soil.

Remediation Measure #1: HVAC Modifications

Assumptions:

-Separate fan and ductwork installed to separately ventilate sub-basement
-Seal cracks/openings in the sub-basement slab; seal penetraions through ceiling to isolate.

Activity	Quantity	Units	Unit Rate	Cost
Fan, ductwork, accessories, electrical connection	1	LS	$ 9,000.00	$9,000.00
Seal slab, wall, ceiling penetrations, seams, cracks, install weather stripping, etc.	1	LS	$ 2,500.00	$2,500.00
			Activity Total Cost	**$16,000.00**
			Engineering Design (20%)	$3,200.00
			Contingency (15%)	$2,400.00
			Total Cost:	**$21,600.00**

Remediation Measure #2: Abandoned Storage Tank and Petroleum-Contaminated Soil Removal (Contingency)

Assumptions:

-One 1,500-gallon fuel oil storage tank
-50 cubic yards of petroleum contaminated soil removed at the tanks
-1.5 tons per cubic yard
-Petroleum-contaminated soil disposed as non-hazardous waste
-One round of 5 endpoint samples. Endpoint samples analyzed for CP-51 list VOCs and SVOCs by EPA Methods 8260 and 8270, respectively.

Activity	Quantity	Unit	Unit Rate	Cost
Environmental contractor - manpower & equipment	2	days	$ 5,000.00	$ 10,000.00
Transportation and disposal of tank (metal scrap)	1	LS	$ 500.00	$ 500.00
Transportation and disposal of fuel oil	750	gallons	$ 1.00	$ 750.00
Transportation and disposal of petroleum-contaminated soil	75	tons	$ 65.00	$ 4,875.00
Endpoint samples analysis (CP-51 VOCs/SVOCs)	5	samples	$ 185.00	$ 925.00
Tank/Spill closure report	1	each	$ 5,000.00	$ 5,000.00
			Activity Total Cost	**$ 22,050.00**
			Engineering Design and Environmental Oversight (25%)	$ 5,512.50
			Contingency (15%)	$ 3,307.50
			Total Cost:	**$ 30,870.00**

Total Engineering Controls and Remediation Cost Estimate

	Cost
1 - HVAC Modifications	**$ 21,600.00**
2 - UST/Soil Removal (contingency)	**$ 30,870.00**
Approximate Total Cost	**$ 52,470.00**

Notes:

Cost estimates **do not** include the following:
- Dewatering treatment
- Shoring or sheeting
- Stormwater or other permitting
- Inflationary escalator - prices based upon estimated costs as of September 2013
- Excavation and disposal of non-hazardous urban fill
-Regulatory interaction or reporting